May 2015

User Guide

May 18, 2015

Part Number
E56153-05

Oracle Service Cloud User Guide
Part Number E56153-05

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Core Features

The following sections are intended for administrators and staff members. They contain information and procedures for configuring and using the core features that are common to Oracle Service Cloud products and features.

May 2015 Release Notes

Today's consumers are empowered like no other time in history. Although they've always expected to be listened to, supported, and valued, never before have consumers had the tools at their disposal to ensure those expectations become reality. Oracle Service Cloud, the customer experience suite, delivers comprehensive customer experience applications that drive revenue, increase efficiency, and build loyalty.

For a listing of the hardware and software requirements for all Oracle products, log in to our support site and access Answer ID 31. For information about upgrading from earlier versions, click the link for your specific upgrade path on the Upgrade Guides page.

Major new features

Single sign-on support for external identity providers

You can now use external identity providers (IdP) to log in to Oracle Service Cloud and other service provider (SP) applications such as Oracle Sales Cloud and Oracle Policy Automation Cloud Service. The IdP can be Oracle Identity Management, a third-party product, or an application developed internally. This lets agents log in once to be authenticated across several SP applications. Single logout is also supported, so when agents log out of any SP application, they are also automatically logged out of the IdP and any other SPs they were logged in to.

Note Deployments involving Oracle Service Cloud and Oracle Sales Cloud use Oracle Identity Management since it is bundled with the Sales Cloud application.

When using an external IdP, the IdP's login page is embedded in the Oracle Service Cloud Login window, letting staff members log in without having to directly access a separate login page. After successfully logging in to the IdP, the IdP generates an encrypted SAML token and passes it to Oracle Service Cloud. This method increases security since user IDs and passwords are not sent between the applications.

After being authenticated in Oracle Service Cloud, it then provides authentication services to other SPs, alleviating the need to integrate them and the external IdP.

Connect REST API

In the May 2015 release of Oracle Service Cloud, the new Connect REST API allows customers and partners to integrate with the Oracle Service Cloud platform using representational state transfer (REST) web services. Connect REST API is a public API that leverages the Connect Common Object Model version 1.3. It follows the Oracle REST standard and supports CRUD operations. To use the Connect REST API, contact your Oracle account manager.

Connect Common Object Model version 1.3

The May 2015 release of Oracle Service Cloud introduces version 1.3 of the Connect Common Object Model (CCOM). You can take advantage of this new CCOM version using Connect Web Services for SOAP (Connect Web Services), Connect PHP API, ROQL, and Connect REST API. CCOM version 1.3 provides synchronized metadata among Connect PHP API, ROQL, and Connect Web Services, and provides operation-specific metadata in Connect Web Services.

Also in CCOM version 1.3, ROQL blacklisting behavior has been changed so that candidate blacklist queries are allowed to run by default and are subject to further analysis. Fifteen new operations and properties have also been added to CCOM.

Service collaboration

An enhancement to service collaboration now lets agents get assistance from external users such as subject matter experts (SME) who are not agent desktop users. For example, non-agent users, such as engineers, product experts, and analysts, can be brought together to answer complex questions or contribute to solving an incident.

After you have Collaboration configured on your site and enabled, the External User check box displays on the Other tab of the Profiles editor. Selecting this check box designates that the profile contains only external users. These users can collaborate in conversations with agents, but are not charged to your organization as named users for licensing compliance purposes. External users can log in to the collaboration service directly via a web browser or supported mobile device, but cannot use the Service Console.

Additional new features and other changes

Oracle Service Cloud

- **New content on the Login window**—In the May 2015 release, you will see new content on the banner area of the Login window. The Oracle web page that displays promotes releases, webinars, and events, and lets you click links to perform actions such as signing up for a newsletter or joining a community. The banner area can also be customized to include your organization's own unique content and branding.
- **Oracle Policy Automation for mobile devices**—Customers can deploy their own policy models to the Oracle Policy Automation (OPA) mobile application, available for iOS and Android devices. Once rules and screens are modeled in Oracle Policy Modeling and downloaded by the mobile application, you can perform full, offline interviews using the mobile device application.

Service

Incident thread masking—Additional checks have been added to the 13- and 14-digit masking logic so that it closely matches 13-digit (Visa) and 14-digit (Diners Club) credit card number patterns and reduces the possibilities of false matches.

Customer Portal

Important Be sure to review the changelog for Framework Version 3.2 on the Customer Portal Administration site at https://<your_site>/ci/admin/versions/manage/#tab=1&framework=3.2 to see framework changes beyond those listed here.

Widget changes

- **Nano changes**—The utils/CobrowsePremium widget has had a nano change in this version of the Customer Portal. A nano change is fully backward compatible and is applied automatically to your widget files with no impact to your customer portal. To review the changes, go to the widget documentation page on the Customer Portal Administration site and read the changelog entry for the most recent version.

- **Minor changes**—The following widgets have had a minor change in this version of the Customer Portal. You can update your widgets to the latest version if you choose, but the change is not automatically applied. To review the changes, go to the widget documentation page on the Customer Portal Administration site and read the changelog entries for the most recent version.
  - ▷ input/BasicProductCategoryInput
  - ▷ knowledgebase/GuidedAssistant
  - ▷ notifications/ProdCatNotificationManager
  - ▷ output/FileListDisplay
- **Major changes**—The following widgets have had a major change in this version of the Customer Portal. These changes are not backward compatible. To review the changes to decide if you want to incorporate one of the new widgets, go to the widget documentation page on the Customer Portal Administration site and read the changelog entries for the most recent version.
  - ▷ input/ProductCategoryInput
  - ▷ input/SmartAssistantDialog
  - ▷ search/ProductCategorySearchFilter

Social Experience

- **New Social Monitor cloud results report column**—A new hidden column, Appended Incidents, has been added to the Social Monitor by Search, Conversations by Channel, and Private Messages by Channel Account cloud results reports. When this column is displayed, use Click to View to drill down to a report listing all incidents that cloud result have been manually or automatically appended to, and then click an incident to open it.
- **New Social Monitor configuration setting**— The SOCIAL_MONITOR_CONVERSATION_TRACKING_DEADLINE configuration setting specifies the number of days the system will track a conversation after an agent responds to a Social Monitor incident. Once the time period is exceeded, the incident will be removed from the conversation tracking, and any subsequent posts in the conversation will not be auto-appended as threads in the incident.

Release notes for previous versions

Click any of the following links to access release notes for a previous version.

1

Deploying Oracle Service Cloud

The Oracle Service Cloud Smart Client is deployed on your staff workstations to provide access to Oracle Service Cloud. Oracle Service Cloud uses Microsoft's Click-Once industry standard technology for deployment of the client application to staff workstations. This provides the following benefits:

- New versions of Oracle Service Cloud can be downloaded without redeploying the client.
- Service packs are applied automatically.
- Workstation administrative permissions are not required for staff members.
- Deployment requires little to no involvement from your IS staff.

Note If you are deploying Oracle Service Cloud in a Citrix environment, contact customer support to discuss your deployment needs by sending email to installer@mailca.custhelp.com.

Click-Once deployment

When you deploy the smart client, all necessary components and files are automatically downloaded to your workstation (refer to Application deployment process). After this is complete, your staff can immediately log in and begin configuring and customizing your application. To access the same site in the future, you can launch the client by selecting Start menu > All Programs > RightNow > RightNow (<your_site>).

The client application is site-based, meaning that a separate client must be deployed for each site you access. However, a single client application can be used to access all interfaces on a single site. Interfaces are added to the client in the same way the client is deployed. Simply access the interface's Launch page and click the Install Oracle Service Cloud button (as described in the following procedure), and the deployment tool will add the interface to the Interface drop-down menu on the client's Login window.

Important Before deploying the client application, be sure to review the system requirements (Answer ID 31) and the environmental configuration information (Answer ID 2364) on our support site.

If you are performing a large-scale deployment of Oracle Service Cloud, refer to Deploying Oracle Service Cloud to multiple staff members.

To download the Oracle Service Cloud client and log in

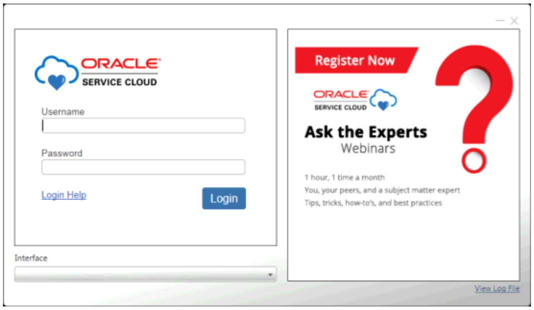
Important Cookies must be enabled on your workstation in order to work in the application.

1 Open your web browser and type the following URL.

```
http://<your_site>.custhelp.com/cgi-bin/<your_interface>.cfg/php/
admin/launch.php
```

2 Click Install Oracle Service Cloud. A security message warns you that the application should not be installed unless you know that it is from a trusted source.

3 Click Install. Once Oracle Service Cloud downloads to your workstation, the Login window opens.



Note To view all deployment files and processes, click View Log File. Refer to Application structure.

You can configure several login options for your application, including login help and Login window customizations. Other login options can help you control and track login behavior.

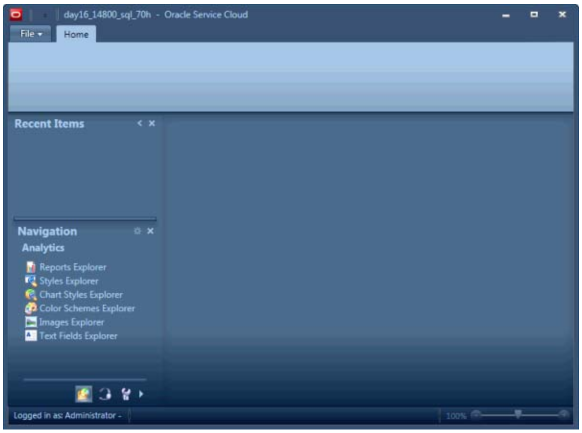
4 Type `administrator` in the Username field. You must enter this user name the first time.

5 Type the password assigned when your site was created. After logging in the first time, you must change your password.

User names and passwords are case sensitive. Keep this in mind as you add staff accounts.

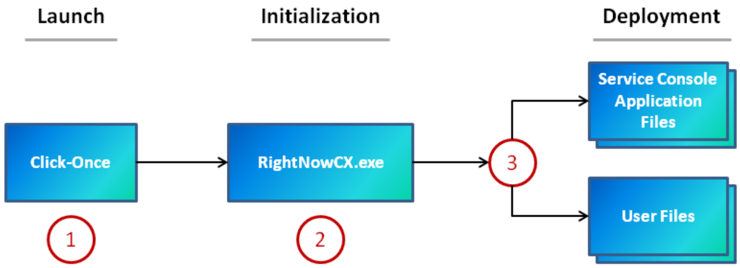
Tip The Interface field displays the name of the interface from which you launched the installer. This drop-down menu will also contain the names of any additional interfaces you install for this site, beginning with the first interface installed.

6 Click Login. The Service Console opens after the system updates and loads all necessary support files.



Application deployment process

When you deploy Oracle Service Cloud, the following process occurs.



1 Click-Once downloads the Oracle Service Cloud application, verifies that its deployment files are current (updating them if necessary), and launches the application.

2 The application prompts you to log in and verifies the credentials you enter.

3 The application deploys the appropriate version application and user files and initializes the smart client. You are now logged in to Oracle Service Cloud.

After Oracle Service Cloud is deployed to your workstation, you can access it in the future by selecting Start menu > All Programs > RightNow > RightNow (<your_site>).

Important Each time you start the application, the Click-Once function will make sure Oracle Service Cloud is current, downloading new files and libraries as needed to keep your deployment up-to-date with each release. For this reason, there is no need to uninstall and reinstall the application following an upgrade.

When logging in after an upgrade, Oracle Service Cloud streamlines the deployment by removing from the workstation any application files (such as program binaries) for versions previously run for the same site. However, user settings and cache files are retained to ensure a smooth transition and consistent experience for staff members.

The deployment process can be customized to ease the load on network bandwidth and disk space during large-scale deployments, operations, and updates of Oracle Service Cloud. For custom deployment options, refer to Deploying Oracle Service Cloud to multiple staff members.

Service pack deployment

Oracle issues service packs to enhance the product release cycle of Oracle Service Cloud. Six iterations are delivered on a regular schedule following the general availability of each major quarterly release. Oracle's automated service pack deployment process provides a simplified change management methodology, promptly delivering code and performance improvements without the need to perform a full upgrade. Service pack updates are deployed using a background process that requires no involvement from your IS team, minimizes impact on your network bandwidth, and is seamless to customers and staff members. For more about service pack deployment, refer to Answer ID 2525 on our support site.

Auto Upgrade Program

The Auto Upgrade Program is for organizations that want the latest version of Oracle Service Cloud by upgrading to each new quarterly release. By upgrading automatically, you get access to the latest features of Oracle Service Cloud while streamlining the upgrade process.

Sites that use standard product functionality and configuration options qualify for the Auto Upgrade Program. Sites that use customizations can qualify for the Auto Upgrade Program if the custom capability is built within the Connect APIs. To see if your site qualifies, contact your Oracle technical migration manager or account manager for a review of your implementation.

After your site is enrolled in the Auto Upgrade Program, an upgrade will be initiated for the site each quarter. An upgrade site and cutover date will be automatically generated, with notifications to your organization sent through an incident generated on our support site. The upgrade site will be available for you to test before cutover. You can change the upgrade cutover date if necessary. Any questions or problems during testing can be reported to customer support, which will be available to assist you during each upgrade cycle.

Starting with the May 2014 release, new sites are automatically enrolled in the Auto Upgrade Program. For more information, refer to Answer ID 6409 on our support site.

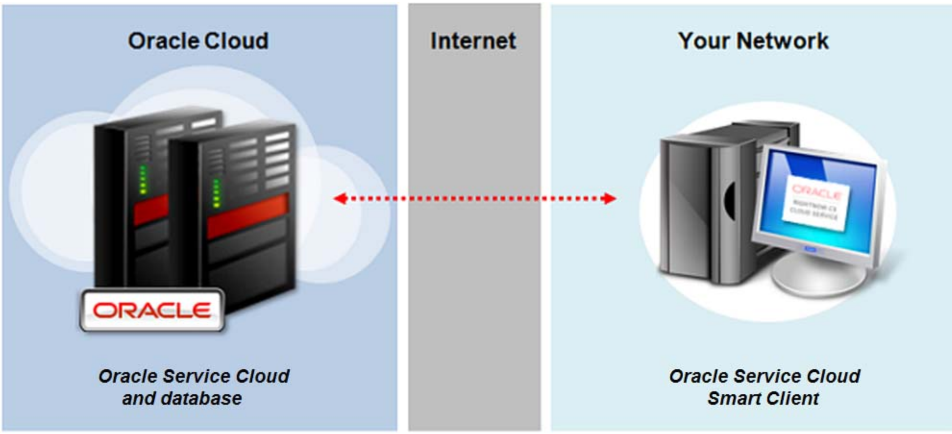
Application structure

Becoming familiar with the application's file structure can be helpful when considering custom deployment options or troubleshooting problems. The following overview describes the smart client directory structure and provides brief definitions of the major files and directories.

When Oracle Service Cloud is fully deployed to a workstation, the Click-Once deployment tool creates the following directories and files in the *%USERPROFILE%\AppData\Local\Apps\2.0* directory.

- <Alphanumeric string>—Contains client executables, cached libraries, and manifest files.
- *Data*—Contains user-specific settings and cache files.

In addition, a set of application resources is downloaded to the Windows user profile of each staff member. By default, these are placed in the *%APPDATA%\RightNow_Technologies\ <your_site>\<version>* directory.



These resources fall into the following three categories.

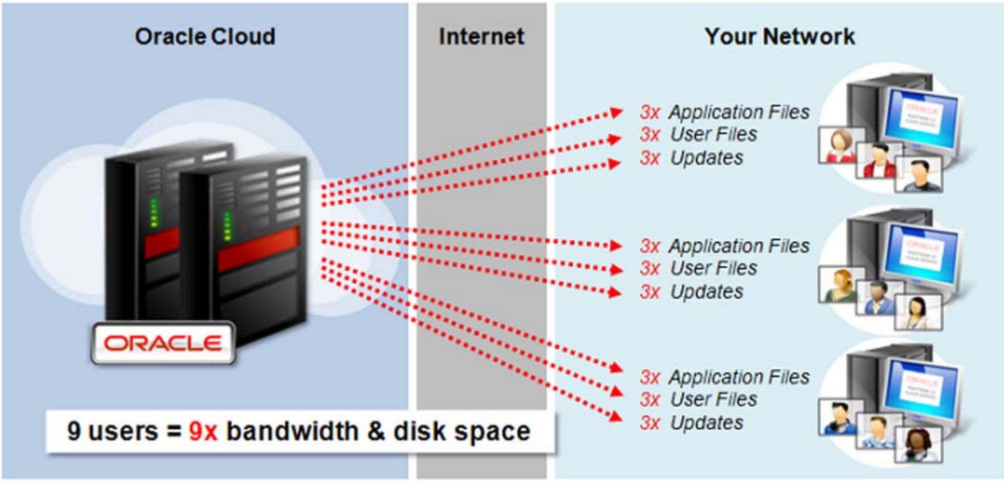
- **Application files**—The binary (.dll) and client files that comprise the extracted application. Upon deployment, these files are downloaded to the *<your_site>\<version>* directory and two subdirectories, *AddInPipeline* (containing add-in libraries) and *RN_COM* (containing the Redemption library used for Outlook integration).
- **User files**—The user-specific files written and used by the application, including user settings, downloaded file attachments, cache files, message base strings, and any add-ins to which the staff member has access. The user files are placed in the *<your_site>\ <version>\Users* subdirectory.
- **Updates directory**—Each time Oracle Service Cloud starts, it checks Oracle's cloud servers to see if there are new versions of the application files available, such as those provided by a service pack release. When an update is found, it is automatically downloaded to the *<your_site>\<version>\Updates* subdirectory as a zip file. The updated files are then extracted and moved to the application files location. The zip file and directory are removed following the update.

Note For custom deployment options, refer to Deploying Oracle Service Cloud to multiple staff members.

All deployment files and processes are logged in a time-stamped file called <yyyy.MM.dd.HHmm.ssffff>.log.txt, found in the <*your_site*>*logs* directory. The log for the current session can also be accessed by clicking View Log File on the Login window. Log files are saved for seven days following deployment and are then automatically deleted to conserve disk space.

Deploying Oracle Service Cloud to multiple staff members

When deploying Oracle Service Cloud to a large team, it is important to consider the impact of the deployment process on your network resources. When each staff member initially logs in to the application, client files and libraries that support the application's activity are downloaded to the workstation (refer to Application structure). Depending on the number of staff members and workstations, these individual downloads can consume significant bandwidth and disk space.



To reduce the impact of deployments and software updates on your resources, the application provides three custom deployment options. These settings allow for great flexibility and efficiency of scale when deploying Oracle Service Cloud to large numbers of workstations. All three options can be used together to dramatically lower the use of the local hard drive on agent workstations.

Important A few basic distribution items such as lock, logging, and settings files will always be written to the Windows profile directory. This occurs before agent login and therefore cannot be redirected to a custom location through configuration of the application. If you want to prevent any client files from being written to the workstation hard drive, you must implement Windows redirected profiles.

To greatly reduce the resources required to complete a large-scale deployment, we recommend the following process.

Step 1—Log in to Oracle Service Cloud and define one or more custom deployment options, based on resource availability.

- Sharing application files
- Storing user files on a network drive
- Sharing update files

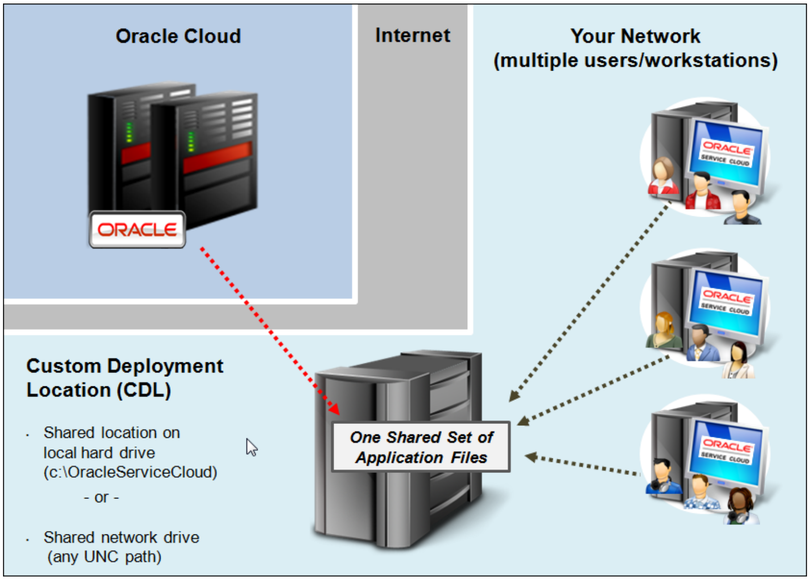
Step 2—Using the Click-Once deployment tool, deploy the application to one workstation. Refer to Click-Once deployment. This will download the deployment files to the custom locations you have defined.

Step 3—Complete the deployment by instructing all staff members to log in. The deployment process on each workstation will access the files from the custom locations, resulting in a much smaller resource impact than using the standard deployment procedure.

Sharing application files

When multiple staff share a single workstation, a full set of application files is placed in the Windows user profile of each staff member. These application files are identical for all staff members, as they do not include personal settings. To save disk space and avoid unnecessary redundancies, you can define a custom deployment location (CDL) to serve a single set of application files to multiple staff members. This location can be a directory on the workstation itself, or any path in universal naming convention (UNC) format.

When this option is enabled, the full set of application files is downloaded only once from the Oracle servers to the location you define, conserving bandwidth. This set of files can then be shared from the custom location by multiple staff members, conserving disk space. Even greater savings can be achieved when you store this set of files on a network drive, allowing it to be shared by staff members across multiple workstations.



You can define a CDL for your entire site, for specific profiles, or both. If both are defined, the location defined in the profile will override the location defined for the site for all staff members who share that profile.

To define a custom deployment location for a site

Set the CUSTOM_DEPLOYMENT_LOCATION configuration setting to the location you want. Refer to the online documentation.

Note If your site contains multiple interfaces, this setting must be consistent for all interfaces.

To define a custom deployment location for a profile

1 Log in to Oracle Service Cloud on an administrator's workstation.

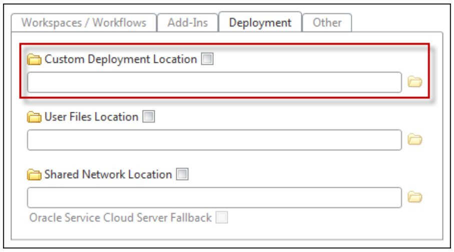
2 Click the Configuration button on the navigation pane.

3 Double-click Profiles under Staff Management. The report opens on the content pane, listing the profiles created for your site.

4 Double-click a profile to edit it. The Profiles editor opens.

5 Click the Deployment tab to display custom deployment settings.

6 Select the Custom Deployment Location check box.



7 Click the Browse button to the right of the field. The Browse for Folder window opens.

Tip As an alternative to browsing for a location, you can click the text field and type the path you want. This setting supports any UNC path or local directory name, such as C:\OracleServiceCloud.

8 Select a location for the custom deployment directory that is outside of the profile directory.

Or

Click the Make New Folder button to create a folder.

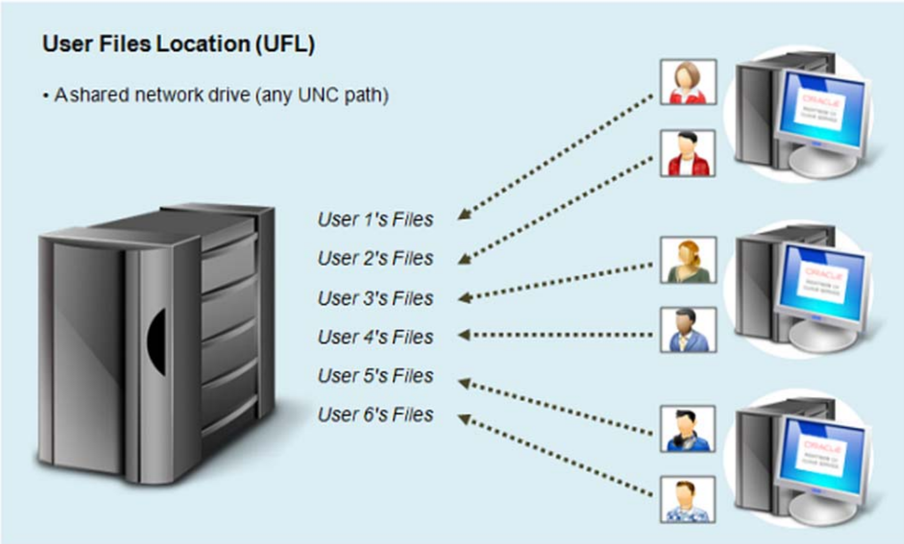
Important Staff members associated with the profile must have permission to create the directory you define (if it does not yet exist) as well as the ability to write and execute files in that directory. If a staff member does not have these permissions, the deployment tool will cease deployment of the files and prompt the staff member to contact an administrator to resolve the problem.

9 Click the OK button to close the window.

10 Click the Save and Close button to save your changes.

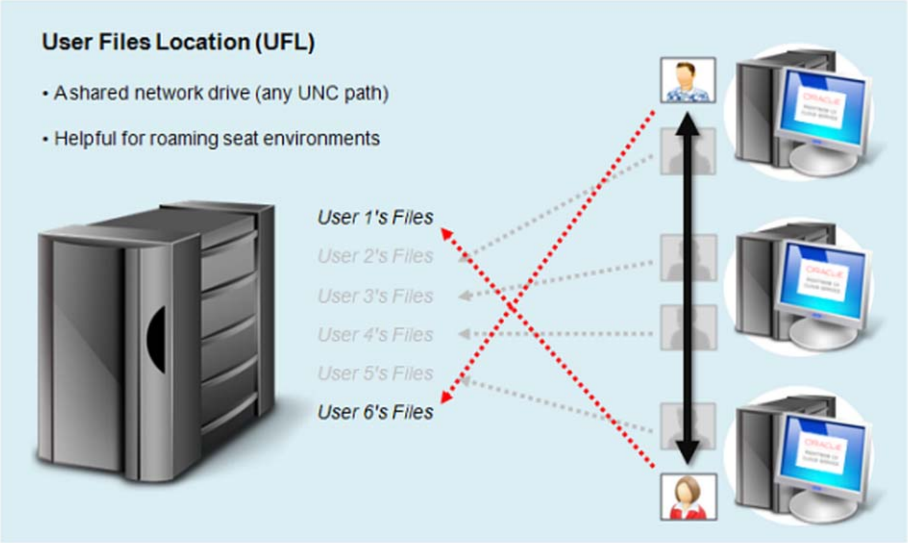
Storing user files on a network drive

When deploying to multiple staff members and workstations, you can define a custom user files location (UFL) for storing private user files that are used to run the Service Console. By default, these files are stored within each staff member's Windows profile. With this option, you can redirect them to a network drive.



Caution When specifying a shared network location for user files, make sure the location you define has adequate resources to serve these files efficiently to all of your staff members. Because these files support user processes in the application, they must be served efficiently in order to avoid system latency.

This option is also useful if your staff members roam among different workstations. When a UFL is defined, each staff member will access a single set of user files regardless of what workstation is used.



You can define a UFL for your entire site, for specific profiles, or both. If both are defined, the location defined in the profile will override the location defined for the site for all staff members who share that profile.

To define a user files location for a site

Set the USER_FILES_LOCATION configuration setting to the location you want. Refer to the online documentation.

Note If your site contains multiple interfaces, this setting must be consistent for all interfaces.

To define a user files location for a profile

1 Log in to Oracle Service Cloud on an administrator's workstation.

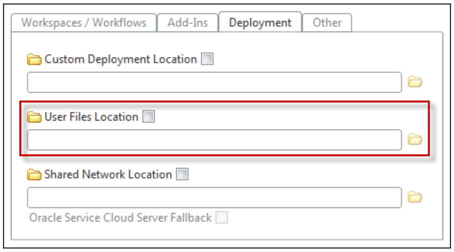
2 Click the Configuration button on the navigation pane.

3 Double-click Profiles under Staff Management. The report opens on the content pane, listing the profiles created for your site.

4 Double-click a profile to edit it. The Profiles editor opens.

5 Click the Deployment tab to display custom deployment settings.

6 Select the User Files Location check box.



7 Click the Browse button to the right of the field. The Browse for Folder window opens.

Tip As an alternative to browsing for a location, you can click the text field and type the path you want. This setting supports any UNC path.

8 Select a location for the user files directory, generally somewhere inside the staff member's profile directory.

Or

Click the Make New Folder button to create a folder.

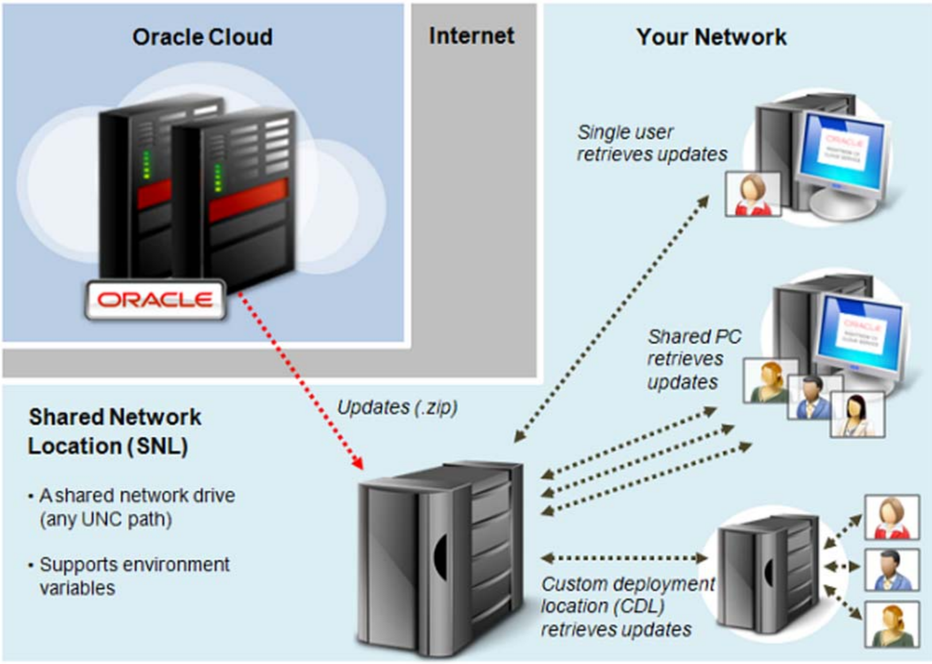
Important Staff members associated with the profile must have permission to create the directory you define (if it does not yet exist) as well as the ability to write and execute files in that directory. If a staff member does not have these permissions, the deployment tool will cease deployment of the files and prompt the staff member to contact an administrator to resolve the problem.

9 Click the OK button to close the window.

10 Click the Save and Close button to save your changes.

Sharing update files

To reduce the bandwidth and disk space required for application updates, you can define a shared network location (SNL) for storing and applying updates. This option can greatly reduce the impact of updating multiple workstations by locally mirroring the update content from the Oracle host servers. The first client to detect an available update will download the zip file to the location you define and extract the contents to its application files location. The zip file is then retained so it can be extracted by the remaining clients upon subsequent logins.



Note By default, updates are automatically downloaded to the *Updates* subdirectory of the application files location. For this reason, if a custom deployment location (CDL) has been specified (refer to Sharing application files), update files will already be shared from that location's *Updates* subdirectory just as they would be if the same location were defined in this setting.

However, you can still use this setting to define a different location to store updates if you prefer to do so. For example, if the CDL you have defined is on the workstation hard drive, you can still reduce resource impact by downloading updates to a shared network location.

You can also specify the protocol used to perform the updates, and enable the Oracle servers as a fallback resource should the location you define become unavailable, such as during server maintenance.

You can define an SNL for your entire site, for specific profiles, or both. If both are defined, the location defined in the profile will override the location defined for the site for all staff members who share that profile.

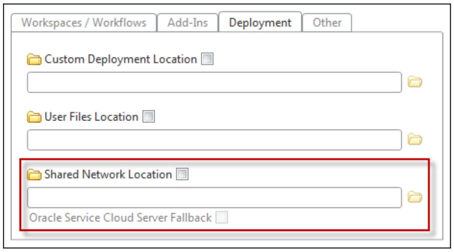
To define a shared update files location for a site

1. Set the SHARED_NETWORK_LOCATION configuration setting to the location you want. Refer to the online documentation.
2. To enable the Oracle servers as a fallback resource should the location you define become unavailable, set the RNT_SERVER_FALLBACK configuration setting to Yes.

Note If your site contains multiple interfaces, these settings must be consistent for all interfaces.

To define a shared update files location for a profile

1. Log in to Oracle Service Cloud on an administrator's workstation.
2. Click the Configuration button on the navigation pane.
3. Double-click Profiles under Staff Management. The report opens on the content pane, listing the profiles created for your site.
4. Double-click a profile to edit it. The Profiles editor opens.
5. Click the Deployment tab to display custom deployment settings.
6. Select the Shared Network Location check box.



7 Click the Browse button to the right of the field. The Browse for Folder window opens.

Tip As an alternative to browsing for a location, you can click the text field and type the path you want. This setting supports any UNC path.

8 Select a shared directory on the network.

Or

Click the Make New Folder button to create a folder.

Important Staff members associated with the profile must have permission to create the directory you define (if it does not yet exist) as well as the ability to write and execute files in that directory. If a staff member does not have these permissions, the deployment tool will cease deployment of the files and prompt the staff member to contact an administrator to resolve the problem.

9 Click the OK button to close the window.

10 To obtain update files from the Oracle servers as a fallback in the event the network location is inaccessible, select the Oracle Service Cloud Server Fallback check box.

11 Click the Save and Close button to save your changes.

2

Getting Started for Administrators

Today's consumers are empowered like no other time in history. Although they've always expected to be listened to, supported, and valued, never before have consumers had the tools at their disposal to ensure those expectations become reality. Oracle Service Cloud, the customer experience suite, delivers comprehensive customer experience applications that drive revenue, increase efficiency, and build loyalty.

Downloading Oracle Service Cloud

Once you download Oracle Service Cloud, all of the necessary components are automatically installed so you can begin configuring and customizing your application immediately. However, before you get started, you will want to review the system requirements in Answer ID 31 and the environmental configuration information in Answer ID 2364 on our support site.

To download the Oracle Service Cloud client and log in

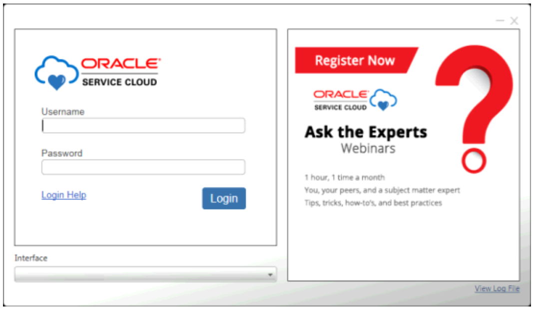
Important Cookies must be enabled on your workstation in order to work in the application.

1 Open your web browser and type the following URL.

```
http://<your_site>.custhelp.com/cgi-bin/<your_interface>.cfg/php/
admin/launch.php
```

2 Click Install Oracle Service Cloud. A security message warns you that the application should not be installed unless you know that it is from a trusted source.

3 Click Install. Once Oracle Service Cloud downloads to your workstation, the Login window opens.



Note To view all deployment files and processes, click View Log File. Refer to Application structure.

You can configure several login options for your application, including login help and Login window customizations. Other login options can help you control and track login behavior.

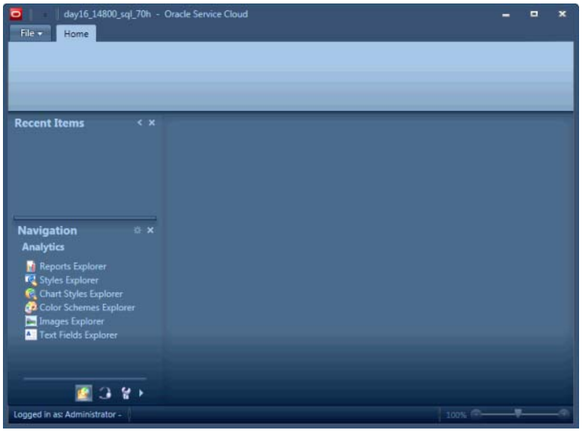
4 Type `administrator` in the Username field. You must enter this user name the first time.

5 Type the password assigned when your site was created. After logging in the first time, you must change your password.

User names and passwords are case sensitive. Keep this in mind as you add staff accounts.

Tip The Interface field displays the name of the interface from which you launched the installer. This drop-down menu will also contain the names of any additional interfaces you install for this site, beginning with the first interface installed.

6 Click Login. The Service Console opens after the system updates and loads all necessary support files.



Initial setup

The administrator login you used to download Oracle Service Cloud is a special account, meaning it is not a defined **staff account** and has no **profile** or **navigation set** associated with it. Consequently, your access to functionality is limited to the Analytics **explorers**, the administrator's **notifications**, and a default **configuration list**. This list contains essential items for initially configuring your application so your staff can begin working.

Before you get started, it's important to understand how navigation sets, profiles, and staff accounts work together as you initially configure your application.

Navigation sets, profiles, and staff accounts

No staff members can work in your application without a navigation set. Navigation sets control the navigation lists and buttons that staff members see on the console's navigation pane. You can create unique navigation sets for staff members who have any combination of responsibilities, such as working with incidents, maintaining answers in your knowledge base, and creating mailings and surveys.

Staff members must also be associated with a profile to give them permission to add and edit **reports**, **records**, and other items. You can create as many profiles as you need based on the areas that staff members will work in and the functionality they need to access. When you create profiles, you must assign a default navigation set to each profile.

It's important to consider the security of your site when granting staff members permissions. Refer to Using role access to define permissions for information about protecting your site when assigning staff member profile permissions. To learn how you can develop a security plan that fits the needs of your organization, see Developing a Security Plan.

The final element all staff members need is a staff account, which contains the login information they'll need to access the application.

Configure the initial setup for your staff in this order.

1. Create navigation sets consisting of navigation buttons and their associated navigation lists.
2. Create profiles and assign a navigation set to each profile.
3. Create a staff account for each staff member and assign a profile to each staff account.

Since you need access to all functionality, the first navigation set and profile you'll create is your own (see Creating a navigation set for the administrator). Then, add a staff account for yourself and begin using your new login information.

Tip If you intend to use custom **workspaces** instead of the default standard workspaces, you might want to create your custom workspaces before creating profiles, since you assign the workspaces staff members use in their profiles. However, if you decide to create your profiles and staff accounts first, you can always update profiles later with the custom workspaces. Refer to Creating custom workspaces.

- ❖ Creating navigation sets
- ❖ Customizing profiles
- ❖ Managing staff accounts
- ❖ Creating custom workspaces

Determining the functionality your organization needs

In order to configure your application with all the functionality your organization needs, it makes sense to identify those needs before creating your own navigation set. And while you can update any navigation set after you create it, we recommend doing it beforehand to save time and work.

Answers to the following questions can help determine what additional functionality beyond the defaults you want to use. If you answer Yes to any question, contact your Oracle account manager to enable the product or component.

1 Do you plan to use **Oracle RightNow Outreach Cloud Service** (Outreach) to communicate with your customers through mailings and campaigns and **Oracle RightNow Feedback Cloud Service** (Feedback) to survey your customers and prospects? If Yes, enable Outreach and Feedback. Refer to Creating mailings, Creating campaigns, and Creating surveys.

2 Do you want your sales staff to be able to manage and track all opportunity and related organization and contact information, and track quote interactions sent to customers and prospects? If Yes, enable **Oracle RightNow Opportunity Tracking Cloud Service** (Opportunity Tracking). Refer to Working with opportunities and Preparing quotes.

3 Do you want to take advantage of the power of social networking by providing your own social channels where your customers can interact with one another and your staff? If Yes, enable a **community** in **Oracle RightNow Social Experience** (Social Experience). Refer to Communities.

4 Do you want your staff to be able to monitor conversations taking place on the social web regarding your organization and its products and services? If Yes, enable **Oracle Right-Now Social Monitor Cloud Service** (Social Monitor). Refer to Social Monitoring.

Important Those products that are not enabled by default, Outreach and Opportunity Tracking, must be enabled in order for certain items to appear in the default list of configuration items for the administrator special account. For instance, if you want **tracked link categories** and the **external suppression list** to appear in your list of configuration items, contact your Oracle account manager to enable Outreach before you start this procedure. Likewise, if you want the **product catalog**, **price schedules**, **strategies**, **quote templates**, **territories**, and **sales periods** in your list of configuration items, Opportunity Tracking must be enabled. If you create navigation sets before Outreach and Opportunity Tracking are enabled, you will have to manually add those items to the list of configuration items for the Configuration button once the products are enabled.

Additionally, Feedback is not enabled by default, and while there are no configuration items associated with Feedback, it must be enabled in order to access the Surveys and Questions explorers and create **questions** and **surveys**.

Creating a navigation set for the administrator

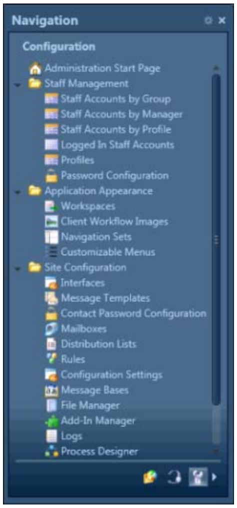
Your navigation set must contain all the navigation buttons you want to access. For instance, if you want to add and edit incidents, add the Incidents button to your navigation set and select the reports you want associated with this button. Your navigation set will also include the Configuration button, which will contain the configuration items you'll need to configure and customize your application.

To create a navigation set for the administrator

Tip We focus on adding items to the Configuration button in this procedure, but the same steps apply when adding reports and other items to any navigation button you want in your navigation set. See Creating navigation sets.

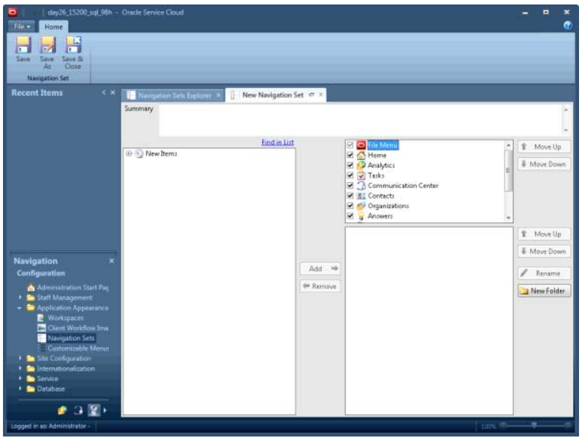
1 Log in to your application using the **special administrator account**.

2 Click the Configuration button on the navigation pane. The default list of configuration items displays.



3 Double-click Navigation Sets under Application Appearance. The Navigation Sets explorer opens.

4 Click New. The Navigation Sets editor opens.



Notice that File Menu displays first in the list on the right. While this is not a navigation button, it is part of every navigation set, and you can configure it with the items you want to be able to create from the **file menu** (accessed by clicking File next to the Home tab on the ribbon).

Keep in mind, however, that you must also have the corresponding permission in your profile for every item or record type you add to this menu. See To configure the file menu.

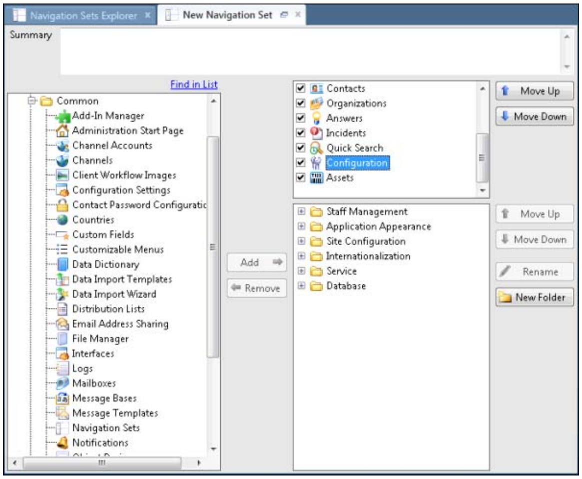
5 On the top right of the **content pane**, scroll down and select Configuration in the list of buttons. The lower portion displays the folders containing default configuration items associated with the Configuration button for the administrator special account.

a Expand each folder to view its items.

Tip File Menu will always appear first in the list, but since it isn't a button that appears on the navigation pane, you can move the Configuration button under the File Menu and it will appear first on the navigation pane. Just click the button in the top portion and then click Move Up to position it where you want it in the list.

6 On the left side of the content pane, click the plus sign next to Components to expand the list of configuration items.

a Expand the Common and Service subfolders. Items appear in alphabetical order.



Notice that Outreach and Opportunity Tracking folders don't appear in the default list. In order for them to appear, they need to be enabled before you create your navigation set. Contact your Oracle account manager.

The following table describes the default folders and items associated with the Configuration button.

Table 1: Default Configuration Items in a New Navigation Set

Folder/Configuration Item	**Description**
Staff Management	This folder contains options to configure your application for profiles, staff accounts, and password requirements.
Staff Accounts by Group	This report lists your organization's staff accounts by group. Refer to Adding and editing staff accounts. **Note:** When you access any report in this folder, you can double-click a staff account (or profile in the Profiles report) to open it or select one and click Open. You can also click New to add a staff account or profile, depending on the active report.
Staff Accounts by Manager	This report lists staff accounts by manager.
Staff Accounts by Profile	This report lists staff accounts by profile.
Logged In Staff Accounts	This report lists the staff members who are currently logged in. You can use this report to manage your **desktop user sessions**. Refer to Manually logging out active sessions.
Profiles	This report lists all profiles in your application. From this report you can add profiles that define the permissions staff members need to configure areas in your application and work with reports, records, and components. Refer to Customizing profiles.
Password Configuration	Define requirements for password expiration, number of invalid logins allowed, and password length for staff accounts. Refer to Configuring staff member passwords. **Important:** If you intend to require staff members to have a password to log in to the application, you must configure your organization's password requirements before adding staff accounts.

Table 1: Default Configuration Items in a New Navigation Set (Continued)

Folder/Configuration Item	Description
Application Appearance	This folder contains options to customize the information that is displayed to staff members, determine what navigation buttons and navigation lists staff members can access, create images for workspaces, and customize your application with tools to ensure that your knowledge base contains accurate and consistent data.
Workspaces	Create custom workspaces to define the way fields, tabs, buttons, and reports display on the content pane when working with records (answers, assets, contacts, incidents, opportunities, organizations, and tasks) and when working in **Oracle RightNow Chat Cloud Service** (Chat). You can also create custom workspaces for the Quote, Quote Product, and Service Opportunity windows. See Creating custom workspaces.
Client Workflow Images	Create images to use in workspaces and in questions for **guided assistance**. Refer to Images explorer.
Navigation Sets	Create navigation sets containing the navigation buttons and associated navigation lists staff members can access. Refer to Creating navigation sets.
Customizable Menus	Create menu items to keep your knowledge base organized and up-to-date. Refer to Customizable Menus. **Note:** By default, the Customizable Menus tree contains a System Menus folder, consisting of default menu items, and a Custom Menus folder, which will contain the menu-only custom objects you create. If you disable the **custom objects** feature before creating your navigation set, the tree will not contain any folders and only the default menu items will be listed in the tree. See Creating menu-only custom objects.
System Menus	Customize any of the following default menu items in this folder. **Note:** When Opportunity Tracking and Chat are enabled, this list will also contain the following items. • **Opportunity Tracking**—Competitors, Contact Roles, Industry Types, Lead Rejection Types, Opportunity Statuses, and Win/Loss Reasons • **Chat**—Chat Agent Statuses and Chat Queues

Table 1: Default Configuration Items in a New Navigation Set (Continued)

Folder/Configuration Item	Description
Answer Access Levels	Add custom answer access levels to control what information is visible to staff members and customers on each interface. The two default answer access levels are Help and Everyone. See Adding and editing answer access levels.
Answer Statuses	Add custom answer statuses to control which public answers are visible to customers and staff members. The four default answer statuses are Private, Proposed, Public, and Review. See Adding and editing answer statuses.
Asset Statuses	Add custom asset statuses to more accurately represent the status of **assets** (products and services) registered and tracked in your application. The default asset statuses are Active, Retired, and Unregistered. See Configuring asset statuses.
Billable Tasks	Add billable tasks so you can record the time agents spend working on incidents. The default billable task is Miscellaneous. See Adding and editing billable tasks.
Channel Types	Configure your application so you can store your contacts' Twitter, YouTube, and Facebook user names in their contact record. When user names are available, incidents created from these channels are associated with the appropriate contact, giving agents a more complete understanding of all incidents submitted by each contact. See Storing social media user names.
Contact Types	Add contact types to organize the contacts in your knowledge base into classifications, such as a contact's position or function with respect to your organization. See Adding and editing contact types.
Incident Queues	Add incident queues to automatically route incoming incidents when used with business rules. Adding incident queues lets you also control which incidents agents work on, the order incidents are worked on, and how many incidents agents can have in their **inbox** at one time. See Adding and editing incident queues.
Incident Severities	Add incident severity levels to record the importance or urgency of individual incidents. See Adding and editing incident severities.

Table 1: Default Configuration Items in a New Navigation Set (Continued)

Folder/Configuration Item	**Description**
Incident Statuses	Add custom incident statuses to show a more complete representation of the state of incidents in your knowledge base. The four default incident statuses are Solved, Unresolved, Updated, and Waiting. See Adding and editing incident statuses.
Organization Address Types	Add organization address types to store multiple addresses for the organizations in your knowledge base. The default address types are Billing and Shipping. See Adding and editing organization address types.
Custom Menus	While this folder is initially empty, it will contain any menu-only custom objects you define for your application. Using menu-only custom objects, you can store options for populating menu fields in other custom objects. You can then use the same menu lists to populate menu fields in multiple custom objects. See Creating menu-only custom objects.
Site Configuration	This folder contains options to configure and customize all elements of your interfaces.
Interfaces	Change the display name of the interface (see Changing the interface display name) and identify the answers report that displays on your **customer portal** (see Changing the report on the Answers page). **Note:** When Chat is enabled, the ribbon on the Interfaces editor contains a Chat Hours button for setting the hours your agents are available to chat with customers. See Setting chat hours.
Message Templates	Customize your **Oracle RightNow Cloud Service** (Service) email, including messages used in administrator notifications and emails and in contact emails. You can also standardize the look and feel of all your outgoing email to present a unified image to your customers. See Working with the Message Templates editor.
Contact Password Configuration	Set requirements, such as minimum password length and the maximum number of character repetitions and occurrences allowed, to strengthen customer passwords when accessing your customer portal. See Configuring password requirements.

Table 1: Default Configuration Items in a New Navigation Set (Continued)

Folder/Configuration Item	**Description**
Mailboxes	Add Service and Outreach mailboxes (when Outreach is enabled) and customize mailbox settings. You can configure both outgoing and incoming email options. See Adding and editing mailboxes. **Important:** If Oracle has added an **Oracle-managed Service mailbox** for your application, you can edit some of the settings associated with this mailbox, while other settings are read-only. See To edit an Oracle-managed Service mailbox.
Distribution Lists	Add mailing lists consisting of non-staff members' email addresses. See Managing distribution lists. Distribution lists can also be used to schedule and send reports. See Scheduling reports.
Rules	Configure your application with business rules to automate workflow and handle routine tasks. See Creating rule bases.
Configuration Settings	Customize **configuration settings** for each interface. See Customizing configuration settings. **Note:** When you change a configuration setting, you must log out and log back in for the change to take effect.
Message Bases	Customize the headings, labels, and text on the **administration interface** and your customer portal. See Customizing message bases.
File Manager	Modify Chat images, custom scripts, wordlist files, dictionary files, and certificate directories. See Managing files.
Add-In Manager	Upload add-ins and allow access to individual add-ins for each profile and interface. See Installing add-ins.
Logs	View the error log, info log, security log, and the external search log. You can also access the rule log from this option. See Viewing log files.
Process Designer	Create custom processes (**object event handlers**) that run when events occur on **objects** in Oracle Service Cloud. See Accessing the process designer.

Table 1: Default Configuration Items in a New Navigation Set (Continued)

Folder/Configuration Item	Description
Internationalization	This folder contains an option to configure your application with the countries in which you do business.
Countries	Add countries and provinces to maintain accurate address information for the organizations and contacts in your knowledge base. See Adding and editing countries and provinces.
Service	This folder contains configuration options specific to Service.
Knowledge Base	Configure options so search results are more effective for customers when searching for answers and to broaden the scope of search capabilities for both customers and staff.
Incident Stopwords	View or change the list of stopwords for incidents that will be excluded from indexing and searching. See Configuring incident stopwords.
External Search Configuration	Configure the Web Indexer to index and search documents that are not part of your knowledge base (for example, web pages and entire websites). See Configuring the Web Indexer.
Search Priority Words	Create words that are associated with a public answer or a web document that will always display when the word is included in the search text. Refer to Configuring search priority words.
Answer Stopwords	View or change the list of **stopwords** for answers that will be excluded from indexing and searching. See Configuring answer stopwords.
Topic Browse	Test the cluster groups for the Browse search method or schedule clustering for the next run of the **Agedatabase** utility. See Adding a Browse page.
Service Level Agreements	Track the effectiveness of your customer service and control the service and support you provide to your customers.
Response Requirements	Define the time (in minutes) that agents have to initially respond to incidents and the time (in minutes) allowed to solve incidents. By defining response requirements, you can monitor how agents are meeting your organization's service goals. See Defining response requirements.

Table 1: Default Configuration Items in a New Navigation Set (Continued)

Folder/Configuration Item	Description
Service Level Agreements	Create SLAs (service level agreements) to assign to the contacts and organizations in your knowledge base. You choose the duration of each SLA, the number of incidents that can be submitted through the SLA, and the response requirements based on the support you want to offer customers. See Creating SLAs.
Holidays	Add all the holidays your organization observes, per interface. Response requirements, including any custom response requirements you have created, are suspended during holidays. See Adding and editing holidays.
Products/Categories/Dispositions	• Add service products and categories to group the answers and incidents in your knowledge base. You can add products and categories to each interface you have configured as well as add additional levels of products (sub-products) and categories (sub-categories). • Add dispositions to record how incidents were resolved (what was done for the status to change to Solved). You can add up to six levels of dispositions and require that agents select a disposition before an incident's status can change to Solved. • Link products to categories and products to dispositions so that only the categories and dispositions that have been linked to a product appear when the product is selected on the administration interface or your customer portal. Refer to Adding and editing products, categories, and dispositions and Product linking.
Standard Text	Define text and responses for agents to insert when responding to incidents or engaged in chat sessions, or to add as a business rule action. When you define standard text, you designate where it will be available to staff: Incident Text and Rule Text. See Adding standard text. **Note:** When Chat is enabled, Chat Text and Chat URL options are also available.

Table 1: Default Configuration Items in a New Navigation Set (Continued)

Folder/Configuration Item	Description
Variables	Define shortcuts instead of entering long strings of text. Variables can be inserted in the Question and Answer fields of answers or inline when responding to customers during a chat. When customers view the answer or receive a response from an agent during a chat, the variable is replaced with the value you define. See Adding variables.
Channels	Customize all the channels customers use to communicate with your organization, including the standard channels through which incidents are created (Service Email, Outreach Email, Phone, Fax, Post, Service Web, Outreach Web, Chat, and Email) as well as the social channels (**Community**, Twitter, YouTube, RSS, and Facebook). You can also create custom channels for Community, RSS, and Facebook. The remaining standard and social channels can be edited, including updating their name and disabling them. See Social channels overview. **Note:** **Social Monitor** must be enabled in order to monitor the social channels.
Channel Accounts	Configure your application so staff members can respond to contacts through communities, Facebook, or Twitter. Without a channel account, your staff can respond only through email. See Granting agent access to channel accounts. **Note:** Social Monitor must be enabled in order to create a channel account for communities.
Database	This folder contains options to add and update items in your database to ensure the information is complete and up-to-date.
Data Dictionary	View a list of all the tables in the Oracle database and all columns in each table. Refer to Viewing the data dictionary.
Custom Fields	Gather additional information about answers, contacts, incidents, opportunities, organizations, quotes, sales products, staff accounts, and tasks. See Adding and editing custom fields.

Table 1: Default Configuration Items in a New Navigation Set (Continued)

Folder/Configuration Item	Description
Object Designer	Create **custom objects** in order to integrate your organization's data with Oracle Service Cloud. You can manage and report on the data in the same way you manage and report on incidents, answers, contacts, tasks, and other **standard objects**. See Creating custom objects. **Note:** If you disable the custom objects feature before creating your navigation set, the Object Designer will not display in the default list.
Incident Thread Type Correction	Convert an incident response thread into a note thread. Note threads are never seen by customers in their incident responses. Refer to Converting response threads.
Data Import Templates	Add data import templates to map columns in a CSV file to columns in your database. You can then skip the column mapping process when uploading records from a CSV file with the same column ordering. See Data import templates.
Data Import Wizard	Upload multiple records using the Data Import Wizard. See Importing data.
Email Address Sharing	Enable email address sharing so a group of related contacts (such as a family or a team) can maintain individual contact records while sharing one email address. See Email address sharing.

7 Select the configuration item from the left column and click Add. You can also drag the item to the lower portion of the right column and place it where you want it in the list or double-click the item.

- **a** To add more than one item at the same time, press **Ctrl** while selecting each item and click Add.
- **b** To search for a specific item to add, click Find in List above Available Items. This feature also locates items in folders that aren't expanded.

8 To set an item as the default for the configuration list, right-click it and select Set As Default.

Note The item you set as the default will automatically open on the content pane when the configuration list displays when you log in.

9 To remove an item from the configuration list, select it and click Remove.

10 To group your items into more categories than currently exist in the configuration list, click New Folder.

  a Type the name of the folder.
  b Drag items to the folder.

11 To rename a folder, including one of the default folders, right-click it and select Rename. Then type a new name.

12 To move an item in the list, select it and click Move Up or Move Down, or drag it where you want it in the list.

13 To create a navigation list for each type of record and item that you want to be available in your navigation set (such as answers, incidents, contacts, and organizations), repeat steps 5 through 8.

Tip The check box next to each button is selected by default. To remove a button from your navigation set, just clear its check box.

14 To add items to the file menu so you can use this shortcut to add records and items to the knowledge base, scroll up to the top of your list and select File Menu. See To configure the file menu.

15 Click Save and Close. The Save As window opens.

  a Type a name for the navigation set in the Navigation Set Name field and click OK.

Next, create a profile with full administration permissions and associate your navigation set with this profile. Then add your staff account assigned to the full access profile. Thereafter, use your staff account information (name entered in the Username field and password, if you define one) to log in. Refer to Customizing profiles and Managing staff accounts.

Tip There's another way to customize your configuration list or any navigation list after you create your navigation set. With the Customize Navigation Sets permission in your profile, you can add items to a list directly from the navigation pane (by clicking the Gear button at the top right of the Configuration list). When you add items this way, you are changing only your lists, not the original navigation set. See Customizing navigation and configuration lists. To examine the implications of customizing your navigation set from the navigation pane, refer to Customizing navigation sets.

- Creating navigation sets
- Customizing profiles
- Managing staff accounts
- Changing navigation pane settings

Optional configuration items

Although Oracle Service Cloud contains a default configuration list for the special administrator account, there are more items you can add to your configuration list depending on what functionality you want. However, the majority of the items won't be available for you to add until the associated product or component is enabled. Contact your Oracle account manager to enable products and components listed in this section.

The following table describes the items that display under Components once their associated product or component is enabled. The alphabetical list is organized in folders: Analytics, Audiences, Common, Content Library, Feedback, Opportunity Tracking, Outreach, and Service items. Unless specifically noted, all items appear in the default configuration list if you enable the product or component before creating a navigation set. Otherwise, you must manually add the item to your configuration list.

Table 2: Additional Configuration Items Under Components

Folder/Item	Description
Analytics	The Analytics folder contains all Analytics explorers and the Report Management item. **Note:** The Analytics explorers are available to you with your special administrator account from the Analytics button on the navigation pane. In addition, the Analytics navigation button is part of new navigation sets, and you can add any Analytics explorers to this button for your own navigation set or any of the other navigation sets you create. Refer to Creating navigation sets.
Explorers	Analytics explorers include Chart Styles, Color Schemes, Images, Reports, Styles, and Text Fields.

Table 2: Additional Configuration Items Under Components (Continued)

Folder/Item	Description
Report Management	Manage reports more easily and gain insight into where and how reports are being used in your application. Using the Report Management item, you can identify certain types of reports to help make system and report maintenance easier. Refer to Management Reports. **Note:** This item does not have to be enabled, but you must manually add it to your navigation set. You can add it to the Analytics button, the Configuration button, or any other navigation button.
Audiences	The following configuration items appear under Audiences after you enable Outreach and Feedback.
Contact Lists Explorer	Add the Contact Lists explorer to a navigation list in order to access and create static lists of contacts for use in mailings and surveys. You must manually add this explorer to one of your navigation lists or the configuration list. See Adding contact lists.
External Suppression List	Add a list of email addresses that will be excluded from mailings. See Creating and editing the external suppression list. **Note:** The External Suppression List displays under the Outreach folder in the default configuration list if you enable Outreach before creating your navigation set.
Segments Explorer	Add the Segments explorer to a navigation list in order to access and create dynamic lists of contacts for use in mailings and surveys. You must manually add this explorer to one of your navigation lists or the configuration list. See Creating segments.
Common	Common items apply to all products: Feedback, Opportunity Tracking, Outreach, and Service.
Currencies/Exchange Rates	Add currencies for all the countries in which you do business and add exchange rates for each currency so your sales representatives have up-to-date rates when sending quotes to customers. See Adding and editing currencies. **Note:** This item appears under Internationalization in the default configuration list if you enable Opportunity Tracking before creating your navigation set.

Table 2: Additional Configuration Items Under Components (Continued)

Folder/Item	Description
Customer Portal	Access the Customer Portal Administration site to perform administrative tasks, including staging and deploying your customer portal pages. **Note:** You must enable MOD_CP_DEVELOPMENT_ENABLED at Common > Oracle Products > Modules in order to make changes to your development site. If you do not enable this setting, you cannot make changes to your customer portal, and your customers will see the default **reference implementation** with no customization. Refer to Customer Portal Administration.
Engagement Engine Rules	Create rules to give your organization greater control over where, when, and how proactive and reactive chats are provided to your customers. Refer to Configuring engagement engine rules. **Note:** Once this component is enabled, you must manually add it to your list of items for the Configuration button.
Language Skills	Add language skills to your application so you can route incoming chats to the agent with the most appropriate skill set. Refer to Configuring advanced routing. **Note:** Chat and **Smart Interaction Hub** must be enabled before you can add this item to your configuration list. Contact your Oracle account manager.
Product Skills	Add product skills to your application so you can route incoming chats to the agent with the most appropriate skill set. Refer to Configuring advanced routing. **Note:** Chat and Smart Interaction Hub must be enabled before you can add this item to your configuration list. Contact your Oracle account manager.
SA Auto Tuner	Fine-tune SmartAssistant to provide more relevant results to your customers and help reduce the incidents submitted to your support site. In addition to improving incident deflection rates, information produced by the autotuning feature can be useful for refining the knowledge base and providing guidance to agents. Refer to Adding SmartAssistant suggested answers. **Note:** You must enable KF_SA_OPTIMIZATION_ENABLE and manually add this component to your list of items for the Configuration button.

Table 2: Additional Configuration Items Under Components (Continued)

Folder/Item	Description
Scripts Explorer	Create scripts for workspaces that can contain fields and controls and branching logic to guide agents to different pages based on actions they take on a script page. See Creating and editing scripts. **Note:** This item appears under Application Appearance if you enable agent scripting before creating your navigation set.
Service Update Notifications	View changes that have been made in this version that may affect your organization if you are upgrading from an earlier version. You can view compatibility exceptions and deprecations and make changes **inline** to help you track how service updates affect your site. Refer to Service update notifications. **Note:** This component does not have to be enabled, but you must manually add it to your list of items for the Configuration button.
Single Sign-On Configurations	Administer **single sign-on** (SSO) integrations with external applications that reside outside Oracle Service Cloud. Single sign-on integrations let you use Oracle Service Cloud as an identity provider to store and authenticate customer credentials. After configuring an SSO service provider and application, staff members can then access the external application without being asked for their login credentials. Refer to Setting up single sign-on using an external identity provider. **Note:** This component does not have to be enabled, but you must manually add it to your list of items for the Configuration button.
Virtual Assistant Editor	Route incoming chats to a simulated agent that uses knowledge base data to respond to customer questions. Virtual assistant chats can ease the volume of chats requiring an agent. **Note:** Your site must be integrated with **Oracle RightNow Virtual Assistant Cloud Service** in order to use a virtual assistant. Refer to Configuring virtual assistant.
Workspaces/Workflows	When the desktop workflow feature is enabled, Application Appearance > Workspaces changes to Workspaces/Workflows. No action on your part is required. You can then create **desktop workflows** that can be used in place of a single workspace for each editor. Refer to Creating workflows.

Table 2: Additional Configuration Items Under Components (Continued)

Folder/Item	Description
Content Library	When Outreach or Feedback is enabled, this folder displays in the list of configuration items and contains Documents, File Attachments, Snippets, Templates, and Tracked Links explorers. You'll use these explorers to access and manage mailings, campaigns, questions, surveys, audiences, and content library items (documents, file attachments, snippets, templates, and tracked links). Refer to Explorers. **Note:** The Content Library navigation button also appears in a new navigation set when Outreach or Feedback is enabled, and you can add these explorers to the Content Library button (or any other button in new navigation sets).
Feedback	When Feedback is enabled, this folder displays in the list of configuration items and contains the Questions and Surveys explorers. **Note:** The Surveys navigation button also appears in a new navigation set when Feedback is enabled, and you can add these explorers to the Surveys button (or any other button in new navigation sets). Refer to Feedback Surveys and Feedback Questions.
Opportunity Tracking	The following items appear under Opportunity Tracking after Opportunity Tracking is enabled.
Price Schedules	Add price schedules to assign to your sales products. You can add multiple price schedules for greater flexibility when sending quotes to customers. See Adding and editing price schedules.
Product Catalog	Add your organization's sales products for use with quotes in Opportunity Tracking and **Offer Advisor** in Service. See Adding and editing sales products.
Promotions	Add promotions to offer to customers and automatic recommendations based on customer attributes and purchase history. You can also add target rules, which define groups of customers called targets, for use in promotions and product suggestions. See Setting up Offer Advisor and Creating targets. **Note:** Offer Advisor must be enabled before this item will be available. If enabled before you create your navigation set, Promotions will appear under Opportunity Tracking in the default list for the special administrator account. If enabled after you create your navigation set, you will need to manually add it to your list.

Table 2: Additional Configuration Items Under Components (Continued)

Folder/Item	Description
Quote Templates	Add quote templates and organize them into folders to automate and standardize quote generation. See Adding and editing quote templates.
Sales Periods	Add sales periods to track how sales representatives are meeting their sales quotas. See Adding and editing sales periods.
Strategies	Add strategies to track your sales processes. Also add the stages and tasks specific to each strategy. See Adding and editing strategies.
Territories	Add territories and assign each sales representative to a territory for opportunity assignments. You can add additional levels of territories (sub-territories) to cover all the geographical areas in which you do business. See Adding and editing territories.
Outreach	The following configuration items appear under Outreach after Outreach is enabled.
Campaigns Explorer	The Campaigns explorer also displays in the Outreach folder. **Note:** The Campaigns navigation button appears in new navigation sets when Outreach is enabled, and you can add this explorer to the Campaigns navigation button (or any other navigation button). Refer to Explorers.
Mailings Explorer	The Mailings explorer also displays in the Outreach folder. **Note:** The Mailings navigation button appears in new navigation sets when Outreach is enabled, and you can add this explorer to the Mailings navigation button (or any other navigation button). Refer to Explorers.
Tracked Link Categories	Add tracked link categories to group and classify your tracked links so your staff can quickly find particular tracked links. You can also generate reports to evaluate their effectiveness. See Tracked link categories.

Table 2: Additional Configuration Items Under Components (Continued)

Folder/Item	Description
Service	Optional items in this folder apply to Service.
Archived Incidents	Access outdated incidents that have been removed from your knowledge base. Refer to Accessing archived incidents. **Note:** This item does not have to be enabled, but you must manually add it to your list of items for the Configuration button.
Guided Assistance Explorer	Configure your application with an alternate search method for agents to quickly find information when working with customers on the phone or when responding to an incident and for customers when searching for answers on your customer portal. Refer to Creating guides. **Note:** This item appears under Service if you enable guided assistance before creating your navigation set.
Incident Thread Masking	Automatically mask incident thread content that matches certain common patterns, such as credit card, social security, and telephone numbers. You can also define up to five custom patterns that will be masked from view when new thread entries are created. Refer to Masking information in incident threads. **Note:** Incident thread masking must be enabled for this item to be available. Once enabled, you can add it to your list of items for the Configuration button. Contact your Oracle account manager to enable incident thread masking.
Social Monitor	Interact with your customers by searching social media services, create incidents in Service, and include social media in your Outreach and Feedback messages. **Note:** **Social Monitor** must be enabled for this item to be available. Once enabled, the Social Monitor button appears in a new navigation set, and you can add this item to the Social Monitor navigation button. Refer to Configuring social monitoring.

Important Configuring your application so your staff can work in Oracle Service Cloud is an important first step in the setup process. Another important element is managing staff sessions for site security and desktop usage metering and licensing compliance. See Session Management and Login Controls to learn about your options.

Working with configuration items

Before you begin customizing your site, take a few minutes to view the tutorial for administrators to learn about the key areas on the Service Console and some basic functionality.

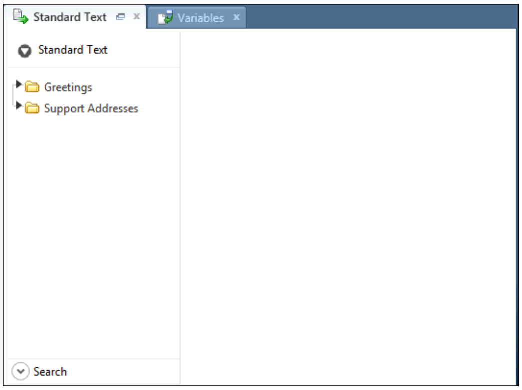
Note It's also a good idea to look at the key elements on the console from the perspective of customer service agents, sales representatives, and marketing personnel. Refer to Console overview.

To open a configuration item

1 Click the Configuration button on the navigation pane. The configuration list displays.

2 Double-click an item in the list. The item's tree displays on the content pane.

The following figure shows the content pane after double-clicking Standard Text under Service.



The tree displays the text and responses defined for your application. Some configuration items, including **standard text**, can be organized in folders. If the configuration item contains folders, as the standard text item does in our example, you can expand all of them by clicking the down arrow at the top of the tree.

You can also add folders to **custom fields** across all products, **variables** in Service, and the **product catalog** and **quote templates** in Opportunity Tracking.

Tip Tabs on the top of the content pane display all of the items you currently have open. When more than one item is open, just click a tab to return to that item or right-click a tab and select from the following options: Open in New Window, Close, Close All But This, and Close All. You can also press **Ctrl+w** or **Ctrl+F4** to close the active tab or click the Close button (X) on any content pane tab. Refer to Closing multiple records simultaneously.

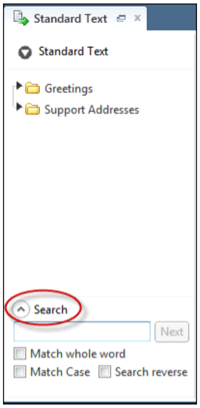
Right-click options differ for records in a **workgroup**. When you right-click the content pane tab of the primary record, your only option is to close all associated records in the workgroup. When you right-click an associated record that is the active tab, your options include Accept Changes, Cancel Changes, and Undock. Refer to Creating and using workgroups.

On administration editors, you can undock any editor by clicking the Undock button on the active tab. This action opens the editor in a separate window and lets you move between the window and console without having to close the window first.

3 To expand a single folder in the tree, click the arrow to the left of the folder.

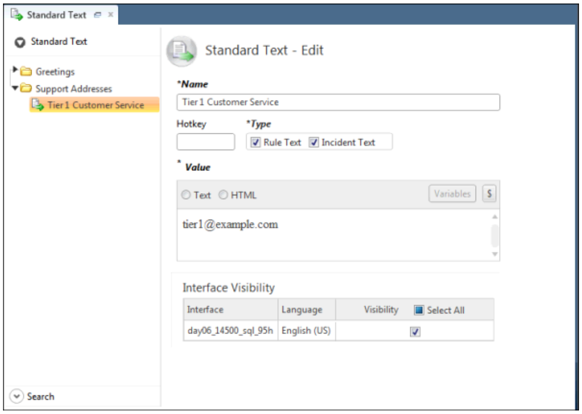
4 To change the name of a folder, click the folder.

To quickly locate an item in the tree, click the arrow next to Search at the bottom of the tree. The search menu displays.



You can search by whole word or case and also search the list from the bottom up. If your tree contains folders, results will return a folder matching the text you enter. Clicking the Next button returns any items within the folder that contain the search text.

5 To edit one of the standard text entries, click it in the tree. The editor displays the fields for the standard text.



a Make any changes you want and click Save. This saves your changes and leaves the editor open.

b To save your changes and close the editor, click Save and Close.

Important If another staff member makes changes to the same entry and saves it before you save your changes, you will receive a message to refresh or reload the editor in order to view the most current data.

6 To add a standard text entry, click New. Your new entry will appear in the active folder.

You can access the following options from a configuration item's tree and ribbon.

Table 3: Options from a Configuration Item's Tree and Ribbon

Action	Description
Add a folder	Right-click in the tree and select New Folder or right-click a folder to add a subfolder.
Add an item	Click New. The editor opens.
Delete folders and items	• To delete a folder, right-click it and select Delete. Be aware that when you delete a folder, all items in the folder are also deleted. • To delete an item, select it and click the Delete button on the ribbon. The item is removed from the knowledge base. **Note:** If the item you want to delete contains sub-items, you must delete the sub-items first. Sub-items can be added to those configuration items that offer additional levels of functionality. This includes **products**, **categories**, and **dispositions** in Service; **tracked link** categories in Outreach; and **territories** in Opportunity Tracking.
Expand and collapse folders	• Click the arrow at the top of the tree to expand all folders, and click it again to collapse them. • To expand or collapse a single folder, click the arrow to the left of the folder.
Edit an item	Click an item in the tree. The item's information displays on the editor.
Reorganize folders and items	Drag an item and drop it in the new position. When you move a folder, all items in the folder also move. You can reorder within a folder or move items to another folder. You can also drop a folder onto another folder to create a hierarchy.

Table 3: Options from a Configuration Item's Tree and Ribbon (Continued)

Action	Description
Save folders and items	• To save a new folder or item or save changes to an existing item and remain on the editor, click Save. • To save a new folder or item or save changes to an existing item and close the editor, click Save and Close.
Search the tree	Click the arrow next to Search at the bottom of the tree to display a menu for searching folders and items.

❖ Reordering items in the tree

❖ Selecting actions from a navigation or configuration list

❖ Adding folders

Adding folders

Certain configuration items can be organized in folders (**custom fields** across all products, **standard text** and **variables** in Service, and the **product catalog** and **quote templates** in Opportunity Tracking). Adding folders gives you more flexibility in organizing your data. For instance, you might want to add a folder for each type of sales product your organization sells or add folders to organize your quote templates by quote types. And once you add folders, you can move them in the tree to create the hierarchy you want.

1 Double-click the item in the configuration list. The item's tree displays on the content pane.

2 Right-click in the tree and select New Folder. The Folder editor opens and a New Folder entry appears in the tree.

3 Type the folder name and press **Enter**. The new folder displays in the tree and the Label field on the editor populates with the name of the new folder.

Tip You can also click Save or save the new folder and close the editor simultaneously by clicking Save and Close.

4 To add a subfolder, right-click a folder and select New Folder.

Reordering items in the tree

In addition to adding folders to certain configuration items to better organize and group your data, you can also rearrange folders and items in the tree using drag-and-drop operations. When you move a folder, all items in the folder also move. You can also drag a folder onto another folder to create an additional level in the hierarchy and reorder within a folder or move items to another folder.

Tip Remember that you can also add subfolders by right-clicking a folder and selecting New Folder.

3

Getting Started for Users

No matter which **channel** you use to interact with customers, you need to quickly and accurately respond to them. With Oracle Service Cloud, you have a variety of powerful tools to help ensure that every customer interaction is a positive experience.

Downloading Oracle Service Cloud and logging in

Once you have a **staff account**, just type the URL to your site and the software will download to your workstation. You can then enter your login information.

If you are the **administrator** for your organization, see Downloading Oracle Service Cloud for login instructions.

Important Cookies must be enabled on your workstation in order to work in the application.

To download Oracle Service Cloud and log in

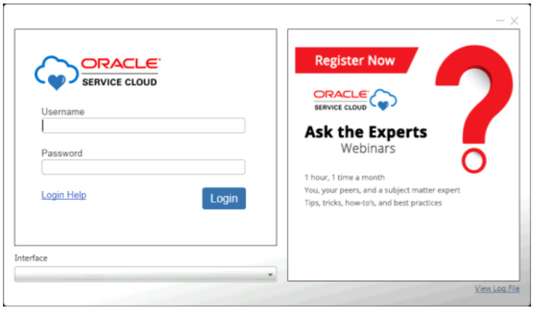
1 Open your web browser and type the following URL.

```
http://<your_site>.custhelp.com/cgi-bin/<your_interface>.cfg/php/
admin/launch.php
```

2 Click Install Oracle Service Cloud. A security message warns you that the application should not be installed unless you know that it is from a trusted source.

Note If Oracle Service Cloud has been configured to use an external identity provider (IdP) for agent authentication, an additional button (Install Oracle Service Cloud–Internal Login) displays on the Launch page. Clicking this button opens the Oracle Service Cloud Login window without embedding the IdP's login page. This lets accounts that do not have the SSO Login (SAML 2.0) profile permission log in without using the external IdP. Refer to Logging in using external identity providers.

3 Click Install. Once Oracle Service Cloud downloads to your workstation, the Login window opens. (This can take a few minutes.)



Note To view all deployment files and processes, click View Log File.

The Login window may look different from the one shown here if your administrator has customized it.

4 If you need help logging in, for example, if you've forgotten your password, click Login Help.

5 Type your user name in the Username field. Your user name and password are defined in your staff account and both are case sensitive.

Important

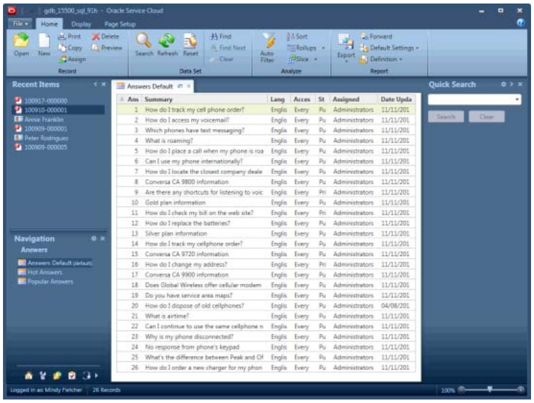
- If you attempt to log in to this application using the same user name and interface name as another staff member who is already logged in on a different workstation, and the **cache files** are stored in the same location for the two instances, you will receive a message that the application is already running and the subsequent session will not be started. However, if you are using the same user name and interface as another staff member, but the cache files are *not* stored in a shared location (in a non-virtualized environment), the cache files will not be overwritten and the second session will start, overriding and ending the first session.
- If you attempt to log in to the same site you are already logged in to on the same workstation using the same user name and interface, or another staff member is already logged in on that workstation with the same user name and interface, the initial instance will be brought to focus and no message appears.
- Although user names and passwords are case sensitive, two staff accounts with user names that are identical except for case cannot be logged in on the same workstation at the same time. If you attempt to do so, the Login window closes and the console for the first staff member logged in will be brought to focus and no message appears.

6 If you have been assigned a password, type it in the Password field. (Passwords are optional in Oracle Service Cloud.)

Tip The Interface field displays the name of the interface you entered in step 1. The drop-down menu contains the names of any additional interfaces installed for this site, beginning with the first interface installed.

7 Click Login. The **Service Console** opens after the system updates and loads all necessary support files.

The application icon now appears in your system tray. Hover over the icon to view your site name.



What you see when you initially log in depends on how your application is configured and what permissions have been assigned in your **profile**.

Tip After downloading Oracle Service Cloud and logging in the first time, access your application from Start > All Programs > RightNow > RightNow <your site name>.

- Application structure
- Deploying Oracle Service Cloud to multiple staff members
- Adding your branding on the Login window
- Configuring Login Help

After logging in

Oracle Service Cloud is set up to automatically log you out after a specific period of inactivity on the console (by default, fifteen minutes). Once your session expires, you will receive a Console Locked message, and you must re-enter your password to resume work without any loss of data.

After you enter your password and are reauthenticated, a new session is created and you can continue working with any loss of data.

If you choose to exit the application, all your unsaved work will be lost. In addition, after entering four incorrect passwords, you will be locked out of the console and must re-launch the application. Any unsaved work will be lost.

Important If you log in through an identity provider (that is, using the **single sign-on** process), you will **not** have the opportunity to re-enter your password to continue working in the application. Any unsaved work will be lost.

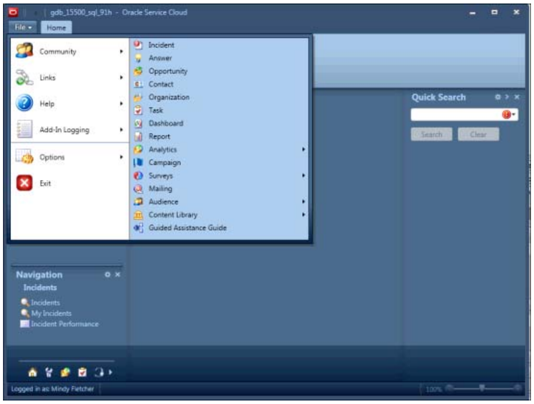
- ❖ Automatically logging out inactive sessions
- ❖ Logging in using external identity providers

Console overview

Whether you respond to **incidents** to answer customer questions, create and send **mailings** to contacts, or work **opportunities** and send **quotes** to customers, you can access everything you need from the Service Console (also called the agent desktop). And while the interface is easy to navigate, we recommend that you take the time to learn about the key areas on the console and how to perform some basic tasks. You can also watch the tutorial for an overview.

File menu

Click File next to the Home tab on the ribbon to access a menu of options for working in your application.



The file menu is divided into two panels. The left panel contains content-dependent options at the top, meaning that the options you see depend on what is currently displayed on the **content pane** (for example, a Print option appears when a report is open). Below this section are global options, meaning they are constant and will always appear on the file menu no matter what is displayed on the content pane (Community, Links, Help, Add-In Logging, Options, and Exit). The panel on the right side of the menu contains shortcuts for adding **records** and items to the knowledge base.

The following options are available from the file menu.

Table 4: File Menu Description

Section and Option	Description
Content-dependent Options	The top section on the left panel contains options for performing actions on what is displayed on the content pane. These options will change to reflect the active tab on the content pane. **Note:** You can add content-dependent options to the **Quick Access toolbar**. See Customizing the Quick Access toolbar.
Global Options	This section on the left panel contains options for accessing other areas in the application. Global options display no matter what is displayed on the content pane. **Note:** You can also add global options to the Quick Access toolbar.
Community	Select Community to access the following options.
Discussion Forum	Select this option to participate in discussion forums with other customers.

Table 4: File Menu Description (Continued)

Section and Option	Description
Idea Lab	Select this option to access a feedback forum where you and other customers can submit ideas, collaborate on development, vote for your favorite ideas, and see which ideas are being implemented.
Support Knowledge Base	Select this option to search for answers on our support site, submit questions, and access your account information.
Documentation	Select this option to access documentation for all Oracle Service Cloud products.
Tutorials	Select this option to take any of our tutorials, which walk you through product functionality and features based on user personas (administrators, users, and sales representatives). You can choose tutorials for any release of Oracle Service Cloud.
Best Practices	Select this option to explore our best practice guides to improve the customer experience you deliver.
Training	Select this option to access the Oracle University website for information about training classes and available delivery channels.
Developer Resources	Select this option to access our developer community to help you configure, manage, and extend Oracle Service Cloud beyond the enterprise.
Links	Select Links and choose from the following options.
Oracle Service Cloud Interfaces	Select this option to access any of the interfaces defined for your application and their associated **Service Console** and **customer portal**. (The link for the customer portal is called End-user.)
Office Integration	Choose from the following options. • **Install Outlook Integration**—Select this option to install Outlook Email Sync, Outlook Contact Sync, and Outlook Task Sync. • **Install Incident Reference Number Smart Tag**—Select this option to install the Oracle Service Cloud SmartTag so you'll be able to open incidents on the **agent desktop** from email messages in Microsoft Outlook. **Note:** Outlook integration must be enabled for these options to be available.

Table 4: File Menu Description (Continued)

Section and Option	Description
Oracle Service Cloud Customer Portal	The Site Administration option lets you access the Customer Portal Administration site. **Note:** The development area must be enabled in order for this option to appear (MOD_CP_DEVELOPMENT_ENABLED at Common > Oracle Products > Modules).
Site Administration	Select this option to set a cookie for viewing the development pages or one of the other available page sets (production, staging, and reference implementation). From this option you can also create custom widgets and view documentation about all widgets. Other functions include page set mapping, defining data fields, identifying framework and widget versions, viewing logs, and staging and deploying your customer portal. **Note:** You must also have customer portal permissions in your profile for this option to appear.
External Links	Select this option to access any custom links defined for your application. Custom links can include commonly used URLs or any website you may need to access.
Help	Select Help to access the help contents, help index, help search, documentation and tutorials for all Oracle Service Cloud products, and product version information. **Note:** Context-sensitive help is available throughout the application when working with reports, records, editors, and explorers. (The context-sensitive Help button is located on the far right of the ribbon.)
Add-in Logging	Select Add-in Logging to view the current or previous log file. See Logging add-in activity.
Options	Select Options to change your staff account settings, **local settings**, and password. You can also customize the content pane and navigation pane display, set tool windows visibility, and return tool windows to their default locations. See Accessing application options.
Exit	Select Exit to log out of the application.

Table 4: File Menu Description (Continued)

Section and Option	Description
Create new items	On the right panel is a list of all the records and items you can add to the knowledge base. The order of records and items in your list is selected by your administrator in your **navigation set** and the products and components that are enabled. **Note:** The options in this list are added to your navigation set for the file menu. If a record or item hasn't been added, then it won't appear in the list even if you have permission in your profile to create the record or item. Likewise, if your navigation set contains options to create records and items from the file menu, but you haven't been assigned permissions in your profile, then those options will not appear in the list.
Dashboard (Ctrl+Shift+b)	Select this option to create a dashboard. See Creating dashboards.
Report (Ctrl+Shift+r)	Select this option to create a custom report. See Creating reports.
Image	Select this option to create a report image. See Images explorer.
Style	Select this option to create a report style. See Styles explorer.
Chart Style	Select this option to create a chart style. See Chart Styles explorer.
Color Scheme	Select this option to create a color scheme. See Color Schemes explorer.
Text Field	Select this option to create a text field to add to a custom report or dashboard. See Text Fields explorer.
Contact (Ctrl+Shift+c)	Select this option to add a contact. See Adding contacts.
Organization (Ctrl+Shift+o)	Select this option to add an organization. See Adding organizations.
Task (Ctrl+Shift+t)	Select this option to add a task. See Adding tasks.
Answer (Ctrl+Shift+a)	Select this option to add an answer. See Adding answers.
Incident (Ctrl+Shift+i)	Select this option to add an incident. See Adding incidents.
Asset (Ctrl+Shift+n)	Select this option to add an asset. See Adding asset products.
Opportunity (Ctrl+Shift+p)	Select this option to add an opportunity. See Adding opportunities.
Campaign (Ctrl+Shift+g)	Select this option to create a campaign. See Creating campaigns.

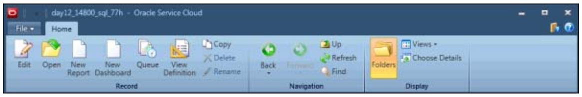
Table 4: File Menu Description (Continued)

Section and Option	Description
Surveys	Select this option to create a survey or survey question. See Creating surveys and Creating questions.
Mailing (Ctrl+Shift+m)	Select this option to create a mailing. See Creating mailings.
Audience	Select this option to create a contact list or segment. See Adding contact lists and Creating segments.
Content Library	Select this option to create a document, template, snippet, tracked link, or file. See Content Library.
Guided Assistance Guide (Ctrl+Shift+e)	Select this option to create a guide to assist staff members and customers in locating answers. See Creating guides and Finding answers using guided assistance. **Note:** Guided assistance must be enabled for this option to appear in the list and you must have permission in your profile to create guides.

- Configuring Outlook integration
- Opening the Customer Portal Administration page
- Customizing the Links menu

Ribbon

Next to the file menu is the ribbon, which displays on all **reports**, **records**, and **explorers**.



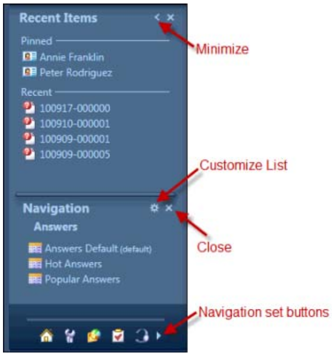
The ribbon consists of tabs and buttons for performing actions on an entire report, individual records in a report, or items in an explorer tree or list. Refer to Working with the ribbon.

Tip If nothing opens on the content pane when you log in, the ribbon will be empty. See Changing navigation pane settings to define what opens on the content pane when you log in.

Navigation pane

On the left side of the console is a navigation pane containing Recent Items and Navigation tool windows. There's also a navigation pane on the right containing the Quick Search tool window, which you can use to search for any record or item in the knowledge base. Although this setup is part of the default configuration, the tool windows can be put in any order or displayed in separate, floating windows. Tool windows can also be removed from the console. Refer to Moving tool windows.

The following figure shows the default configuration for the left navigation pane. The Answers **navigation list** is the active list in this example, displayed by clicking the Answers button on the navigation pane.



The majority of your work will begin on the left navigation pane where you can select the reports, records, and other items you need. At the top is Recent Items, which lists the records and items you have recently opened. Next is the Navigation tool window, which contains all of the navigation buttons in your **navigation set**.

Each record type (answers, assets, contacts, incidents, opportunities, organizations, and tasks) and component (such as analytics, campaigns, mailings, and surveys) has a corresponding navigation button. Your administrator has created a navigation set containing the navigation buttons you can access and assigned it to your profile. This determines the buttons and associated navigation lists that appear on the navigation pane. (The **Configuration button** may also be part of your navigation set if your administrator added it.)

Note By default, the navigation list that appears when you log in will be the navigation list that was active when you logged out.

Navigation lists are organized in a tree and can contain any of the following items.

- **Folders**—Folders are used to organize reports, dashboards, and other items in a navigation list.
- **Reports**—Reports include records reports (answers, assets, contacts, incidents, opportunities, organizations, or tasks), **standard reports**, and **custom reports**.
- **Dashboards**—Dashboards are any combination of individual reports shown together in one report on the content pane.
- **Explorers**—Explorers display information on the content pane in hierarchical folders and are available for certain components and configuration items. Explorers can be added to any navigation list. Refer to Explorers.
- **Miscellaneous items**—**Notifications**, **archived incidents,** and the **social monitor** component are just a few of the other items that can be placed in a navigation list.

❖ Changing navigation pane settings

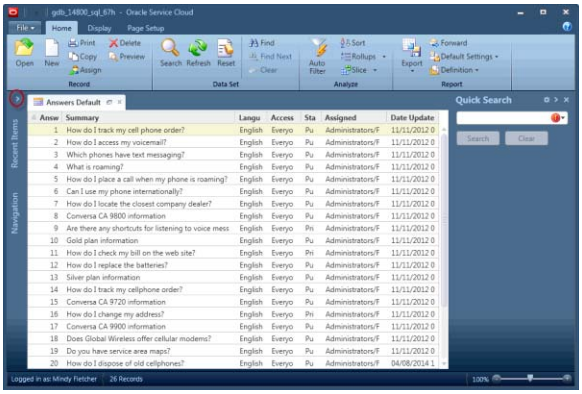
❖ Customizing navigation and configuration lists

❖ Opening reports

❖ Creating dashboards

Tool window buttons

The buttons next to each tool window title let you customize a single window or all windows. For instance, the top tool window on each navigation pane (both left and right in the default console configuration) contains a Minimize button, which collapses the navigation pane so all tool windows on that navigation pane run down the side of the console.



In this example, only the left navigation pane is collapsed. The right navigation pane, containing Quick Search, is maximized. To maximize the left navigation pane, click the right arrow at the top.

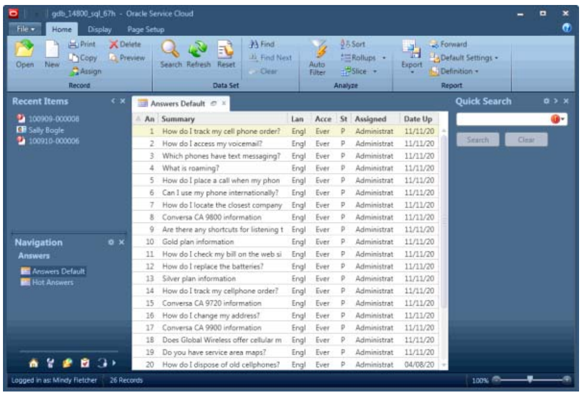
You can also close individual tool windows by clicking X (Close) next to a window title and customize the items in any navigation list and the Quick Search menu by clicking the Gear (Customize List) button. Refer to [Customizing navigation and configuration lists](#).

Moving tool windows

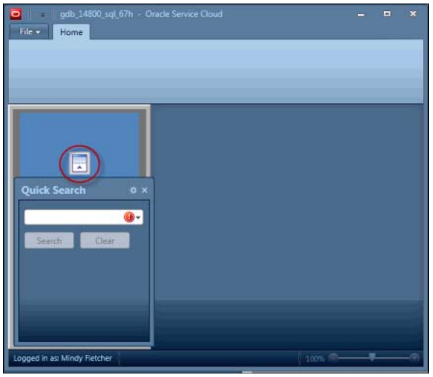
Being able to move tool windows gives you the flexibility to arrange your console to suit your own work preferences. You might want all windows to remain on the navigation pane but want them in a different order. Or you might want to move all tool windows to the left or right navigation pane or to the status bar to create more space on the content pane. Plus, you can return the windows to their default locations at anytime. Click File and select Options > Reset Tool Windows or refer to [Changing your personal settings](#) and select the Reset Local Settings check box.

In the default console configuration, Recent Items and Navigation display on the left navigation pane and Quick Search displays on the right.

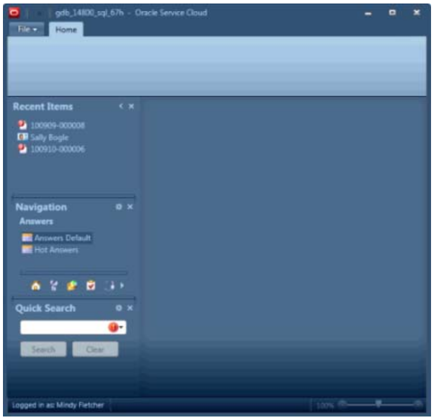
Click to view



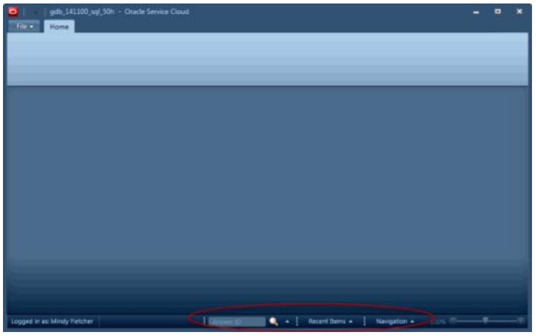
When you drag a window to another area on the console, the content pane momentarily changes to light gray, the area where you can dock the window is highlighted in blue, and a docking area indicator displays. In the following example, we're moving the Quick Search tool window to the left navigation pane.



Once you release your mouse, Quick Search is docked on the left navigation pane.



Using the same technique, you can move all tool windows to the status bar.



When a tool window is docked to the status bar, just click its button to display a full flyout. For the Quick Search tool window, the first docked filter displays on the button. Simply type an entry and click the Search button. If you want to change to another Quick Search report, click the arrow next to the Search button to display the full Quick Search menu.

Tip To move a tool window from the status bar, move your pointer to the dotted divider line to the left of the tool window you want to move and drag it to its new location.

Selecting actions from a navigation or configuration list

Once you display the list you want, just double-click a report or other item to open it on the **content pane**. You can also right-click any item to select other actions. Be aware that certain actions require one or more profile permissions.

Table 5: Available Actions from Navigation and Configuration Lists

Right-Click	Available Actions
Report or Other Item	Select from the following actions.
Open	Select this action to open the report or item on the content pane. **Note:** This is the only right-click option available for configuration items.
Open in New Tab	Select this action to open a second copy of a currently open report in a new tab on the content pane. **Note:** This action is available only when you right-click a report that is already open.
Queue	Select this action to manually schedule the report to run in the background.
View Report Definition	Select this action to view the report definition in a new window.

Table 5: Available Actions from Navigation and Configuration Lists (Continued)

Right-Click	**Available Actions**
Edit Report Definition	Select this action to edit the report. If you select this action for a **standard report**, the report does not open. Instead, the content pane displays options for creating a **schedule** to generate and distribute the report and for changing profile permissions for the report if your profile allows you to assign permissions. Also, a message displays at the top of the content pane telling you that this is a read-only report. **Note:** This action will not display if you do not have appropriate Analytics permissions in your profile.
The remaining right-click actions appear only if you have the Customize Navigation Sets permission in your profile.	
Remove from List	Select this action to remove the report or item from your navigation or configuration list. You will be prompted to confirm the removal.
Set as Default	Select this action to set the report or item as the default for this list. Default items have Default appended to their name. When you right-click a default item, this option changes to Unset as Default. **Note:** The item you set as the default will automatically open on the content pane when the item's navigation or configuration list displays when you log in. For information about the other options available when you log in, see Navigation Pane Settings Description.
Folder	Select from the following actions. **Note:** Folder options do not apply to the configuration list. However, folders can be renamed and removed from a configuration list on the Navigation Sets editor.
Rename	Select this action to rename a folder in a navigation list.
Remove from List	Select this action to remove a folder and all of its contents from the navigation list.

Reordering items

Using drag-and-drop functionality, you can reorder the items in your navigation and configuration lists. You can also move a folder and its contents or move an item from one folder to another. You can reorder items from the navigation pane or from the Customize List window, described in [Customizing navigation and configuration lists](). Keep in mind, however, that you must have the Customize Navigation Sets permission in your profile to change the order of items in your lists.

- ❖ Queuing reports
- ❖ Viewing and exporting report definitions
- ❖ Analytics permissions
- ❖ Creating a navigation set for the administrator
- ❖ Creating navigation sets

Customizing navigation and configuration lists

If your **profile** lets you customize your navigation set, a Gear button (Customize List) displays at the top of the Navigation tool window.

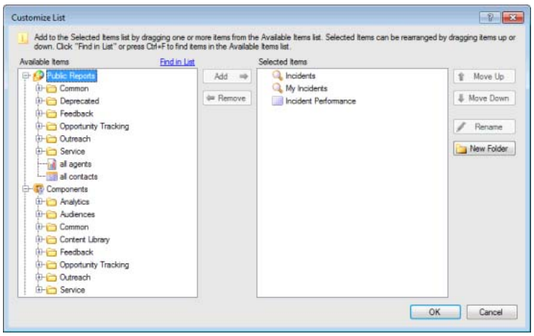
You can add any **report** or **dashboard** you have permission to run, search for items to add, search for a report or item to add, add multiple items at the same time, remove items, and rearrange items in your list. You can add items only from the Available Items list, not folders. (Folders do not apply to Quick Search reports.)

Important This procedure customizes only your navigation list, not the **navigation set** assigned in your profile.

To add items to or remove items from a navigation or configuration list

1 Display the list you want to change.

2 Click the Gear button. The Customize List window opens.



The tree under Available Items on the left lists all the folders for the reports and components you have permission to access. The tree under Selected Items on the right displays the contents of your list.

3 To add an item, expand the appropriate folder under Available Items.

a Select the item and click Add. You can also double-click the item or drag the item to your list and drop it where you want it to display.

b To add multiple items at the same time, press **Ctrl** while making your selections and click Add.

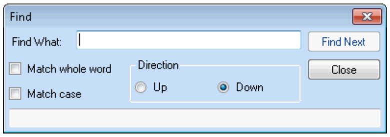
Tip To set an item as the default for the list, right-click the item under Selected Items and select Set as Default. The item will automatically open on the content pane when that item's list displays when you log in.

4 To remove an item, select it and click Remove. Other ways to remove items include right-clicking an item and selecting Remove from List or selecting an item and pressing **Delete**.

5 Click OK. Your changes are saved and the window closes.

To search for an item to add

1 Click Find in List above Available Items. The Find window opens.



2 Type your search term in the Find What field.

3 Click Find Next.

4 To match case or whole word, select the appropriate check box.

5 To specify the direction of the search in Available Items, select the Up or Down radio button.

Tip As you type, the system highlights the first item in the list that begins with the letters you enter. If this is the item you want, close the window. Otherwise, continue typing or click Find Next to scan for the next occurrence. If no match is found, a message displays on the bottom of the window.

6 If your search returns a match and you want to add it to your list, close the window and click Add.

7 Click OK. Your changes are saved and the window closes.

To organize items in a list

1 To reorder items in the list, select an item and click Move Up or Move Down. This action moves the item up or down one position. You can also drag an item to where you want it in the list.

Tip The Move Up and Move Down buttons are context-sensitive. For instance, if you select the first item in your list, the Move Up button is disabled. Likewise, if you select the last item in your list, the Move Down button is disabled.

2 To add a folder to your list, click New Folder and name the folder.

If no item in your list is selected, the new folder is placed at the end of the list. If an item is selected, the new folder is placed immediately after the selected item. And if a folder is selected, the new folder is placed beneath the parent folder. This button is disabled when you have multiple items selected in your list.

3 To rename a folder, select a folder, click Rename, and type the new name.

4 Click OK. Your changes are saved and the window closes.

❖ Customizing profiles
❖ Adding Quick Search reports
❖ Customizing navigation sets

Selecting actions from the recent items list

The records and items you've recently opened are listed in the Recent Items tool window. By default, the last ten items you opened are listed, but you can increase or decrease that number if you want. See Changing navigation pane settings.

Tip Configuration items are not tracked in the recent items list.

You can double-click an item to open it or right-click an item to display additional actions. Unlike navigation lists, which require a profile permission for certain actions, all staff members can perform the following actions from the recent items list.

Table 6: Available Actions from Recent Items

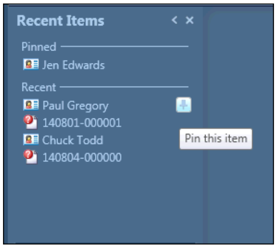
Right-Click	**Available Actions**
Open	Select this action to open the item on the content pane.
Copy Tooltip to Clipboard	Select this action to copy the item's tooltip to the clipboard. You can then insert the tooltip in another record or item. Tooltips vary according to the item or record type. For instance, an incident tooltip contains the reference number, subject, contact name, contact ID, contact email address, contact phone number, and organization name; the tooltip for an answer contains the answer summary, answer ID, language, and answer access levels; and the tooltip for a mailing contains the mailing name.
Copy Text to Clipboard	Select this action to copy the item's name or summary information to the clipboard. You can then insert the text in another record or item. For instance, copying text to the clipboard for an answer copies the text in the Summary field. Copying text to the clipboard for an incident copies the number in the Reference # field. And copying text to the clipboard for a mailing copies the mailing name.
Remove from List	Select this action to remove the item from the recent items list.

Tip Recent items also appear in other areas of the product to help you quickly select commonly used items when updating record fields. Refer to Searching from open records and Assigning records.

Pinning recent items

By default, the last ten records and items you opened appear in your recent items list, but you can increase or decrease that number whenever you want. However, there might be times when you have an item that you don't want to scroll off the recent items list, no matter how many items you've set to appear in your list. For those instances, you can pin one or more items to ensure they remain in your recent items list for as long as you need.

Click the Pin icon that appears when you hover over an item. Pinned items appear at the top of the Recent Items tool window.



When you no longer want an item pinned, just hover over it and click the Unpin icon.

- ❖ [Changing navigation pane settings]
- ❖ [Searching from open records]
- ❖ [Assigning records]

Displaying buttons in your navigation set

By default, one row of buttons displays at the end of the Navigation tool window no matter which navigation list is active. Clicking the right arrow next to the row of buttons displays the remaining buttons in your navigation set and options to show more or fewer buttons.

- **Show More Buttons**—Select this option to add a navigation button in a large format. As you add a button, its smaller version is removed from the bottom of the navigation pane. This action adds large buttons one at a time.
- **Show Fewer Buttons**—Select this option to show fewer navigation buttons in the large format. Selecting this option removes the buttons one at a time. As each large button is removed, its smaller version is added to the bottom of the navigation pane.

Tip You can also change the number of buttons that display by pointing to the slider bar and dragging the bar up or down when the pointer becomes a double-headed arrow.

To change the order of the buttons on the Navigation tool window, refer to Changing navigation pane settings.

Content pane

The content pane is the area of the console that displays the report or other item you select from a **navigation list**, from your list of recent items, or from the **file menu**. The content pane also displays results from a search. The exact placement of the content pane depends on whether you have one or two navigation panes on the Service Console. In the default configuration, the content pane displays in the middle of the console.

You may work with any of the following items on the content pane.

- **Reports**—Access a **custom report** to edit the report definition or a **standard** or custom report to generate the report.
- **Dashboards**—Access a dashboard, which is any combination of reports that display together in one report.
- **Records**—Access a report containing a list of **records** and select one or more to open. See Opening records. You can also open an individual record from the Recent Items tool window. See Selecting actions from the recent items list.
- **Explorers**—Access any of several components and configuration items that display information in hierarchical folders. See Explorers.
- **Notifications**—Access your messages when there is a change in the status of your **incidents** and **answers** in Oracle RightNow Cloud Service (Service), **mailings** and **campaigns** in Oracle RightNow Outreach Cloud Service (Outreach), or **opportunities** in Oracle RightNow Opportunity Tracking Cloud Service (Opportunity Tracking). You will also receive a notification when you are assigned a new incident, answer, or opportunity. See Opening your notifications.
- **Search results**—Access items and records from a standard search or a **Quick Search**. See Searching for records. (The Quick Search menu is a default tool window that displays on the navigation pane. See Navigation pane for details about tool windows.)

To change the way information displays on the content pane, including the content pane tabs, see Changing view options.

Content pane tabs

Tabs on the top of the content pane display all the items you currently have open. When more than one item is open, just click a tab to return to that item or right-click a tab and select from the following options: Open in New Window, Close, Close All But This, and Close All. You can also press **Ctrl+w** or **Ctrl+F4** to close the active tab or click the Close button (X) on any content pane tab. Refer to Closing multiple records simultaneously.

Right-click options differ for records in a **workgroup**. When you right-click the content pane tab of the primary record, your only option is to close all associated records in the workgroup. When you right-click an associated record that is the active tab, your options include Accept Changes, Cancel Changes, and Undock. Refer to Creating and using workgroups.

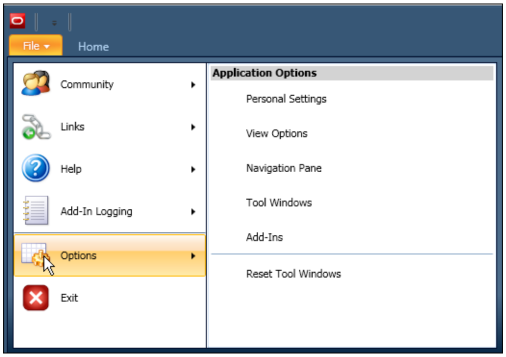
Tip On certain workspaces editors, including incidents, contacts, organizations, and tasks, you can undock an open record by clicking the Undock button on the active tab or the Undock button on the ribbon. This action opens the record in a separate window and lets you move between the window and console without having to close the window first.

- Opening reports
- Using dashboards

Accessing application options

Once you become familiar with the **agent desktop**, you may want to customize certain areas based on your personal preferences and what works best for you. You can change settings specific to your **staff account** that will be reflected when you add certain records to the knowledge base, change your password, and customize how the **navigation pane**, **content pane**, and **tool windows** display.

Click File and select Options on the left. The application options display on the right.



Application options are described in the following table.

Table 7: Application Options Description

Option	Description
Personal Settings	Select this option to change settings in your **staff account** and certain **local settings**. See Changing your personal settings.
View Options	Select this option to change how information displays on the content pane, including content pane tabs; change the color and tint of the interface; and display the date, server time, and time zone in the status bar. See Changing view options.
Navigation Pane	Select this option to change the order of the buttons on the navigation pane, change the number of items that display in the recent iems list, and choose what displays on the content pane when you log in. See Changing navigation pane settings.
Tool Windows	Select this option to choose which tool windows (Recent Items, Navigation, and Quick Search) are visible. See Changing tool window visibility.
Add-Ins	Select this option to view the list of add-ins that are active (enabled) for your profile and the interface you are logged in to. Inactive add-ins are also displayed in the list. See Viewing available add-ins for your profile.
Communication Center	Select this option to customize your chat notification settings. See Changing chat options. **Note:** **Oracle RightNow Chat Cloud Service** (Chat) must be enabled for the Communication Center option to be available.

Table 7: Application Options Description (Continued)

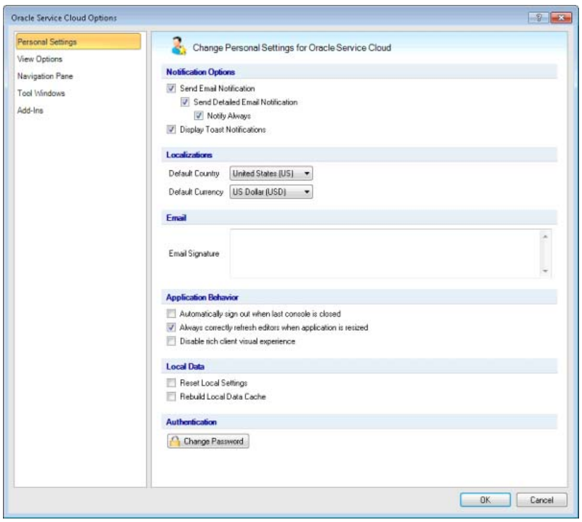
Option	Description
Reset Tool Windows	Select this option to return the tool windows to their default locations. **Note:** You can also return tool windows to their default locations by selecting the Reset Local Settings check box in your personal settings. See Changing your personal settings.

Changing your personal settings

Some personal settings apply to options in your **staff account** and some settings apply to local settings, the interface defaults in Oracle Service Cloud. Any staff account changes you make from the Personal Settings option will also be made to the corresponding settings in your staff account.

To change your personal settings

1 Click File and select Options > Personal Settings.



2 Select from the following options.

Table 8: Personal Settings Description

Field/Button	Description
Notification Options	This section contains options for changing how you receive notifications. **Note:** Changes you make here will also be made to the corresponding settings in your staff account.
Send Email Notification	Select this check box if you want an email sent to your default email client (your external email application) when you receive a notification while you are not logged in to Oracle Service Cloud. An email will be sent to your email client the first time a notification is delivered while you are logged out. Subsequent notifications won't generate an email until you log in and out of the system. **Note:** This check box is disabled if you don't have an email address specified in your staff account. In addition, you must select this check box in order to select the Send Detailed Email Notification and Notify Always check boxes that follow.
Send Detailed Email Notification	Select this check box if you want an email containing detailed information sent to your default email client (your external email application) when you receive a notification while you are not logged in to Oracle Service Cloud. An email will be sent to your email client the first time a notification is delivered while you are logged out. Subsequent notifications won't generate an email until you log in and out of the application.
Notify Always	Select this check box if you want to receive an email for every event that triggers a notification even if you are logged in to Oracle Service Cloud.
Display Toast Notifications	Clear this check box if you don't want to receive notifications in a desktop alert, or toast. By default, when you log in to Oracle Service Cloud, you will receive a desktop alert listing new notifications. The message displays for several seconds in a window on the lower right of the screen. See Opening your notifications. **Note:** This is a local setting, an interface default setting.

Table 8: Personal Settings Description (Continued)

Field/Button	Description
Localizations	Options in this section let you change settings that apply when you add certain records such as opportunities. **Note:** Changes you make here will also be made to the corresponding settings in your staff account.
Default Country	Click this drop-down menu to change the default country in your staff account. United States is the default.
Default Currency	Click this drop-down menu to change the default currency in your staff account. U.S. Dollar is the default.
Time Zone	Click this drop-down menu to select the time zone in which you are working. **Note:** This setting does not apply to all staff members and therefore may not appear.
Email	The option in this section lets you edit your email signature.
Email Signature	If you have an email address specified in your staff account and the permission to customize your signature, make your changes in this text box.
Application Behavior	Options in this section let you select application behavior settings.
Automatically Sign Out when Last Console is Closed	Select this check box to prevent the Exit message from displaying when you close the last console or select Exit on the file menu. **Note:** This is a global setting stored on your workstation and applies to all the interfaces on this site that you can access.
Always Correctly Refresh Editors when Application is Resized	Clear this check box to ensure that editors load faster on the console. This option displays *only* when Oracle Service Cloud is installed on 64-bit operating systems. **Important:** This option is designed to compensate for a Windows limitation when resizing one or more windows on 64-bit operating systems. However, when this option is enabled, which it is by default, you may experience more screen flickering and editors may load more slowly. Also, be aware that when you clear this option, editors that have been resized may not refresh properly.

Table 8: Personal Settings Description (Continued)

Field/Button	Description
Disable Rich Client Visual Experience	Select this check box to use software rendering instead of hardware rendering on the console display. **Note:** This option is effective if you have limited hardware, such as a slow graphics card, which might cause repainting or display issues. However, if you have adequate hardware, selecting this check box may slow down operations.
Local Data	This section contains options for resetting your **local settings** and refreshing your local cache.
Reset Local Settings	Select this check box to reset local settings to the interface defaults.
Rebuild Local Data Cache	Select this check box to remove your local cache entries and request current copies from the server.
Authentication	The option in this section lets you change the password for logging in to your application.
Change Password	Click this button to change your password. See Changing your password.

3 Click OK.

- ❖ Adding and editing staff accounts
- ❖ Rebuilding your local cache

Rebuilding your local cache

You can remove your local cache entries while logged in and request current copies from the server without manually deleting the files. Your local cache files store all option lists data (any data accessed from a drop-down menu or menu list, such as customizable menu items) plus additional data such as **report** and **workspace** definitions, **questions**, **documents**, and **standard text**. If you aren't sure whether your local copy of common data matches the data on the server, rebuild your local cache to retrieve the most up-to-date data.

To rebuild your local cache

Important Contact your administrator or supervisor before rebuilding your local cache.

1. Click File and select Options > Personal Settings.
2. Select the Rebuild Local Data Cache check box under Local Data.
3. Click OK. A prompt asks you to confirm your request.
4. Click Yes. A progress bar displays on the content pane.

Once all data is received from the server and written to the cache, the progress bar and window close.

Changing your password

Although passwords are optional in Oracle Service Cloud, your organization may have security policies that require all staff to use a password to log in. If this is the case, your staff account contains a password you must use each time you log in. You may also need to change your password at regular intervals.

To change your password

Important If your profile contains the SSO Login (SAML 2.0) permission for **single sign-on**, you cannot change your password in Oracle Service Cloud. See Agent login.

1. Click File and select Options > Personal Settings. Your personal settings display.
2. Click Change Password on the bottom of the window.
3. Type your current password and press **Tab.** Don't forget that your password is case sensitive.
4. Type the new password and press **Tab.**

Tip If an entry does not meet your organization's password requirements, such as password length or character repetition, the system highlights the incorrect entry.

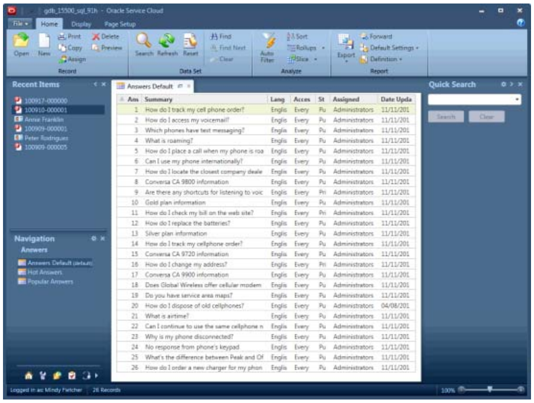
5. Retype your new password.

6 Click OK. The Oracle server verifies your password history (both current and new passwords) and, if errors are found, displays the requirements that were not met.

Changing view options

As you become familiar with your application and navigating the console, you may want to change the way information displays on the **content pane**. By default, when you open an item, it appears in full window display.

Click to view

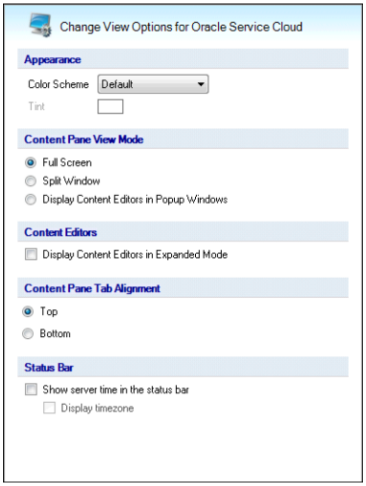


You can change the default content pane display to a split window or pop the content pane in a new window. You can also change the placement of the **content pane tabs**, change how information displays in records, change the interface color, and display date, time, and time zone in the status bar.

Tip All view options are **local settings**.

To change your view options

1 Click File and select Options > View Options.



2 Select from the following options.

Table 9: View Options Description

Field	Description
Appearance	The options in this section apply to the interface color.
Color Scheme	Click this drop-down menu to change the interface color scheme.
Tint	Click this color box to select a tint for the interface color. You can also define a custom color.
Content Pane View Mode	This section contains options for changing how information displays on the content pane.
Full Screen	Leave the default, Full Screen, if you want the report or item to appear in full window display.
Split Window	Select this radio button to display your items in a split window. In split window, explorers always open on the top half of the window and all other items open on the bottom. Drag the divider in the middle of the content pane up or down to show more of one record or item.

Table 9: View Options Description (Continued)

Field	Description
Display Content Editors in Popup Windows	Select this radio button to pop the content pane in a new window. For instance, if you add a record or open one to edit, the record opens in a separate window. Selecting this option applies to the next editor you open, not any that are currently open. **Note:** Selecting this option places the window on top of the console, which prevents the window from disappearing behind other applications, but you must close the window before returning to work on the console. As an alternative to this option, you can undock administration and workspaces editors from the console and work between the console and a separate window without having to close the window first. See Content pane tabs and Creating and using workgroups.
Content Editors	This section contains a setting for changing how records display on the content pane.
Display Content Editors in Expanded Mode	Select this check box so you can scroll through all of a record's fields rather than clicking tabs to access specific field information.
Content Pane Tab Alignment	This section contains options for choosing where the content pane tabs appear.
Top	By default, content pane tabs display at the top of the content pane.
Bottom	Select this radio button to display content pane tabs on the bottom of the content pane.
Status Bar	This section contains options for displaying the server time and time zone in the status bar.
Show Server Time in the Status Bar	Select this check box to display the date and server time in the status bar of the console. **Note:** Selecting this check box enables the Display Time Zone check box so you can select that option as well.
Display Time Zone	Select this check box to display the time zone next to the server time in the status bar.

3 Click OK.

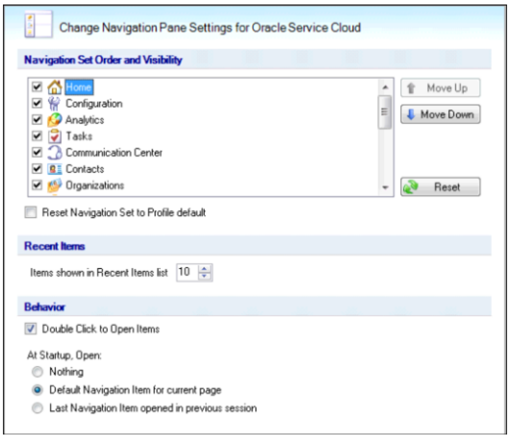
Changing navigation pane settings

Navigation pane settings determine the order of the **navigation buttons** and the **Configuration button** on the navigation pane, which buttons display, and what opens on the content pane when you log in. You can customize these and other settings to suit your specific work responsibilities and preferences.

Important Navigation pane settings are **local settings**. Consequently, any customizations you make from this option, except for resetting your navigation set, will be removed if you select the Reset Local Settings check box from the Personal Settings option. See Reset Local Settings.

To change your navigation pane settings

1 Click File and select Options > Navigation Pane.



2 Select from the following options.

Table 10: Navigation Pane Settings Description

Field/Button	Description
Navigation Set Order and Visibility	This section contains a list of all the navigation buttons in your navigation set and the order in which they display on the navigation pane. All buttons are selected by default. **Note:** Depending on your **profile** permissions, you may also have the Configuration button in your navigation set and it will display in this list as well.
Buttons List	Clear the check box next to any button that you do not want to appear on the navigation pane. Clearing a check box does not remove the button from your navigation set. It just prevents the button from displaying, and you can display it again at any time.
Move Up	After selecting a navigation button, click this button to move the navigation button up one position in the list.
Move down	After selecting a navigation button, click this button to move the navigation button down one position in the list.
Reset	Click this button to reset the order of the buttons that appear on the navigation pane to the order defined in your navigation set.
Reset Navigation Set to Profile Default	Select this check box to remove all customizations you have made to your navigation lists and reset to your profile's default navigation set. See Customizing navigation and configuration lists. **Note:** This check box won't appear unless you have the Customize Navigation Sets permission set in your profile.

Table 10: Navigation Pane Settings Description (Continued)

Field/Button	Description
Recent Items	This section contains an option for defining how many items you want in the recent items list. Recent items are interface specific and include those records and items you have recently opened. Keep in mind that the system does not track configuration items in the list. **Note:** If you make a change to a field on the Contacts or Organization tab of an incident, the contact or organization record will not appear in this list. However, if you open the contact from the incident or the organization from the contact record (by clicking the contact or organization and selecting Open), the record will appear in your recent items list.
Items Shown in Recent Items List	Type a number or click the arrows to change the number of items to show in this list. The default is 10 items and the maximum is 40. **Note:** Recent items associated with disabled products will not appear in the list. For instance, if you edit an opportunity and then Opportunity Tracking is disabled, the opportunity will no longer appear in your list.
Behavior	This section contains options for choosing how to open items on the content pane and what, if anything, opens when you log in.
Double Click to Open Items	Clear this check box to open items with a single click. By default, you must double-click a report or any item in your navigation list to open it on the content pane. **Note:** This setting also affects the way you open configuration items.
At Startup Open:	The options in this section determine what displays on the content pane when you log in. **Note:** By default, the navigation list or configuration list that appears when you log in will be the same list that was displayed when you logged out.
Nothing	Select this radio button if you want the last selected item in the navigation list to be selected but not opened.
Default Navigation Item for Current Page	Clear this radio button if you don't want the default item for the navigation list to automatically open on the content pane. **Note:** This radio button is selected by default. When the navigation list or configuration list does not have a default item, nothing will open.

Table 10: Navigation Pane Settings Description (Continued)

Field/Button	Description
Last Navigation Item Opened in Previous Session	Select this radio button if you want the last item that was open when you logged out to automatically open when you log in, even if it is not in the list that displays when you log in.

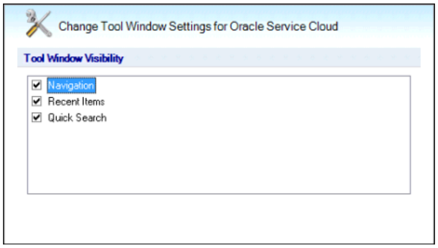
3 Click OK.

Changing tool window visibility

In addition to manually closing tool windows from the navigation pane (Tool window buttons), you can also change tool window visibility from your application options.

To change tool window visibility

1 Click File and select Options > Tool Windows.



2 Clear the check box next to any tool window you want to hide. All tool windows are visible by default.

3 Click OK.

Note You also have the option to add a custom tool window to the Service Console. Using NAVPANE_CUSTOM_WEB_CONTROL_URL (RightNow User Interface > Tool Bar > General), you can embed a web page on the navigation pane. Once you add a fully qualified domain name in the Value field, a Custom Web Control tool window will display in the Tool Window Visibility list. However, you must select the check box in the list in order to display your custom tool window on the console. You can then move it just like any of the default tool windows.

- [Selecting actions from a navigation or configuration list]
- [Moving tool windows]
- [Selecting actions from the recent items list]

Explorers

Certain components and configuration items display data in hierarchical folders similar to Windows Explorer. The main elements and basic functionality of explorers in Oracle Service Cloud are the same, but options may differ slightly from one explorer to another.

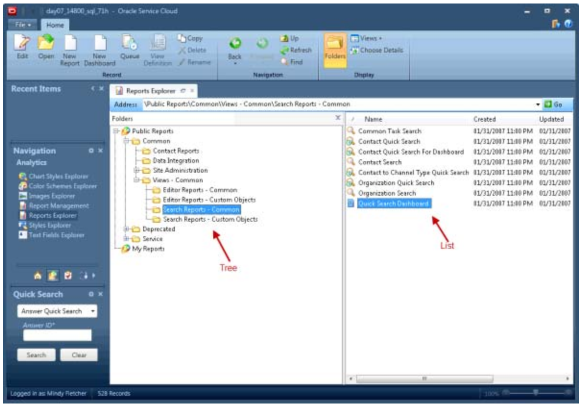
Important Explorers can be added to any **navigation list** or your **configuration list**, just like any report or other item. For instance, the list of **campaigns** in your application display in an explorer, yet you can add the Campaigns explorer to a navigation list other than the Campaigns navigation list.

To open the Reports explorer

1 Click the Analytics button on the navigation pane.

2 Double-click Reports Explorer in the navigation list. The explorer opens on the content pane.

Tip Although the default requires that you double-click an item to open it, you can change the default so that items open with a single click. See Changing navigation pane settings to select this option.



The following explorers are available in Oracle Service Cloud. Certain components contain multiple explorers.

Table 11: Explorers Description

Component/ Configuration Item	Description
Analytics	This component contains Reports, Styles, Chart Styles, Color Schemes, Images, and Text Fields explorers. See Analytics Explorers.
Campaigns	See Outreach Campaigns for information about the campaigns component and the Campaigns explorer.
Mailings	See Outreach Mailings for information about the mailings component and the Mailings explorer.
Surveys	This component contains Surveys and Questions explorers. See Creating surveys, and Creating questions.
Content Library	This component contains Documents, Tracked Links, Files, Templates, and Snippets explorers. See Content Library.
Audiences	This component contains Segments and Contact Lists explorers. See Audiences.
Navigation Sets	See Creating navigation sets for information about this configuration item and the Navigation Sets explorer.

Table 11: Explorers Description (Continued)

Component/ Configuration Item	Description
Workspaces/Workflows	See Workspaces explorer and Creating workflows for information about the Workspaces and Workflows explorers for these configuration items. **Note:** The desktop workflow feature must be enabled for Workflows to display. When disabled, only Workspaces displays under Application Appearance in the configuration list.
Client Workflow Images	See Adding images for use on workspaces for information about this configuration item and the Client Workflow Images explorer.
Scripts	See Scripts explorer for information about this configuration item and the Scripts explorer.
Guided Assistance	See Creating guides for information about this configuration item and the Guided Assistance explorer.

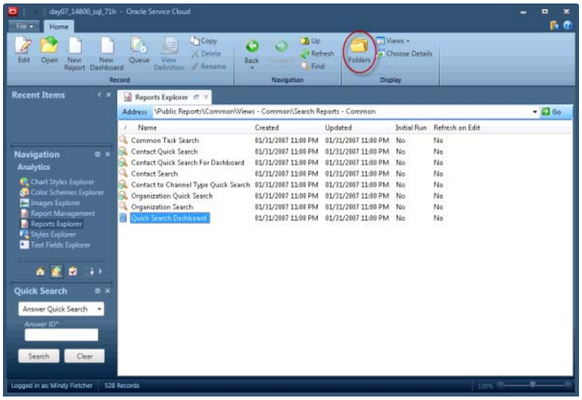
Display states

Explorers display in one of three states: Folders On, Folders Off, and Search On. The display state determines what information you see and what functionality is available. You change states using the Folders and Find buttons on the ribbon.

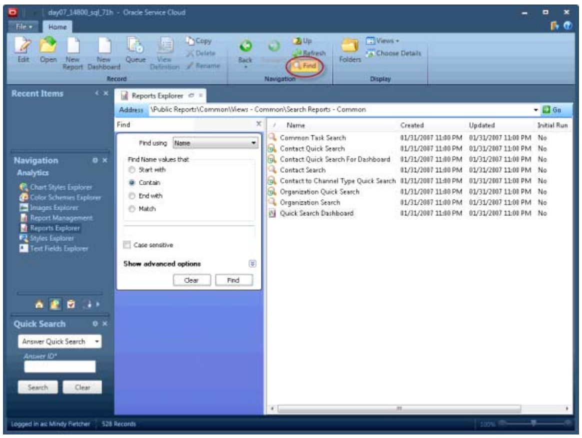
Folders On—In the default Folders On state, explorers display a folders tree on the left and a detailed list of the selected folder's contents (subfolders and items) on the right. The columns that display in the list are specific to each explorer. For instance, the Reports explorer shows Created, Updated, Initial Run, and Refresh on Edit columns, while the Mailings explorer might show Last Launched, Sent, and Clicked columns.

Folders Off—When you turn off folders, the tree is hidden and the content pane displays only the detailed list of the selected folder's contents. However, the folder hierarchy is maintained. Depending on where you are in the hierarchy when you turn off folders, you can double-click a folder to drill down or click Up to move up one level.

Click Folders to turn off folders. (You can also click X on the top right of the folders tree to turn off folders.) Click Folders again to display the tree and turn folders on.



Search On—The third explorer display state is Search On. The left side of the content pane displays the Find menu. Click Find to change to Search On. Click it again to turn off search. (You can also click X on the top right of the Find menu to turn off search.)



Tip Turning off search puts the explorer in the Folders Off state. To turn off search and display the folders list, click Folders instead of closing the Find menu.

Searching in explorers

The steps for searching are the same in all explorers. You can search any of the available columns in the list by selecting a column from the Find Using drop-down menu. Three **data types** are supported in explorer searches: strings (words), dates, and integers (numbers). The data type of the column you select determines the available search criteria.

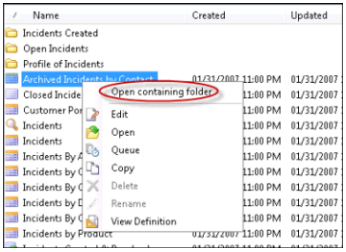
- **String**—The Name column is the default search column in all explorers. Because this is a string data type, you can search for strings that start with, contain, end with, or match the value you enter in the search box. You can also match the case by selecting the Case Sensitive check box.
- **Date**—If the column you select is a date data type, you can search for dates before, on, or after today's date. You can also click the calendar to display the current month's calendar and select another day, or click the arrows at the top of the calendar to change months.
- **Integer**—If the column you select is an integer data type, you can search for values that are less than, equal to, or greater than a number. Either type a number in the search box or select one using the arrows.

To search for a report from the Reports explorer

1. Double-click Reports Explorer in your navigation list. The explorer opens on the content pane.
2. Click Find. The left side of the content pane displays a Find menu, hiding the folders tree.
3. Click the Find Using drop-down menu and select a column to search.
4. Select a radio button for your search criteria.
5. Type your search text in the text box and click Find. The search results display in the list on the right side of the content pane. You will receive a message when no matches are found.
6. To remove the text entered from the previous search, click Clear.

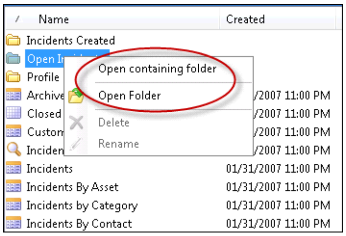
Performing actions on search results

The actions you can perform after a search vary according to the search results and your profile permissions. In addition to the common actions you can initiate from the ribbon or by right-clicking a file, you have an additional option—Open Containing Folder—when you right-click a file returned in an explorer search.



Select Open Containing Folder to display the folder containing the selected file. This automatically closes the Find menu and returns the explorer to the Folders On display state.

Right-clicking a folder returned in your search provides another option in addition to Open Containing Folder.



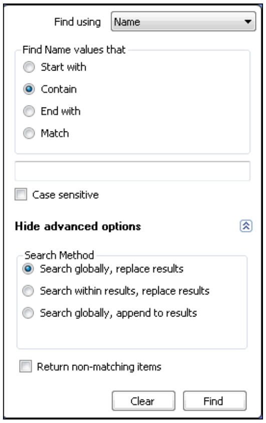
- **Open Containing Folder**—Select this option to display the parent folder in the tree.
- **Open Folder**—Select this option to display the folder in the tree.

Both actions close the Find menu and return the explorer to the Folders On display state.

Advanced search options

You can use advanced search options to remove the results from your search, search your current results, or keep your current results and add results from your next search. By default, conducting a new search removes the previous search results.

Click Show Advanced Options on the bottom of the Find menu. (You can click anywhere on the line to display the advanced options.) The option then changes to Hide Advanced Options.



The following options are available for conducting an advanced search.

Table 12: Advanced Search Options

Option	Description
Search globally, replace results	Select this radio button to remove the results from the previous search and replace with results from this search. This is the default option.
Search within results, replace results	Select this radio button to search only the current results and keep only those that match this search.
Search globally, append to results	Select this radio button to keep results from the previous search and add results from this search.

You can also select the Return Non-Matching Items check box to return all files that do *not* match your search criteria.

Selecting actions from the tree

The primary way of moving around explorers is from the tree, although you can also select actions and change focus in the explorer from the list, ribbon, and address bar.

Note Depending on the permissions in your profile and the explorer you are working in, certain actions may not be available. For instance, if you select a **standard report** in the Reports explorer, the Delete action from the list and the button on the ribbon are not available since you can't delete standard reports.

You have the following options from the tree.

Table 13: Explorer Tree Options

Option	Action
Change the list	Select a folder in the tree to change the list of subfolders and items that appear.
Expand or collapse all folders	Right-click a folder to expand or collapse all folders in the tree. You can also click the plus or minus sign next to a folder to expand or collapse a single folder.
Add a folder	Right-click a folder and select New Folder. A new folder is created under the selected folder and you are given the opportunity to name it. **Note:** This option is not available when you right-click a root or standard folder.
Delete a folder	**Caution!** Deleting a folder deletes all of its contents as well. This action cannot be reversed. Right-click a folder and select Delete. When you select this action, you will be asked to confirm the deletion. **Note:** This option is not available when you right-click a root or standard folder.
Rename a folder	Right-click a folder and select Rename. The selected folder is put into an editable state. **Note:** This option is not available when you right-click a root or standard folder.

Table 13: Explorer Tree Options (Continued)

Option	Action
Reorganize folders	Drag and drop a folder and its contents into another folder and move items from one folder to another. **Note:** Drag-and-drop may be restricted by permissions in your profile. Also, you cannot execute a drag-and-drop that would result in a folder containing more than 12 levels.

Selecting actions from the list

The actions available when working with the list depend on the explorer and the list of items. Some actions can also be initiated from the ribbon. The actions available also depend on whether you right-click a subfolder or an item. You have the following options from the list.

Table 14: Explorer List Options

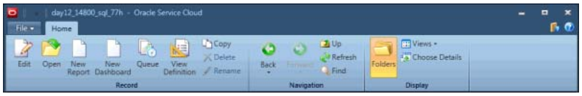
Option	Action
Open a subfolder	Right-click a subfolder and select Open Folder. This action causes the parent folder to be selected in the tree and its contents to display in the list. This option is available only when you right-click a folder. You can also double-click a folder to open it.
Edit an item	Right-click an item and select Edit. This action is available only when you right-click an item. You can also double-click the item to open it for editing. **Note:** In the Reports explorer, double-clicking will run the report.
Open an item	Right-click an item and select Open to view the item. This action is available only when you right-click an item.
Queue a report	Right-click a report and select Queue. This action manually schedules the report to run in the background. **Note:** This option is available only on the Reports explorer.
Copy an item	Right-click an item and select Copy. Select this action when you want to add an item that contains many of the same attributes as the item you right-click. This option is not available when you right-click a folder.

Table 14: Explorer List Options (Continued)

Option	Action
Delete a subfolder or item	**Caution!** Deleting a folder deletes all of its contents as well. This action cannot be reversed. Right-click a subfolder or item and select Delete. You will be asked to confirm the deletion. You can also select a subfolder or item and press **Delete**. **Note:** This option is not available when you right-click a standard folder.
Rename a subfolder or item	Right-click a subfolder or item and select Rename. The folder or item is put into an editable state for you to rename. **Note:** This option is not available when you right-click a standard folder.
View a report definition	Right-click a report and select View Definition. The report definition opens in a new window.
Add a folder	Right-click in the white space of the list and select New Folder. Once you name the folder and press **Enter,** the new folder displays in the list and also under the parent folder in the tree.
Reorganize folders and items	Drag and drop a folder and its contents into another folder and move items from one folder to another using drag-and-drop. You can also drag folders or items in the list and drop them onto a folder in the tree. (You cannot, however, drag from the tree to the list, since dragging a folder into one of its descendants is never permitted.) **Note:** Certain explorers may not permit drag-and-drop operations.
Resize and re-sort columns	Drag the left column boundaries to resize columns. Click a column header to re-sort the data in ascending or descending order.

Selecting actions from the ribbon

Many of the actions you initiate from the explorer list can also be selected by clicking a button on the ribbon. The explorer ribbon contains only the Home tab. Clicking certain buttons, such as New and Open, changes the tabs and buttons that are available. The Help button is located on the far right of the ribbon. Click this button to access help for the current task.



Shortcut keys are also available for all ribbon buttons so you can type a key combination to perform an action rather than clicking a ribbon button. Press **Alt** plus the first letter of the ribbon tab that you want to display shortcut keys for. (For instance, press **Alt+h** to display the shortcut keys for buttons on the Home tab.) This is a one-time action. Once you use a short-cut key, the ribbon returns to its default display.

The following buttons are available on the explorer ribbon.

Table 15: Explorer Ribbon Description

Group/Button	Description
Record	
Edit	Click this button to edit the selected item in the list. You can also right-click the item and select Edit or double-click the item.
Open	Click this button to open the selected item in the list. You can also right-click the item and select Open.
New Report	Click this button to create a **custom report**. **Note:** This button appears only on the Reports explorer ribbon. Other explorers contain a New button.
New Dashboard	Click this button to create a **dashboard**. **Note:** This button appears only on the Reports explorer ribbon.
Queue	Click this button to manually schedule the report to run in the background. When a queued report has been generated, a toast notification displays with a link to open the report. (This option is useful for reports or dashboards that you think may query or return a large amount of data.) You can also right-click the report and select Queue. **Note:** This button appears only on the Reports explorer ribbon.

Table 15: Explorer Ribbon Description (Continued)

Group/Button	Description
View Definition	Click this button to view the report definition in a new window. You can also right-click the report and select View Definition. **Note:** This button appears only on the Reports explorer ribbon.
Copy	Click this button to copy the selected item in the list. You can also right-click the item and select Copy.
Delete	**Caution!** Deleting a folder deletes all of its contents as well. This action cannot be reversed. Click this button to delete the selected item or folder in the list. You can also right-click the item or folder and select Delete or select the item and press **Delete.** **Note:** You cannot delete a root or standard folder.
Rename	Click this button to rename the selected subfolder or item in the list. You can also right-click the item or subfolder and select Rename. **Note:** You cannot rename a root or standard folder.
Navigation	
Back	Click this button to return to the last folder you accessed. The list on the right populates with the folder's contents, just as if you had manually selected a folder in the tree. Initially, this button is disabled. You can also click the arrow on the far right of the address bar to display the paths of the last ten folders and items accessed. The most recent entry is at the top of the list.
Forward	Click this button to move forward in the history of recently accessed folders and items. The forward list is populated as soon as you click the Back button. You can also click the arrow on the far right of the address bar to display the paths of the last ten folders and items in the Forward list. The most recent entry is at the top of the list.
Up	Click this button to access the parent of the selected folder. When the selected folder has no parent (that is, it is a root folder), the Up button is disabled.
Refresh	Click this button to refresh the tree and list.

Table 15: Explorer Ribbon Description (Continued)

Group/Button	Description
Find	Click this button to change the explorer state to Search On. See Display states.
Display	
Folders	Click this button to switch between showing the tree and hiding it. See Display states.
Views	Click the arrow on this button to change the way the subfolders and items display in the list. Options include Tiles, Icons, List, and Details. The default is Details (subfolders and items display in column format).
Choose Details	Click this button to select which database columns you want to display and which you want to hide. The columns that are displayed have a check next to them. This button is available only when the Details view is active. (See the Views button description above.) **Note:** The Name column can never be hidden and therefore does not appear in the list of columns. However, you can display the ID column, which is hidden by default.

- Creating reports
- Creating dashboards
- Queuing reports

Changing folders from the address bar

You can also change folders and focus in the tree by typing a path, or partial path, in the address bar. As you work in the tree, the address bar is updated with the path of the selected folder whenever you change folders. Clicking Back or Forward also updates the path in the address bar.

Tip You can type just a few characters in the address bar and the system will present you with possible path completions. Use your mouse or other pointing device or the arrow key to select the path you want. Then press **Enter** or click Go to change folders.

Saving items in explorers

When you create or edit an item in an explorer, you have more than one option for saving the item. No matter which explorer you are working with, the steps are essentially the same.

To save an item in an explorer

1 Click the Home tab on the ribbon.

Note When saving a **custom report**, click the arrow on Save on the **Quick Access toolbar** and select a save option.

2 To save changes to the item without closing it, click Save.

3 To save changes to the item and close it, click Save and Close. This option is faster than saving a change and then manually closing the window.

4 To save a new item or save a copy of the item you are editing with a different name, click Save As. The Save As window opens.

Note Not all explorers contain a Save As button.

a To save the item in a custom folder, navigate to the folder. You cannot save custom items in the standard folders in either the Reports or Images explorers.
b Type a name for the item in the Name field.
c Click OK.

4

Session Management and Login Controls

Oracle Service Cloud provides a number of security measures to assist you in safeguarding your organization's data and that of your customers.

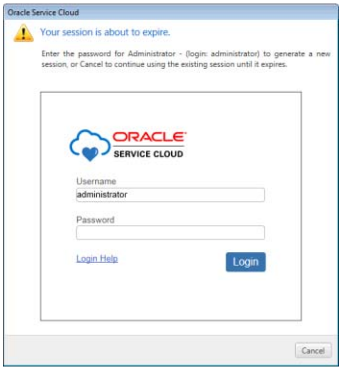
As your organization's administrator, you can expire sessions to help reduce session exploitation, control both active and inactive desktop user sessions to lower seat usage for licensing compliance, and control and track login behavior on the **administration interface**.

Forcing session expiration

Reducing session exploitation can help your organization protect its data. And Oracle Service Cloud is set up to automatically expire sessions so you can control the length of time before staff sessions expire.

The SESSION_HARD_TIMEOUT configuration setting (RightNow User Interface > General > Security) can be set for a time value between a minimum of 1 hour and a maximum of 8,760 hours (1 year). The default value is 12 hours.

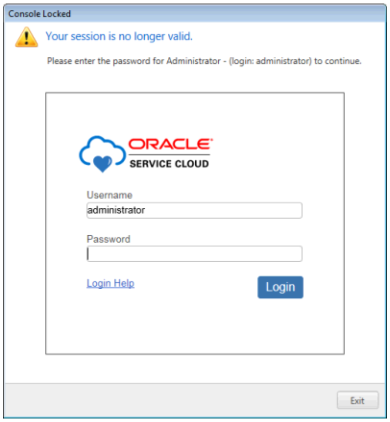
A warning message alerts staff members five minutes before their current session is set to expire and tells them to reauthenticate.



After entering login credentials, the staff member will be authenticated, a new session will be created, and the session ID will be updated throughout the product. The staff member can continue working without any loss of data.

Important Oracle RightNow Desktop Add-Ins Cloud Service (desktop add-ins), Oracle RightNow Connect Desktop Integration (JavaScript API), and co-browse will receive a notification when a new session has been created.

If a staff member dismisses the warning message (by clicking Cancel), the Service Console locks when the session expires.



After the staff member enters login credentials and is authenticated, a new session is created and the staff member can proceed without losing any work.

Agents who are chatting with customers must also enter their password to reauthenticate. If an agent does not reauthenticate, any open chat sessions are sent back into the queue for assignment to the next available agent.

Tip Although you have other ways to force staff members to reauthenticate, the session hard timeout feature should be the primary method you use since it requires no manual intervention on your part.

Controlling desktop usage

Our desktop usage administration feature is controlled by SESSION_MANAGEMENT_ENABLED. The setting is enabled by default and provides ways for you to control and manage both active and inactive sessions.

Note Contact your Oracle account manager for information about desktop usage metering and licensing compliance.

Manually logging out active sessions

While session hard timeout is the preferred way to force staff members to reauthenticate, you can also manually log out individual staff accounts when the situation warrants. This action terminates the staff member's session, locks the Service Console, and forces the staff member to reauthenticate in order to continue working. When an agent is engaged in a chat and is logged out, but then does not reauthenticate, the chat is sent back into the queue for assignment to the next available agent.

Note In order to manually log out staff accounts, staff members must have the Groups/Accounts/Distribution Lists permission on the Administration tab of the Profiles editor. Refer to Administration permissions to assign this permission.

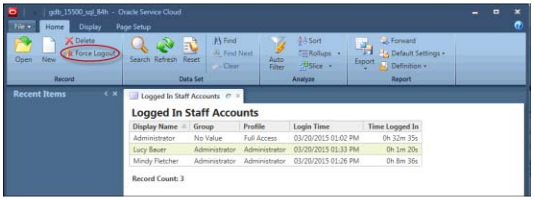
When you manually log out a staff account, the server sends the information to the client. When the staff member then tries to perform an action, like saving an open record or clicking a button, a Console Locked message displays. After the staff member enters login credentials and is authenticated, a new session is created and the staff member can proceed without losing any work. Also, the end date and time are updated in the User Transactions (*user_trans*) table in the Oracle database, enabling you to view and track your desktop user sessions.

Using the Logged In Staff Accounts standard report (Configuration > Staff Management > Logged In Staff Accounts), you can see which staff members are currently logged in, the date and time they logged in, and how long they have been logged in. You'll also see a Force Logout button on the Record group of the ribbon for logging out a selected staff account. (You can also right-click a staff account in the list and select Force Logout.)

Note If you prefer, you can create your own custom report to manually log out staff members. You'll need to use fields from the Accounts (*accounts*) and User Transactions (*user_trans*) tables to display currently logged-in staff accounts and their login start and end times.

To manually log out a staff member

1 From the configuration list, double-click Logged In Staff Accounts under Staff Management.



Tip You can also access this report from the Reports explorer at Common > Site Administration > Staff Management.

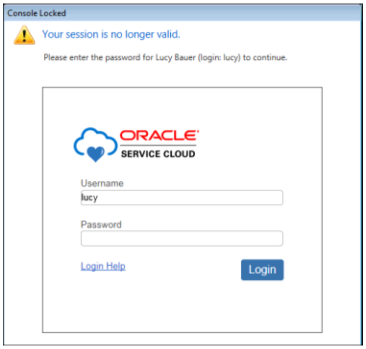
2 Select a staff account in the list and click Force Logout. A message asks you to confirm the action and warns you that all of the staff member's unsaved changes will be lost.

3 Click OK. Another message informs you that the staff member's session has been terminated.

4 Click OK.

5 Repeat steps 2–4 as necessary to log out additional staff accounts.

When a staff member tries to perform an action after being logged out, a Console Locked message displays.



Once the staff member reauthenticates (by entering the correct password), a new session is created and the staff member can proceed without losing any work.

Automatically logging out inactive sessions

In addition to manually logging out active sessions, you can also set up your application to automatically log out inactive sessions. You'll configure automatic logout of inactive sessions using a configuration setting and a profile setting, which work together to give you more flexibility in managing your desktop user sessions and maintaining site security.

- **CLIENT_SESSION_EXP**—Use this configuration setting to specify the time in one-minute intervals that a session can be inactive before a staff account is automatically logged out. The default value of CLIENT_SESSION_EXP, located at Site Configuration > Configuration Settings > RightNow User Interface > General > Security, is 15 minutes and the maximum value is 1440 (24 hours).

Note Even if you disable desktop usage administration, you can still use CLIENT_SESSION_EXP to maintain security on your site.

For security purposes, CLIENT_SESSION_EXP also applies to the **accessibility interface**.

- **Session Timeout field**—Use this field on the Profiles editor to specify a time (0–1440 minutes) other than the time defined in CLIENT_SESSION_EXP that a session can be inactive before a staff account is automatically logged out, or set this field so that staff members with a particular profile are exempt from being automatically logged out due to inactivity. By default, this field is null, meaning that the value in CLIENT_SESSION EXP will be used for automatic logout. Entering *any* value in this field overrides the value defined in CLIENT_SESSION_EXP.

Important Even if you exempt certain staff members from being automatically logged out due to inactivity, staff member sessions will still expire and staff must reauthenticate when the time set in SESSION_HARD_TIMEOUT expires.

Here's how automatic logout of inactive sessions works. Once the time of inactivity has been exceeded, the client sends a logout request to the server, which will update the end date and time in the User Transactions (*user_trans*) table in the Oracle database.

Staff members will receive a Console Locked message asking for their password to reauthenticate. After a staff member enters login credentials and is authenticated, a new session is created and the staff member can continue working with any loss of data.

For staff members who choose to exit the application, all their unsaved work will be lost. In addition, after entering four incorrect passwords, a staff member will be locked out of the console and must re-launch the application. Any unsaved work will be lost.

Agents who are chatting with customers when they are automatically logged out must also enter their password to reauthenticate. If an agent does not reauthenticate, any open chat sessions are sent back into the queue for assignment to the next available agent.

Important Staff members who log in through an identity provider (that is, using the **single sign-on** process) will not have the opportunity to re-enter their password to continue working in the application. Any unsaved work will be lost.

Configuring automatic logout by profile

You may want to exempt certain personnel from an automatic logout, or you may want to change the time that a session can be inactive before a staff account is automatically logged out. Either way, you can customize automatic logout by profile to override the time set in CLIENT_SESSION_EXP.

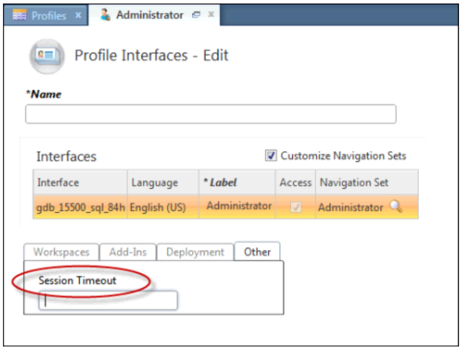
Note When SESSION_MANAGEMENT_ENABLED is disabled, this profile setting is disregarded.

To configure automatic logout by profile

1 From the configuration list, double-click Profiles under Staff Management. The report opens on the content pane.

2 Select the profile you want to edit and click Open.

3 Click the Other tab to display the Session Timeout field.



Note The default in the Session Timeout field is null, meaning that the value specified in CLIENT_SESSION_EXP will be used for automatic logout. Change the null default *only* if you want to override the value in CLIENT_SESSION_EXP.

4 To exempt staff members associated with this profile from being automatically logged out, type `0` in the field.

5 To set another value, which will override the value specified in CLIENT_SESSION_EXP, type the number of minutes in the field.

Important Even if the value in CLIENT_SESSION_EXP is set to 0, any value other than 0 in the Session Timeout field will be used to automatically log out staff members associated with this profile when the minutes of inactivity have been exceeded.

6 Click Save and Close.

7 Repeat this procedure for all the profiles you want to configure for automatic logout.

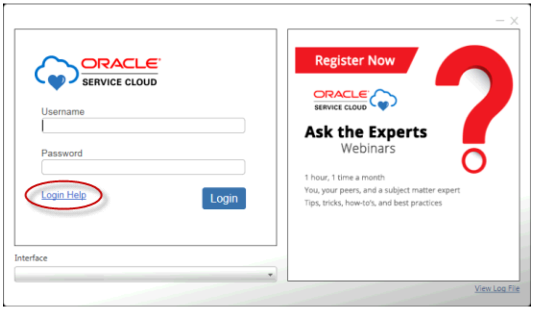
❖ Creating reports
❖ SAML 2.0 Open Login

Configuring login options

You have a number of options that can be added to your application to control login behavior and assist staff members when logging in. You can also add your organization's branding to the Login window to communicate a message to your staff members.

Configuring Login Help

Oracle Service Cloud contains an account self-service feature to assist staff members who are having problems logging in. Staff members access this feature using the Login Help link on the Login window.



Using ACCT_RECOVER_ALT and ACCT_RECOVER_STATUS, located at Site Configuration > Configuration Settings > RightNow User Interface > Tool Bar > General, you can configure your application to perform one of the following actions when staff members click Login Help.

- **Open the login procedure in online help**—In addition to providing the steps required to log in, this procedure directs staff members to their organization's administrator for their login information and explains the default behavior of the account self-service feature.
- **Send staff an email if they have forgotten their user name or password**—This is the default in ACCT_RECOVER_STATUS. When staff members click Login Help, the Account Self Service window opens.

▷ Staff members who have forgotten their user name simply type their email address and click Submit. If their email address is unique, they will receive an email containing their user name. If not unique, they will receive an email telling them to contact their administrator.

▷ Staff members who have forgotten their password select the I Forgot My Password radio button. An additional field displays.

Staff members must type their email address *and* user name. If both email address and user name match what's defined in their staff account, they will receive an email containing a link to the Password Reset page for entering a new password. As a security measure, if either user name or email is incorrect, no email is sent.

Note Use the Accounts email messages (Site Configuration > Message Templates > Administrator Emails > Accounts) to customize the emails sent to staff members when they have forgotten either their user name or their password.

- **Show alternate message**—If you want to display an alternate message to staff members when they click Login Help, change the value in ACCT_RECOVER_STATUS to **2** and type your new message in ACCT_RECOVER_ALT.

❖ [Customizing messages](#)

❖ Customizing configuration settings

Adding your branding on the Login window

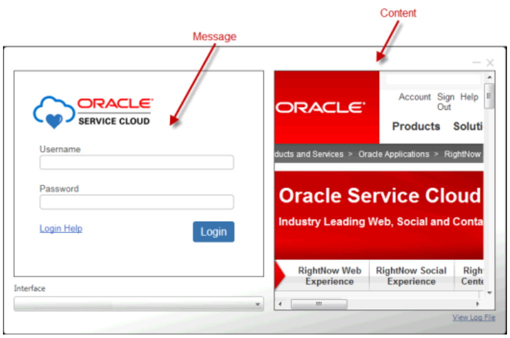
The Login window is an ideal place for you to communicate a message to your staff. Using our branding feature, you can include any message content you want when staff members log in to your application. And if your site is configured for multiple interfaces, you can customize each interface's Login window according to its audience and the message you want to convey.

Two areas can be customized using the following configuration settings (Site Configuration > Configuration Settings > RightNow User Interface > Tool Bar > General).

BRAND_CONTENT_URL—Specifies the URL used to display content on the banner area of the Login window. The default contains Oracle content announcing releases, webinars, and events.

Tip Make sure to enter a fully qualified domain name to display the web page you want. Also, the web page must use fully qualified paths to images, or the images will not display.

BRAND_WELCOME_MSG—Specifies the welcome message displayed on the Login window. Default is blank.

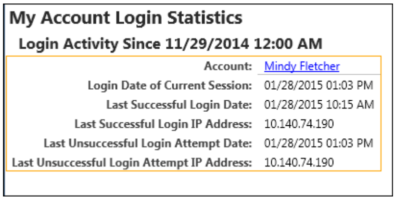


❖ Customizing configuration settings

❖ Overview of multiple interfaces

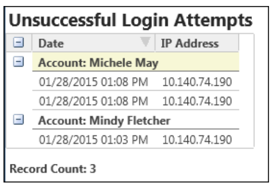
Supplying login information to staff members

You can provide staff members with details about their login activity for the previous sixty days. My Account Login Statistics, located at Common > Site Administration > Staff Management, lists when the staff member last logged in successfully, the IP address of the last successful login, when the last login attempt failed, and the IP address of the last failed login attempt. A drill-down is also available that lists all the unsuccessful login attempts since the last successful login.



You may also want to add the My Account Login Statistics report to your staff members' navigation sets. In addition, if you set this report as the default in a navigation list, and that navigation list displays when staff members log in, the report will automatically open on the content pane. In this way, your staff can track their own login activity on a regular basis.

The staff member's name in the Account column on the My Account Login Statistics report links to the Unsuccessful Login Attempts by Account report, another standard report in Oracle Service Cloud. While staff members can see their individual unsuccessful login attempts in this report, you can run the report to see all failed login attempts throughout your system and spot any trends or problems that may exist.



Limiting concurrent administration logins

Another feature you will want to know about is the ability to control the number of concurrent administration logins per site. Any range between 1 and 40,000 is allowed, and 40,000 is the default. Limiting the number of allowed sessions per site can help you manage system resources. Contact your Oracle account manager to change the default setting.

Refer to Controlling desktop usage to learn about the other ways to manage and control desktop user sessions.

Staff account locking

By default, the system locks a staff account after the staff member enters an incorrect password five times. This measure can help you and your organization maintain site security. You can change any of the password requirements at Staff Management > Password Configuration.

Login agreement functionality

You can distribute a terms of use agreement, a security statement, or any login message you choose to staff members accessing the administration interface. Your message or statement will display after staff members click Login on the Login window. Staff members must agree to the statement or message before the Service Console opens. To review or customize this setting, see LOGIN_SECURITY_MSG, located at Site Configuration > Configuration Settings > RightNow User Interface > Tool Bar > General.

Saving login credentials

For security purposes, staff members must enter their user name and password each time they log in. However, if you want to provide staff members with the option to save their login credentials, enable ACCT_ALLOW_REMEMBER_ME (RightNow User Interface > Tool Bar > General). Thereafter, each staff member's browser control will handle the user's login credentials using auto complete.

- ❖ Opening reports
- ❖ Searching configuration settings
- ❖ Configuring staff member passwords
- ❖ Creating navigation sets

5

Navigation Sets

Navigation sets control the navigation lists and buttons that staff members see on the navigation pane of the agent desktop. You can create unique navigation sets for staff members who have any combination of responsibilities and assign navigation sets to staff members in their profiles. If you do not create navigation sets and assign them to profiles, staff members will not have access to navigation buttons and lists.

To understand how navigation sets, profiles, and staff accounts work together, see Navigation sets, profiles, and staff accounts.

If your installation of Oracle Service Cloud contains multiple interfaces, also see Managing staff member accessibility.

- Navigation sets, profiles, and staff accounts
- Managing staff member accessibility

Overview of navigation sets

Every staff member has a profile, and every profile must include a navigation set that all staff members with that profile use when they work in Oracle Service Cloud. A navigation set is a combination of navigation buttons and their associated navigation lists.

You can configure navigation sets to provide access to only areas of the system that staff members need to perform their job. For example, an agent working in your technical support group probably does not need access to marketing campaigns or sales opportunities. In that case, navigation lists for Campaigns and Opportunities can be left off their navigation sets.

You can create as many navigation sets as your organization needs. Then, when you add a profile, you select the navigation set that staff members with the profile will use. The staff members assigned to the profile have access to only those reports and items defined in their profile's navigation set unless you allow staff members with that profile to customize their navigation set. Refer to step 9 in To add or edit a profile.

Tip Staff members can customize their navigation set to best suit their needs. Refer to Customizing navigation and configuration lists.

Creating navigation sets

The first time you open the Navigation Sets explorer, the right side is generally empty because no navigation sets have been created. If mobile agent app is enabled on your site, a default mobile navigation set will appear on the right side. Refer to Mobile Agent App.

After you create navigation sets, the explorer displays the tree structure on the left and navigation sets on the right. The explorer includes options to copy, edit, delete, and rename any navigation set that you create.

Note The Navigation Sets explorer does not contain standard folders, but you can create custom folders to help keep your navigation sets organized. For information about working with folders, refer to Adding folders. For detailed information about explorer functionality, refer to Explorers.

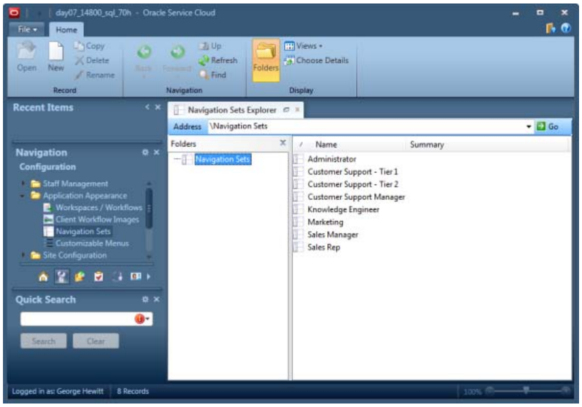
When you create navigation sets, you specify the buttons you want to appear on the navigation pane, and add reports and components to the navigation buttons. You can also add Quick Search reports to navigation sets to allow searching for contacts, incidents, or other types of records directly from the navigation pane.

Note Public and private reports and dashboards can be added to navigation buttons. However, staff members must have the appropriate Analytics permissions in their profile to open them.

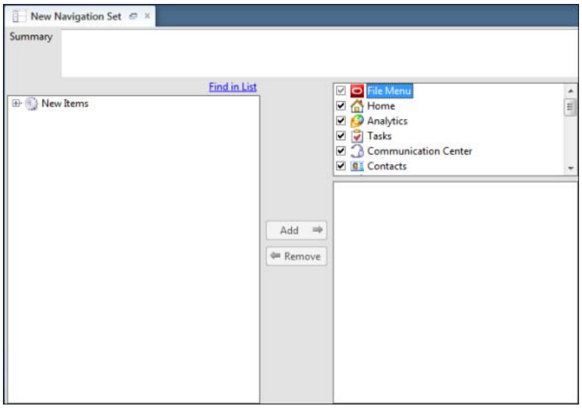
To create a navigation set

1 Click the Configuration button on the navigation pane.

2 Double-click Navigation Sets under Application Appearance. This opens the Navigation Sets explorer.



3 Click the New button on the Navigation Sets explorer's ribbon. The content pane displays the Navigation Sets editor.



By default, the File Menu component is selected on the right side of the content pane and New Items displays on the left. When any other component or record type is selected on the right, the left side of the content pane displays Public Reports and Components.

4 To enter information about the navigation set, type a description in the Summary field.

Note You name the navigation set when you save it.

5 To set the options available through the file menu, refer to To configure the file menu.

6 On the right side of the content pane, select the check boxes next to the types of records or components you want to include in the navigation set. All are selected by default.

Separate navigation lists can be created for each type of record or component you select. For example, select the Incidents check box to include a navigation list staff members can use when they work on incidents.

Note You cannot clear the check box next to the File Menu component, because the file menu is always available.

7 Click one of the selected record types or components to begin creating a navigation list for the record type or component.

Note Most navigation lists for the navigation buttons you select are initially empty when creating a navigation set. However, the navigation list for the Configuration button is populated with default configuration items. The items in this list can be customized using the same functionality used to customize the other navigation lists. Refer to Creating a navigation set for the administrator.

8 On the left side of the content pane, click the plus signs next to Public Reports and Components to expand the lists. Click the plus signs next to subfolders to expand them.

Tip If you know the name of a report or component you want to add to a navigation list, you can quickly locate it by clicking Find in List and searching for the item.

9 To add reports and dashboards to the navigation list, select the reports you want to add from the left column and drag them to the lower portion of the right column.

Tip You can also include reports or components by double-clicking them or by selecting them and clicking the Add button. To add more than one item at the same time, press **Ctrl** while selecting each item.

10 To add explorers to the navigation list, click the plus sign next to the appropriate product under Components in the left column, select the explorer you want, and drag it to the lower portion of the right column.

11 To add notifications to the navigation list, click the plus sign next to Common under Components in the left column, select Notifications, and drag it into the lower portion of the right column. This lets staff members open any notifications they receive. Refer to Opening your notifications.

12 To add a folder to the navigation list to help organize items in the list, click the New Folder button.

a Type the name you want for the folder.

b Drag explorers, reports, or other items to the folder.

c To rename a folder, click the folder, click the Rename button, type the new name for the folder, and click outside the folder name to save the new name.

13 To set a report, explorer, or other item as the default for this navigation list, right-click it and select Set As Default. Refer to Available Actions from Navigation and Configuration Lists.

Note The default item for a navigation list opens on login only if the navigation list was the active list when the staff member logged out last time. See To change your navigation pane settings for how staff members can change this behavior.

14 To create a navigation list for each type of record that you want to be available in the navigation set, repeat steps 7 through 13.

15 To choose the order in which the navigation buttons display on the navigation pane, click a record type or component on the upper portion of the right column and click the Move Up or Move Down button to position it in the list.

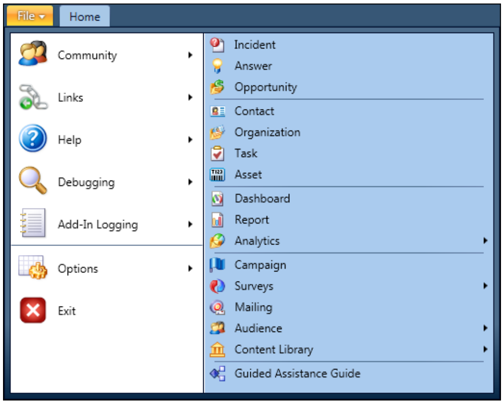
16 To add Quick Search reports to the navigation set, refer to Adding Quick Search reports.

17 Click the Save and Close button on the ribbon. The Save As window opens if you have not previously named the navigation set.

a Type a name for the navigation set in the Navigation Set Name field and click the OK button to save the new navigation set.

Configuring the file menu

The **file menu**, accessed by clicking File next to the ribbon's Home tab, includes a section on the right for creating records and items. This list is blank until you configure the file menu in navigation sets. Once you have configured it, staff members can click File and use the shortcuts you have added.



To configure the file menu

Note If you do not set any options for the file menu in the navigation set, staff members with profiles that use that navigation set do not have the option to create items using this shortcut.

If you set menu options for items that the staff member's profile does not grant permission for, those options do not appear in the file menu.

1 Click the Configuration button on the navigation pane.

2 Double-click Navigation Sets under Application Appearance. This opens the Navigation Sets explorer.

3 Right-click the navigation set you want to configure the file menu for and select Open.

4 If File Menu is not selected at the top of the upper portion of the right column, click it.

5 Expand New Items in the left column.

6 Select the items you want to add to the file menu and click the Add button. You can also double-click items to add them.

Tip To add more than one item at the same time, press **Ctrl** while selecting each item.

7 To add a folder to the file menu to help organize menu items, click the New Folder button.

a Type the name you want for the folder.

b Drag menu items to the folder.

c To rename a folder, click the folder, click the Rename button, type the new name for the folder, and click outside the folder name to save the new name.

8 To choose the order in which the menu options appear when File is clicked, click an item in the lower portion of the right column and then click the Move Up or Move Down button to position it in the list.

9 To group menu options, add one or more horizontal separators from the bottom of the New Items list and use the Move Up and Move Down buttons to position them.

10 Click the Save and Close button on the ribbon.

Adding Quick Search reports

You can add **Quick Search** reports to a navigation set so that staff members can access Quick Search from any navigation list on the agent desktop. Using these reports, staff members can open records, even with limited information and regardless of the type of record they are working on.

When you create a navigation set, you can define which Quick Search reports appear on the Quick Search drop-down menu on the navigation pane. The same Quick Search menu appears for every navigation button in the navigation set.

Note Remember that staff members can move or hide the Quick Search tool window and other tool windows on the navigation pane. For information about changing what appears on the navigation pane, refer to Changing tool window visibility.

Oracle Service Cloud includes the following predefined Quick Search reports.

- Answer Quick Search
- Asset Search
- Campaign Search
- Contact Quick Search
- Contact Quick Search for Dashboard
- Contact to Channel Type Quick Search
- Document Search
- Incident Search
- Mailing Search

- Outreach Task Search
- Opportunity Search
- Organization Quick Search
- Quick Search Dashboard
- Service Task Search
- Survey Search

To add Quick Search reports to a navigation set

1 Click the Configuration button on the navigation pane.

2 Double-click Navigation Sets under Application Appearance. The Navigation Sets explorer opens.

3 On the right side of the explorer, right-click the navigation set you want to add Quick Search reports to and select Open.

4 If the Quick Search component check box on the upper portion of the right column is cleared, select it. The Quick Search component is highlighted.

Or

If the Quick Search component check box is already selected, then click the Quick Search component to highlight it.

You may need to scroll down to locate Quick Search. If any reports are defined, they appear in the lower portion of the right column.

5 On the left side of the content pane, click the plus sign next to Public Reports to expand the list.

6 Drag a search report from the left column and drop it in the lower portion of the right column.

Tip You can also add search reports by double-clicking them or by selecting them and clicking the Add button.

7 Click the Save and Close button on the ribbon to save the modified navigation set.

Modifying navigation sets

After you create a navigation set, you can copy it to use as the starting point for another navigation set or edit it to meet changing needs. For example, you might want to include additional reports in a navigation set or remove a component from it. Occasionally, you might find that a navigation set is no longer required so you decide to delete it.

Important Remember that editing a navigation set used in a profile does not impact staff members who have permission to customize their navigation sets. Refer to Customizing navigation sets.

To copy a navigation set

1 Click the Configuration button on the navigation pane.

2 Double-click Navigation Sets under Application Appearance. This opens the Navigation Sets explorer.

3 On the right side of the explorer, right-click the navigation set you want to copy and select Copy. The Copy As window opens.

4 To add the copied navigation set to a folder, click the folder name.

5 Type the name of the copied navigation set in the Name field.

6 Click the OK button to close the Copy As window and return to the Navigation Sets explorer. The copy you added appears on the explorer in the folder you selected.

To edit a navigation set

1 Click the Configuration button on the navigation pane.

2 Double-click Navigation Sets under Application Appearance. This opens the Navigation Sets explorer.

3 Right-click the navigation set you want to edit and select Open. The navigation set opens on the Navigation Sets editor.

4 Click the record type or component you want to edit. Its navigation list displays in the lower portion of the right column on the content pane.

5 To add a report, explorer, or other item to the navigation list, expand the list of Public Reports or Components, drag the item from the left column, and drop it in the lower portion of the right column.

6 To remove a report or item from the navigation list, right-click it and select Remove.

7 Repeat steps 4 through 6 for each navigation list you want to modify.

8 Click the Save and Close button on the ribbon to save the modified navigation set.

To delete a navigation set

1 Click the Configuration button on the navigation pane.

2 Double-click Navigation Sets under Application Appearance. This opens the Navigation Sets explorer.

3 Right-click the navigation set you want to delete and select Delete.

Important If you try to delete a navigation set used in a profile, a message informs you that deletion is permanent and cannot be undone. If you delete the navigation set, you must edit the profile to select a different navigation set.

4 Click the Yes button at the Confirm Navigation Set Deletion message to delete the navigation set.

Assigning navigation sets to profiles

After you create navigation sets, you assign them to profiles used by your staff members. You can also assign permission allowing staff members to customize the navigation set to their individual needs.

To assign a navigation set to a profile

1 Click the Configuration button on the navigation pane.

2 Double-click Profiles under Staff Management. The report opens on the content pane.

3 Double-click the profile you want to assign the navigation set to. The Profiles editor opens.

4 Click the Search button in the Navigation Set field, select the navigation set you want staff members with this profile to use, and click the OK button.

5 To give staff members permission to change the items in their navigation lists, select the Customize Navigation Sets check box.

Note Staff members with this permission can add reports, dashboards, and explorers to their navigation lists and remove items they do not use. Changes that staff members make to their own navigation set do not impact other staff members' navigation sets. However, there are some additional considerations when this permission is granted. For information about the impacts of assigning this permission, see Customizing navigation sets.

6 Click the Save and Close button on the ribbon to save the profile.

Customizing navigation sets

If you assign the Customize Navigation Sets permission in a profile, it is important that you understand what happens when you edit the navigation set associated with the profile. Some changes you make to the navigation set automatically override changes made by staff members, while other changes have no effect on the custom navigation set.

Tip Staff members can reset their navigation set to their profile's default navigation set by accessing their navigation pane settings (File > Options > Navigation Pane), and then selecting the Reset Navigation Set to Profile Default check box. Refer to Changing navigation pane settings.

We recommend that you consider the following implications when updating navigation sets.

- Changing the default navigation set for a profile resets all navigation lists. All custom navigation lists are removed.
- Changing the profile for a specific staff account removes the staff member's custom navigation lists.
- Adding or removing buttons from navigation sets determines what buttons are available on staff members' navigation sets, even if those staff members have permission to customize their navigation set. After buttons are added to or removed from navigation sets, the changes are applied to staff members' navigation sets the next time they log in to the agent desktop.

- If you edit navigation sets to add or remove items, such as reports or explorers, from navigation lists, the changes you make have no effect on staff members' navigation sets if their profiles include the Customize Navigation Sets permission. To apply the changes to those staff members' navigation sets, you must edit their profiles and clear the Customize Navigation Sets check box. When you do so, all personalized navigation lists are removed and staff members use the navigation set defined in their profile.

6

Staff Management

Every staff member who accesses or works in Oracle Service Cloud requires a staff account. Staff accounts are organized in folders according to groups defined by job duties or other criteria, though you can also define secondary groupings by manager. When creating staff accounts, you specify staff member information, including the account login, phone number, and assigned profile. Profiles are created before creating staff accounts to define what products and information staff members can work with when logged in to Oracle Service Cloud.

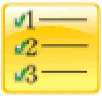
When creating a staff account, you can also specify an initial password, which can later be changed by you or the staff member after log in. You control the requirements passwords must conform to by defining the minimum password length, format, expiration options, and the number of invalid logins allowed.

Customizing profiles

Profiles let you control what areas of Oracle Service Cloud your staff members can access and what specific actions they can perform in those areas. Profiles contain general options for Oracle Service Cloud administration functions and more specific options for each of the products within the system. For example, profiles define whether your staff members can view and edit **business rules**. They also define whether your agents can respond to customers, assign incidents, conduct chat sessions in Oracle RightNow Chat Cloud Service (Chat), and perform other activities.

Important Navigation sets and custom workspaces are associated with profiles on the Profiles editor. While creating and using custom workspaces is optional, navigation sets must be created and associated with profiles before you add staff accounts. Otherwise, staff members will not have access to any records, reports, or components. Refer to Navigation Sets and Workspaces.

You may decide to define your profiles based on the structure of your organization. For example, you may want separate profiles for administrators, managers, agents, sales representatives, marketing personnel, and knowledge engineers. Once you create profiles, you can add staff accounts and assign a profile to each account.



Prerequisites

The following items must be created before adding profiles.

- **Navigation sets**—Profiles without navigation sets do not allow access to reports and other components. See Creating navigation sets.
- **Custom workspaces (optional)**—If you use custom workspaces, we recommend creating them before creating profiles so you can assign workspaces to specific profiles. See Creating custom workspaces.

To add or edit a profile

1 Click the Configuration button on the **navigation pane**.

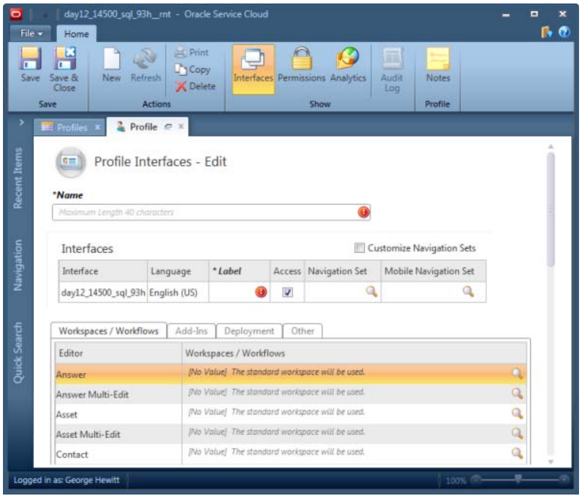
2 Double-click Profiles under Staff Management. The report opens on the **content pane**, listing the profiles that have already been created.

Tip If a profile already exists that is similar to the profile you want to create, you can copy the existing profile and edit the copy to create the new profile.

3 To add a profile, click the New button on the **ribbon**. The Profiles editor opens.

Or

To edit an existing profile, double-click the profile.



4 Type the name of the profile in the Name field.

Note When you move to another field on the content pane, the name you type is automatically added to the Label field.

5 Select the check boxes in the Access field next to the interfaces you want the profile to access.

6 If your site has multiple interfaces, click the interface you want to configure the profile for. See Configuring multiple interfaces.

Important The permissions granted for the first interface you configure are also granted for all other interfaces the profile can access.

7 Click the Search button in the Navigation Set field to specify the navigation set you want to use for the profile. The Select Navigation Set window opens.

a Select the navigation set in the list.

b Click the OK button to close the window.

8 If mobile agent app is enabled on your site, repeat step 7 for the Mobile Navigation Set field. See Editing mobile navigation sets.

9 To allow the staff accounts associated with the profile to customize their navigation set, select the Customize Navigation Sets check box. See Customizing navigation sets.

10 By default, standard workspaces are selected in new profiles. To assign custom workspaces to the profile, click the Search button next to the workspace you want to change. The Workspaces window opens.

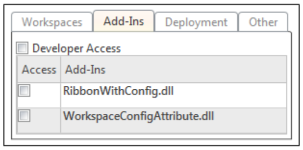
a Select the workspace you want to use.

b Click the OK button to close the window.

See Creating custom workspaces.

11 To grant access to add-ins that are installed on the site, click the Add-Ins tab.

Note Options on this tab are active when add-ins are installed using the Add-in Manager. See Installing add-ins. For information about creating add-ins, refer to the Oracle Service Cloud Connect API documentation on the RightNow Developer Community.



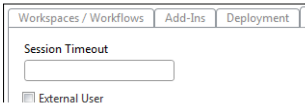
a To let staff members with this profile install add-ins on their workstations without uploading the add-in to the server, select the Developer Access check box. This option lets developers test add-ins without the add-ins being downloaded to other staff members' workstations.

Note Add-ins must be placed in subdirectories of the *%APPDATA%\RightNow_Technologies\<your_site>\<version>\Users\profile_number\AddIns* directory. Each add-in must be contained in a separate subdirectory.

b To let staff member with this profile use add-ins, select the check boxes next to the add-ins they can access.

12 To grant access to installer options, click the Deployment tab. See Deploying Oracle Service Cloud to multiple staff members.

13 To change the automatic logout setting for staff members with this profile, click the Other tab and type a value (in minutes) in the Session Timeout field. See Automatically logging out inactive sessions.



14 To create a profile for external users to have collaboration-only access, click the Other tab and select the External User check box. Service Collaboration must be enabled for this check box to appear. See Collaborating with other agents.

15 Click the Permissions button on the ribbon to grant permissions to the profile. The Permissions page opens, displaying the following tabs.

- **Administration**—This tab is selected by default when you open the Permissions page. See Administration permissions.
- **Organizations**—Click this tab to select permissions related to adding and editing organizations. See Organizations permissions.
- **Contacts**—Click this tab to select permissions related to adding and editing contacts. See Contacts permissions.
- **Service**—Click this tab to select permissions related to Service. If **Chat** is enabled on the site, chat permissions are also selected on this tab. See Service permissions and Adding Chat permissions to profiles.
- **Opportunities**—Click this tab to select permissions related to Oracle RightNow Opportunity Tracking Cloud Service (Opportunity Tracking). See Opportunity Tracking permissions.
- **Outlook Integration**—Click this tab to select Outlook integration permissions. Outlook integration must be enabled for this tab to appear. See Configuring Outlook integration.
- **Outreach**—Click this tab to select Oracle RightNow Outreach Cloud Service (Outreach) permissions. See Outreach permissions.
- **Feedback**—Click this tab to select Oracle RightNow Feedback Cloud Service (Feedback) permissions. See Feedback permissions.
- **Tasks**—Click this tab to select task permissions. See Tasks permissions.
- **Custom Objects**—Click this tab to select custom object permissions. Custom objects must be enabled for this tab to appear. See Custom object permissions.

16 To select Analytics permissions, click the Analytics button on the ribbon and refer to Analytics permissions.

17 To view an audit log of changes made to the profile, click the Audit Log button.

18 To add notes to the profile, click the Notes button on the ribbon. The Notes window opens.

   a Type the note you want to add.

   b Click the OK button to close the Notes window.

19 Click the Save and Close button on the ribbon to save the profile and close the editor.

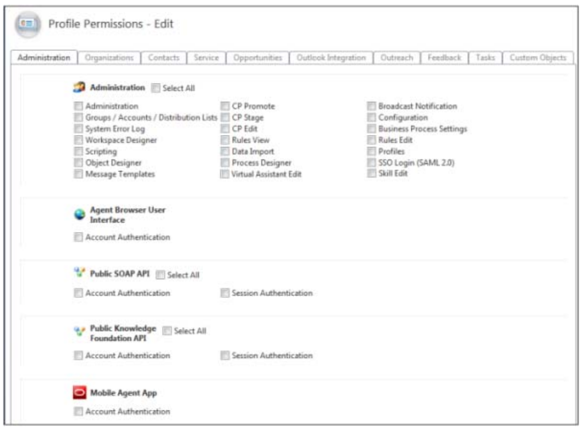
   ❖ [Creating navigation sets]

   ❖ [Creating custom workspaces]

Administration permissions

The Administration tab is the default tab of the Profiles editor's Permissions page. By enabling options on this tab, you can grant staff members permissions related to administrative functions of the system. For example, you can give permission to configure staff accounts and distribution lists, create and edit agent scripts, access business process settings, and add and edit business rules.

Tip Hover over the permissions on this tab to view the product areas the permissions impact.



To select options on the Administration tab

1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management and double-click the profile you want to edit. The Profiles editor opens.

3 Click the Permissions button on the **ribbon**. The Permissions page opens with the Administration tab selected.

4 Enter the following field information.

Table 16: Administration Tab Description

Field	Description
Administration	These options define administration permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Administration section.
Administration	Select this check box to let staff members with this profile access the following options: • Custom Fields • Messages • Mailboxes • Currencies and Exchange Rates • Service Level Agreements • Response Requirements • Chat Hours • Channels • Channel Accounts • Quote Templates • Territories • Promotions • Strategies • Sales Periods • External Suppression List • Thread Type Correction
Groups/Accounts/ Distribution Lists	Select this check box to let staff members with this profile access the following options: • Staff Accounts and Groups • Distribution Lists **Note:** Staff members who have Groups/Accounts/Distribution Lists permissions can assign only those profiles with the same or lesser permissions as their profile.
System Error Log	Select this check box to let staff members with this profile access the log files under Site Configuration.

Table 16: Administration Tab Description (Continued)

Field	Description
Workspace Designer	Select this check box to let staff members with this profile access the Workspaces and Workflows explorer and designer. See Workspaces and Desktop Workflows.
Scripting	Select this check box to let staff members with this profile create and edit agent scripts. **Note:** Agent scripting must be enabled on your site to use this feature. Contact your Oracle account manager.
Object Designer	Select this check box to let staff members with this profile create and manage custom objects using the object designer. See Creating custom objects. For information about the Custom Objects tab on the Profiles editor, see Custom object permissions. **Note:** Custom objects must be enabled on your site to use this feature. Contact your Oracle account manager.
Message Templates	Select this check box to let staff members with this profile edit message templates used to customize administrator notifications, administrator email, and contact email. See Working with the Message Templates editor.
CP Promote	Select this check box to let staff members with this profile promote pages from the staging area to the production area of the customer portal site, where customers can view them. See Assigning permissions. For this check box to display, MOD_CP_DEVELOPMENT_ENABLED must be enabled on your site. See Enabling the development area. **Note:** Staff members with CP Promote permission automatically have CP Edit and CP Stage permissions.
CP Stage	Select this check box to let staff members with this profile copy development files to the staging area of the customer portal site. See Assigning permissions. For this check box to display, MOD_CP_DEVELOPMENT_ENABLED must be enabled on your site. See Enabling the development area. **Note:** Staff members who have CP Stage permission automatically have CP Edit permission.

Table 16: Administration Tab Description (Continued)

Field	Description
CP Edit	Select this check box to let staff members with this profile access the **Customer Portal Administration site** and edit customer portal pages in the development area using WebDAV. See Assigning permissions. For this check box to display, MOD_CP_DEVELOPMENT_ENABLED must be enabled on your site. See Enabling the development area. **Note:** Staff members with CP Edit permission, but not CP Stage or CP Promote permission, cannot access the Customer Portal editor. Nor can they access the Deploy tab on the Customer Portal Administration site.
Rules View	Select this check box to let staff members with this profile view business rules.
Data Import	Select this check box to let staff members with this profile import records through the Data Import Wizard and manage Data Import templates. See Importing data.
Process Designer	Select this check box to let staff members with the profile create custom processes (**object event handlers**) that run when events occur on objects in the system. See Accessing the process designer.
Virtual Assistant Edit	Select this check box to let staff members with this profile configure the virtual assistant. **Note:** For this check box to display, your site must be integrated with **Oracle RightNow Virtual Assistant Cloud Service** (Virtual Assistant). See Configuring virtual assistant.
Broadcast Notification	Select this check box to let staff members with this profile send notifications to other staff members. If cleared, the New button is grayed out on the notifications ribbon. See Sending broadcast notifications.

Table 16: Administration Tab Description (Continued)

Field	Description
Configuration	Select this check box to let staff members with this profile access the following options: • Password Configuration • Configuration Settings • Configuration Wizard • Message Bases • File Manager • Interfaces • Add-In Manager • Email Address Sharing If cleared, these options are not available. **Note:** If selected, staff members with this profile can edit message bases for all interfaces on a site, including interfaces that they do not have permission to access. See To edit the same message base on multiple interfaces.
Business Process Settings	Select this check box to let staff members with this profile access the following options: • Navigation Sets • Customizable Menus • Countries • Products/Categories/Dispositions • Standard Text • Variables • Holidays • Product Catalog • Price Schedules • Tracked Link Categories If cleared, these options are not available.
Rules Edit	Select this check box to let staff members with this profile edit business rules. See Adding rules.
Profiles	Select this check box to let staff members with this profile add and edit profiles. **Note:** Staff members who have access to the Profiles permission also have access to all other profiles and can add, edit, or delete those profiles without any restrictions.

Table 16: Administration Tab Description (Continued)

Field	Description
SSO Login (SAML 2.0)	Select this check box to let staff members with this profile log in only through an external identity provider, that is, using a single sign-on process. Several restrictions apply to staff members whose profile includes this permission. • CP permissions (CP Promote, CP Stage, and CP Edit) are disabled if they have been enabled. • Staff members cannot edit development pages in WebDAV. • Staff members cannot deploy the customer portal. • Public SOAP API is disabled if it has been enabled. • Password options on the Account Details page are disabled. See Enabling single sign-on profile permission. **Note:** Oracle Service Cloud uses the **SAML 2.0** protocol for single sign-on. For this check box to display, SSO Login (SAML 2.0) must be enabled on your site. Contact your Oracle account manager.
Skill Edit	Select this check box to let staff members with this profile configure advanced routing. **Note:** For this check box to display, Chat and Smart Interaction Hub must be enabled. Refer to Configuring advanced routing.
Agent Browser User Interface	The permission in this section lets staff members with this profile access Oracle Service Cloud using the Agent Browser UI through account authentication.
Account Authentication	Select this check box to let staff members with this profile access Oracle Service Cloud using the Agent Browser UI. **Note:** For this check box to display, Agent Browser UI must be enabled on your site. Contact your Oracle account manager.
Public SOAP API	Permissions in this section let staff members with this profile access the public SOAP API through account or session authentication.
Select All	Select this check box to select all check boxes in the Public SOAP API section.
Account Authentication	Select this check box to let staff members with this profile access the public SOAP API using their staff account login user name and password.

Table 16: Administration Tab Description (Continued)

Field	Description
Session Authentication	Select this check box to let staff members with this profile access the public SOAP API using their staff account login user name and session ID from the agent desktop when agents are logged in.
Public Knowledge Foundation API	Permissions in this section let staff members with this profile access the public Knowledge Foundation API through account or session authentication.
Select All	Select this check box to select all check boxes in the Public Knowledge Foundation API section.
Account Authentication	Select this check box to let staff members with this profile access the public Knowledge Foundation API using their staff account login user name and password.
Session Authentication	Select this check box to let staff members with this profile access the public Knowledge Foundation API using their staff account login user name and session ID from the agent desktop when agents are logged in.
Mobile Agent App	The Mobile Agent App permission in this section lets staff members with this profile access Oracle Service Cloud on a mobile device through account authentication.
Account Authentication	Select this check box to let staff members with this profile access Oracle Service Cloud on a mobile device. Refer to Getting started. **Note:** For this check box to display, Mobile Agent App must be enabled on your site. Contact your Oracle account manager.

5 Click the Save and Close button on the ribbon to save the changes and close the Profiles editor.

Organizations permissions

The Organizations tab lists the possible Service, Outreach, and Opportunities states for organizations. It defines permissions for the staff members with this profile to read, edit, or delete organizations that are in the selected states. The state of an organization can be manually set by staff members when adding or editing an organization, or automatically by the system based on how the organization was added. For example, an organization that has been added while creating an incident defaults to the Service state.

There are seven states:

- Service
- Outreach
- Opportunities
- Opportunities & Outreach
- Service & Outreach
- Service & Opportunities
- Service & Opportunities & Outreach

When you define the permissions by state on the Organizations tab, consider which staff members should be able to take actions on organizations in the various states. For example, you might give agents read and edit access to organizations in any state that includes Service. However, you may decide that you do not want them to delete any organizations in the Service & Opportunities, Service & Outreach, and Service & Opportunities & Outreach states. See [Adding organizations](#).

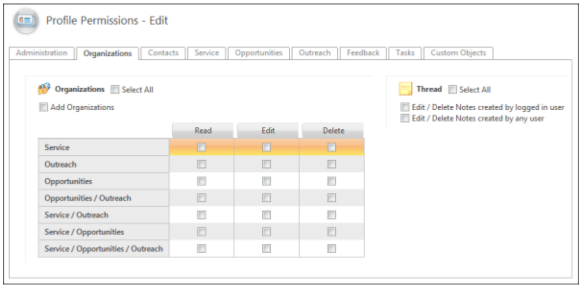
To select options on the Organizations tab

1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management and double-click the profile you want to edit. The Profiles editor opens.

3 Click the Permissions button on the **ribbon**.

4 Click the Organizations tab.



5 Enter the following field information.

Table 17: Organizations Tab Description

Field	Description
Organizations	These options define the organization permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Organizations section.
Add Organizations	Select this check box to let staff members with this profile add organizations.
Permission by organization state	Organizations are classified by their state, which can be Service, Outreach, Opportunities, or any combination of the three. In this section, set the permissions for staff members with this profile to view, edit, and delete organizations in these states and combinations of states. **Note:** Click the Read, Edit, or Delete button above a column to select or clear all check boxes in the column.
Read	Select these check boxes to let staff members with this profile view organizations in the specified state.
Edit	Select these check boxes to let staff members with this profile edit organizations in the specified state.
Delete	Select these check boxes to let staff members with this profile delete organizations in the specified state.
Thread	These options determine if staff members can modify notes in organization records.
Select All	Select this check box to select all check boxes in the Thread section.
Edit/Delete Notes created by logged in user	Select this check box to let staff members with this profile edit and delete notes they have added to an organization record.
Edit/Delete Notes created by any user	Select this check box to let staff members with this profile edit and delete notes other staff members have added to an organization record.

6 Click the Save and Close button on the ribbon to save the changes and close the Profiles editor.

❖ Adding organizations

Contacts permissions

The Contacts tab lists the possible Service, Outreach, and Opportunities states for contacts. It defines permissions for the staff members with this profile to read, edit, delete, or move contacts that are in the selected states. The state of a contact can be manually set by staff members when adding or editing a contact record, or automatically by the system based on how the contact was added. For example, a contact who enters the system needing customer support would initially be classified in the Service state. If the contact expresses interest in a sales product and an opportunity is created, the contact's state changes to Service & Opportunities. See Adding contacts.

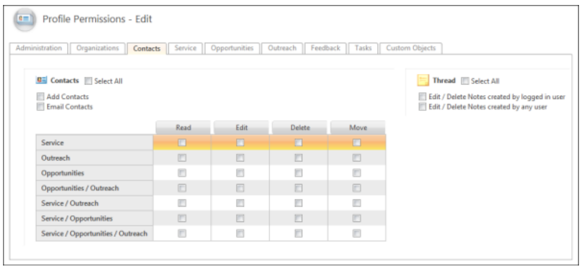
To select options on the Contacts tab

1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management and double-click the profile you want to edit. The Profiles editor opens.

3 Click the Permissions button on the **ribbon**.

4 Click the Contacts tab.



5 Enter the following field information.

Table 18: Contacts Tab Description

Field	Description
Contacts	These options define the contact permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Contacts section.
Add Contacts	Select this check box to let staff members with this profile add contacts.
Email Contacts	Select this check box to let staff members with this profile email contacts from an open contact record or from the Contacts tab of an associated record. **Note:** With this permission, a staff member can click the Send Email button to the right of the Email field on a contact record or the Contacts tab to open a new message in their default email client (outside of Oracle Service Cloud). The To field in the new message is populated with the contact's email address.
Permission by contact state	Contacts are classified by their state, which can be Service, Outreach, Opportunities, or any combination of the three. In this section, set the permissions for staff members with this profile to view, edit, delete, and move contacts in these states and combinations of states. **Note:** Click the Read, Edit, Delete, or Move button above a column to select or clear all check boxes in the column.
Read	Select these check boxes to let staff members with this profile view contacts in the specified state.
Edit	Select these check boxes to let staff members with this profile edit contacts in the specified state.
Delete	Select these check boxes to let staff members with this profile delete contacts in the specified state.
Move	Select these check boxes to let staff members with this profile move contacts to different organizations.

Table 18: Contacts Tab Description (Continued)

Field	Description
Thread	These options determine if staff members can modify notes in contact records.
Select All	Select this check box to select all check boxes in the Thread section.
Edit/Delete Notes created by logged in user	Select this check box to let staff members with this profile edit and delete notes they have added to a contact record.
Edit/Delete Notes created by any user	Select this check box to let staff members with this profile edit and delete notes other staff members have added to a contact record.

6 Click the Save and Close button on the ribbon to save the changes and close the Profiles editor.

❖ Adding contacts

Service permissions

Profile settings on the Service tab let you define permissions for handling incidents, answers, assignments, assets, social monitoring, SLAs, and guided assistance guides. They also let you specify the queues staff members can access, the queue rank, pull policies and quantities, and **inbox limits**. If Chat is enabled, additional profile permissions display on the Service tab. See Adding Chat permissions to profiles.

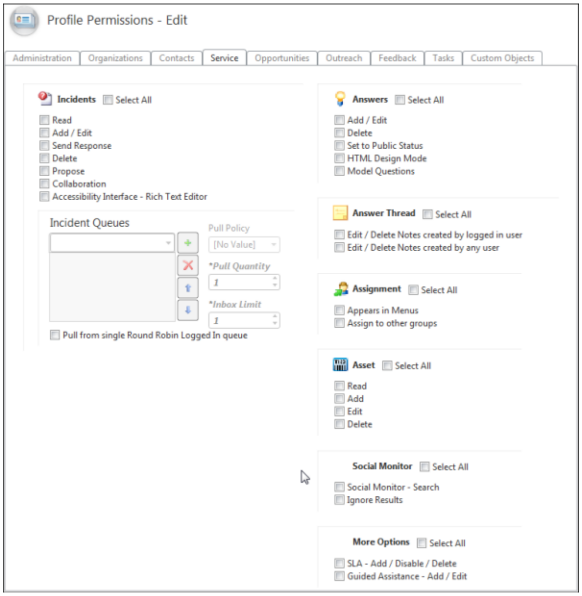
To select options on the Service tab

1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management and double-click the profile you want to edit. The Profiles editor opens.

3 Click the Permissions button on the **ribbon**.

4 Click the Service tab.



5 Enter the following field information.

Table 19: Service Tab Description

Field	Description
Incidents	These options define the incident permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Incidents section.
Read	Select this check box to let staff members with this profile view incidents.
Add/Edit	Select this check box to let staff members with this profile add incidents and modify existing incidents. If cleared, incidents are read-only when opened and staff members cannot edit fields or send responses.
Send Response	Select this check box to let staff members with this profile respond to incidents through email. If cleared, staff members can add responses to an incident, but cannot send responses to contacts through email.

Table 19: Service Tab Description (Continued)

Field	Description
Delete	Select this check box to let staff members with this profile delete incidents. If cleared, the Delete button is unavailable and staff members cannot delete incidents.
Propose	Select this check box to let staff members with this profile propose incidents as answers. If cleared, the Propose button is unavailable on the incidents ribbon.
Collaboration	Select this check box to let staff members with this profile collaborate with other staff members on incidents. **Note:** For this check box to display, Service Collaboration must be enabled on your site. See Collaborating with other agents.
Accessibility Interface–Rich Text Editor	Select this check box to let staff members with this profile use the rich text editor on the **accessibility interface**.

Table 19: Service Tab Description (Continued)

Field	Description
Incident Queues	Select a queue you want to be available for this profile from the drop-down menu and click the Add (+) button. If needed, you can then select additional queues to associate with this profile, delete queues, or change their order to reflect queue priority ranking.
Pull Policy	Click this drop-down menu to select a pull policy that determines the queues that incidents are retrieved from and their order. The pull policies include: • **Manual**—Lets staff members manually pull incidents from any queues available to them, allowing them to select a particular queue. Incidents are pulled from the selected queue in order of due date. • **Strict priority**—Uses the priority ranking of the available queues to determine which queue to pull incidents from, starting with the highest ranking queue. Incidents are pulled from this queue until the staff member's pull quantity is met, the staff member's inbox limit is met, or the queue is empty. If the queue is empty before the staff member's pull quantity is met, then incidents are pulled from the queue with the next highest priority ranking. • **First due**—Uses the incident due date to determine which incidents to retrieve, pulling incidents that are nearest to their due date first. Incidents are pulled from all the staff member's available queues in the order of due date until the staff member's pull quantity is met, the staff member's inbox limit is met, or all queues are empty. Queue ranking does not affect the pull order.
Pull Quantity	Type the number of incidents to be retrieved from the queues at one time when a staff member with this profile pulls incidents. The maximum pull quantity is 99.
Inbox Limit	Type the number of incidents that can be in a staff member's inbox at one time. The maximum inbox limit is 999.

Table 19: Service Tab Description (Continued)

Field	Description
Pull From Single Round Robin Logged In Queue	Select this check box to specify that staff members with this profile will be assigned new incidents from the same round-robin logged-in queue in which the most recently solved incident originated. When the check box is not selected, all round-robin logged-in queues are considered when assigning incidents. **Note:** This setting has no effect when staff members manually pull incidents using the Fill Inbox feature.
Answers	These options define the answer permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Answers section.
Add/Edit	Select this check box to let staff members with this profile add and update answers.
Delete	Select this check box to let staff members with this profile delete answers. If cleared, the Delete button is unavailable and staff members cannot delete answers.
Set to Public Status	Select this check box to let staff members with this profile set answers to the Public status and make them available to customers. If cleared, the Public option in the Status drop-down menu is not available when adding or editing answers. **Note:** While a staff member without this permission cannot change an answer's status to Public, existing public answers can still be edited as long as the staff member has the Add/Edit permission.
HTML Design Mode	Select this check box to let staff members with this profile create an HTML answer in design mode. If cleared, the Design tab does not display and staff members can edit only in source mode.
Model Questions	Select this check box to let staff members with this profile add and delete **model questions** when creating answers. **Note:** Your site must be integrated with **Oracle RightNow Virtual Assistant Cloud Service** (Virtual Assistant) in order to use this feature. Contact your Oracle account manager. See Adding answers.

Table 19: Service Tab Description (Continued)

Field	Description
Answer Thread	These options determine if staff members can modify notes in answers.
Select All	Select this check box to select all check boxes in the Answer Thread section.
Edit/Delete Notes created by logged in user	Select this check box to let staff members with this profile edit and delete notes they have added to answers.
Edit/Delete Notes created by any user	Select this check box to let staff members with this profile edit and delete notes other staff members have added to answers.
Assignment	These options define whether staff members with this profile are available for record assignment and whether they can assign records to other groups.
Select All	Select this check box to select all check boxes in the Assignment section.
Appears in Menus	Select this check box to display staff accounts associated with this profile in assignment menus when adding or editing incidents and answers. If cleared, staff members with this profile are not available in the Assigned drop-down menu.
Assign to Other Groups	Select this check box to let staff members with this profile assign incidents and answers to other groups. If cleared, the Assigned drop-down menu when adding and editing incidents and answers contains only those selections from the staff member's group.
Asset	These options define the **asset** permissions for staff members with this profile. See To assign assets profile permissions.
Select All	Select this check box to select all check boxes in the Asset section.
Read	Select this check box to let staff members with this profile view assets.
Add	Select this check box to let staff members with this profile add assets.
Edit	Select this check box to let staff members with this profile update existing assets. If cleared, assets are read-only when opened and staff members cannot edit fields.

Table 19: Service Tab Description (Continued)

Field	Description
Delete	Select this check box to let staff members with this profile delete assets. If cleared, the Delete button is unavailable and staff members cannot delete assets.
Social Monitor	These options define the social monitoring permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Social Monitor section.
Social Monitor—Search	Select this check box to give staff members access to the social monitor controls to search the social cloud. **Note:** Oracle RightNow Social Monitor Cloud Service must be enabled on your site to use this feature. Contact your Oracle account manager.
Ignore Results	Select this check box to let staff members with this profile ignore social cloud search results. If cleared, the Ignore Result button is unavailable and staff members cannot ignore social cloud search results.
More Options	These options define whether staff members with this profile can apply SLAs and guides to records.
Select All	Select this check box to select all check boxes in the More Options section.
SLA—Add/Disable/Delete	Select this check box to let staff members assign SLA instances to contacts and organizations, and deactivate and delete SLA instances.
Guided Assistance—Add/Edit	Select this check box to let staff members add the guided assistance control to an incident workspace or customer portal pages, and to edit the guided assistance control. **Note:** Guided assistance must be enabled to use this feature. Contact your Oracle account manager.

6 Click the Save and Close button on the ribbon to save the changes and close the Profiles editor.

❖ Adding incidents

❖ Adding answers

Opportunity Tracking permissions

Options on the Opportunities tab include permissions for adding and editing **opportunities**, adding and editing **sales periods** and **quotas**, and permissions to access additional features with opportunities and **leads**.

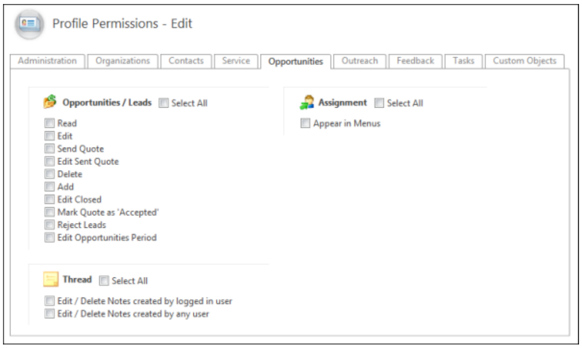
To select options on the Opportunities tab

1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management and double-click the profile you want to edit. The Profiles editor opens.

3 Click the Permissions button on the **ribbon**.

4 Click the Opportunities tab.



5 Enter the following field information.

Table 20: Opportunities Tab Description

Field	Description
Opportunities/Leads	These options define the opportunity and lead permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Opportunities/Leads section.
Read	Select this check box to let staff members with this profile view opportunities.

Table 20: Opportunities Tab Description (Continued)

Field	Description
Edit	Select this check box to let staff members with this profile edit existing opportunities. If cleared, opportunities are read-only when opened and staff members cannot edit fields or send quotes.
Send Quote	Select this check box to let staff members with this profile send quotes with opportunities.
Edit Sent Quote	Select this check box to let staff members with this profile edit a sent quote.
Delete	Select this check box to let staff members with this profile delete opportunities. If cleared, the Delete button is not available and staff members cannot delete opportunities.
Add	Select this check box to let staff members with this profile add opportunities. If cleared, the New button is not available and staff members cannot add opportunities.
Edit Closed	Select this check box to let staff members with this profile update the closed date and closed value fields of opportunities. **Note:** Selecting the Edit Closed check box automatically activates the Read and Edit check boxes if they are not already selected.
Mark Quote as 'Accepted'	Select this check box to let staff members with this profile select Accepted as the status of a quote when adding or editing quotes. If cleared, the Accepted option is not available.
Reject Leads	Select this check box to let staff members with this profile reject leads.
Edit Sales Period	Select this check box to let staff members with this profile add and edit sales periods, including quotas on the Sales Periods editor. If cleared, staff members cannot access the Sales Periods editor unless their profile has the Administration check box selected on the Administration tab.
Thread	These options determine if staff members can modify notes in opportunity records.
Select All	Select this check box to select all check boxes in the Thread section.

Table 20: Opportunities Tab Description (Continued)

Field	Description
Edit/Delete Notes created by logged in user	Select this check box to let staff members with this profile edit and delete notes they have added to an opportunity.
Edit/Delete Notes created by any user	Select this check box to let staff members with this profile edit and delete notes other staff members have added to an opportunity.
Assignment	The option in this section defines whether opportunities can be assigned to staff members with this profile.
Appear in Menus	Select this check box to display staff accounts associated with this profile in the Assigned drop-down menu when adding or editing leads and opportunities, as well as the Salesperson drop-down menu when adding or editing contacts and organizations.

6 Click the Save and Close button on the ribbon to save the changes and close the Profiles editor.

❖ Adding opportunities

Outreach permissions

You can set options on the Outreach tab to grant permissions to add, update, and delete **mailings**, **campaigns**, and **documents**. You can also allow staff members with this profile to create **templates**, **snippets**, file attachments, and **tracked links**.

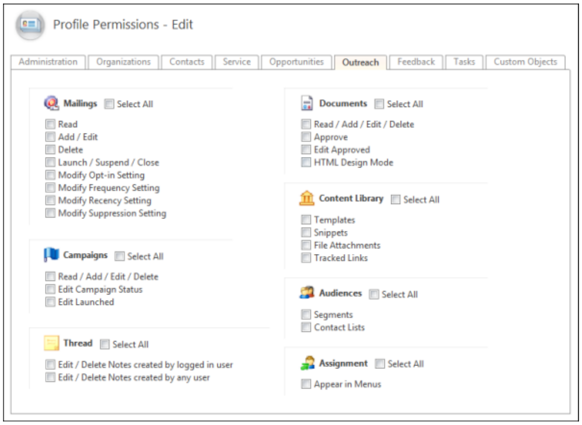
To select options on the Outreach tab

1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management and double-click the profile you want to edit. The Profiles editor opens.

3 Click the Permissions button on the **ribbon**.

4 Click the Outreach tab.



5 Enter the following field information.

Table 21: Outreach Tab Description

Field	Description
Mailings	These options define the mailing permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Mailings section.
Read	Select this check box to let staff members with this profile view mailings.
Add/Edit	Select this check box to let staff members with this profile create mailings and modify existing mailings. If cleared, mailings are read-only when opened and staff members cannot edit fields.
Delete	Select this check box to let staff members with this profile delete mailings. If cleared, the Delete button is not available and staff members cannot delete mailings.
Launch/Suspend/Close	Select this check box to let staff members with this profile launch or suspend a mailing, relaunch a suspended mailing, and cancel a mailing.

Table 21: Outreach Tab Description (Continued)

Field	Description
Modify Opt-in Setting	Select this check box to let staff members with this profile change the Honor Global Opt-in setting when creating or editing a mailing.
Modify Frequency Setting	Select this check box to let staff members with this profile change the Limit Frequency of Communication setting when creating or editing a mailing.
Modify Recency Setting	Select this check box to let staff members with this profile change the Limit Recency of Communication setting when creating or editing a mailing.
Modify Suppression Setting	Select this check box to let staff members with this profile change the Honor External Suppression List setting when creating or editing a mailing.
Campaigns	These options define the campaign permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Campaigns section.
Read/Add/Edit/Delete	Select this check box to give staff members with this profile access to campaigns, including the ability to add, edit, and delete campaigns.
Edit Campaign Status	Select this check box to let staff members with this profile modify the status of campaigns.
Edit Launched	Select this check box to let staff members with this profile edit launched campaigns.
Thread	These options determine if staff members can modify notes in campaigns, mailings, or documents.
Select All	Select this check box to select all check boxes in the Threads section.
Edit/Delete Notes created by logged in user	Select this check box to let staff members with this profile edit and delete notes they have added to a campaign, mailing, or document.

Table 21: Outreach Tab Description (Continued)

Field	Description
Edit/Delete Notes created by any user	Select this check box to let staff members with this profile edit and delete notes other staff members have added to a campaign, mailing, or document.
Documents	These options define the document permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Documents section.
Read/Add/Edit/Delete	Select this check box to let staff members with this profile read, add, edit, and delete documents.
Approve	Select this check box to let staff members with this profile approve documents. If cleared, the Approved check boxes cannot be selected by staff members when adding or editing documents.
Edit Approved	Select this check box to let staff members with this profile edit a document that has been approved. If cleared, staff members cannot edit documents if the Approved check box has been selected.
HTML Design Mode	Select this check box to let staff members with this profile use the HTML editor in design mode. If cleared, the Design tab does not display and staff members can edit only in source mode.
Content Library	These options define the content library permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Content Library section.
Templates	Select this check box to let staff members with this profile view, add, edit, and delete templates.
Snippets	Select this check box to let staff members with this profile view, add, edit, and delete snippets.
File Attachments	Select this check box to let staff members with this profile view, add, edit, and delete files.
Tracked Links	Select this check box to let staff members with this profile view, add, edit, and delete tracked links.

Table 21: Outreach Tab Description (Continued)

Field	Description
Audiences	These options define the audience permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Audiences section.
Segments	Select this check box to let staff members with this profile add, edit, and delete segments.
Contact Lists	Select this check box to let staff members with this profile add, edit, and delete contact lists.
Assignment	The option in this section defines whether records related to Outreach can be assigned to staff members with this profile.
Appear in Menus	Select this check box to display accounts associated with this profile in the Assigned drop-down menu when adding or editing campaigns, mailings, or documents.

6 Click the Save and Close button on the ribbon to save the changes and close the Profiles editor.

- ❖ Creating mailings
- ❖ Creating campaigns

Feedback permissions

You can use the Feedback options to give staff members permission to add, edit, and delete **surveys** and **questions**. You can also specify permissions for enabling and disabling surveys and editing questions that have already been answered by customers.

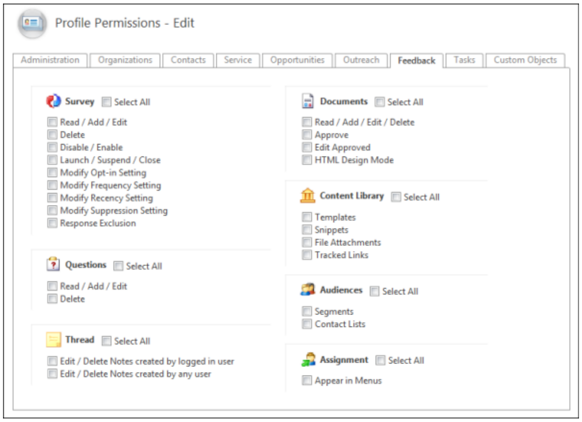
To select options on the Feedback tab

1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management and double-click the profile you want to edit. The Profiles editor opens.

3 Click the Permissions button on the **ribbon**.

4 Click the Feedback tab.



5 Enter the following field information.

Table 22: Feedback Tab Description

Field	Description
Survey	These options define the survey permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Survey section.
Read/Add/Edit	Select this check box to let staff members with this profile view, create, and edit surveys.
Delete	Select this check box to let staff members with this profile delete surveys. If cleared, the Delete button is not available and staff members cannot delete surveys.
Disable/Enable	Select this check box to let staff members with this profile enable and disable surveys.
Launch/Suspend/Close	Select this check box to let staff members with this profile launch or suspend a survey, relaunch a suspended survey, and cancel a survey.
Modify Opt-in Setting	Select this check box to let staff members with this profile change the Honor Global Opt-in setting when creating or editing a survey.

Table 22: Feedback Tab Description (Continued)

Field	Description
Modify Frequency Setting	Select this check box to let staff members with this profile change the Limit Frequency of Communication setting when creating or editing a survey.
Modify Recency Setting	Select this check box to let staff members with this profile change the Limit Recency of Communication setting when creating or editing a survey.
Modify Suppression Setting	Select this check box to let staff members with this profile change the Honor External Suppression List setting when creating or editing a survey.
Response Exclusion	Select this check box to let staff members with this profile exclude specific survey responses from reports.
Questions	These options define the question permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Questions section.
Read/Add/Edit	Select this check box to let staff members with this profile access questions, including the ability to add and edit questions.
Delete	Select this check box to let staff members with this profile delete questions.
Thread	These options determine if staff members can modify notes in surveys or documents.
Select All	Select this check box to select all check boxes in the Thread section.
Edit/Delete Notes created by logged in user	Select this check box to let staff members with this profile edit and delete notes they have added to a survey or document.
Edit/Delete Notes created by any user	Select this check box to let staff members with this profile edit and delete notes other staff members have added to a survey or document.

Table 22: Feedback Tab Description (Continued)

Field	Description
Documents	These options define the document permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Documents section.
Read/Add/Edit/Delete	Select this check box to let staff members with this profile read, add, edit, and delete documents.
Approve	Select this check box to let staff members with this profile approve documents. If cleared, the Approved check box cannot be selected by staff members when adding or editing documents.
Edit Approved	Select this check box to let staff members with this profile edit a document that has been approved. If cleared, staff members cannot edit documents if the Approved check box has been selected.
HTML Design Mode	Select this check box to let staff members with this profile use the HTML editor in design mode. If cleared, the Design tab does not display and staff members can edit only in source mode.
Content Library	These options define the content library permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Content Library section.
Templates	Select this check box to let staff members with this profile view, add, edit, and delete templates.
Snippets	Select this check box to let staff members with this profile view, add, edit, and delete snippets.
File Attachments	Select this check box to let staff members with this profile view, add, edit, and delete files.
Tracked Links	Select this check box to let staff members with this profile view, add, edit, and delete tracked links.

Table 22: Feedback Tab Description (Continued)

Field	Description
Audiences	These options define the segment and contact list permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Audiences section.
Segments	Select this check box to let staff members with this profile add, edit, and delete segments.
Contact Lists	Select this check box to let staff members with this profile add, edit, and delete contact lists.
Assignment	Select this check box to select the check box in the Assignment section.
Appear in Menus	Select this check box to display staff accounts associated with this profile in the Assigned drop-down menu when adding or editing surveys or documents.

6 Click the Save and Close button on the ribbon to save the changes and close the Profiles editor.

- ❖ Creating questions
- ❖ Creating surveys

Tasks permissions

You can use the tasks options to give staff members permission to add, edit, and delete tasks.

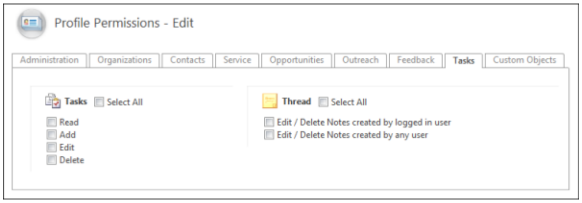
To select options on the Tasks tab

1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management and double-click the profile you want to edit. The Profiles editor opens.

3 Click the Permissions button on the **ribbon**.

4 Click the Tasks tab.



5 Enter the following field information.

Table 23: Tasks Tab Description

Field	Description
Tasks	These options define the task permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Tasks section.
Read	Select this check box to let staff members with this profile view tasks.
Add	Select this check box to let staff members with this profile add tasks.
Edit	Select this check box to let staff members with this profile edit existing tasks. If cleared, tasks are read-only when opened and staff members cannot edit fields or assign tasks.
Delete	Select this check box to let staff members with this profile delete tasks.
Thread	These options determine if staff members can modify notes in tasks.
Select All	Select this check box to select all check boxes in the Thread section.
Edit/Delete Notes created by logged in user	Select this check box to let staff members with this profile edit and delete notes they have added to a task.
Edit/Delete Notes created by any user	Select this check box to let staff members with this profile edit and delete notes other staff members have added to a task.

6 Click the Save and Close button on the ribbon to save the changes and close the Profiles editor.

❖ [Adding tasks]

Custom object permissions

You must specify permissions for your staff members to read, delete, and perform other actions on **custom object** records. All deployed custom objects are listed on the Custom Objects tab of the Profiles editor and are organized by the package they are contained in. Similar permissions can be granted for each object, though the Notes permissions are available only for objects with a notes field. Permissions can also be specified when editing custom objects on the Object Designer.

Note Custom objects must be enabled for this tab to appear. Contact your Oracle account manager.

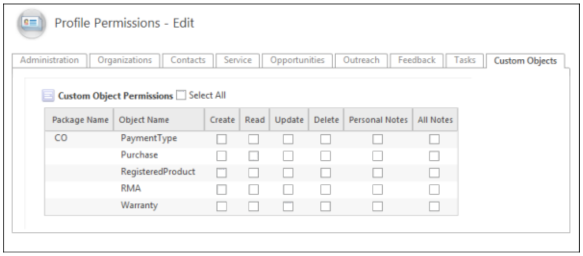
To select permissions on the Custom Objects tab

1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management and double-click the profile you want to edit. The Profiles editor opens.

3 Click the Permissions button on the **ribbon**.

4 Click the Custom Objects tab.



5 Enter the following field information.

Table 24: Custom Objects Tab Description

Field	Description
Custom Object Permissions	These options define the permissions needed to work with records for custom objects.
Select All	Select this check box to select all check boxes on the Custom Objects tab.
Package Name	This column displays package names.
Object Name	This column displays custom object names.
Create	Select check boxes in this column to let staff members with this profile create records for the custom object.
Read	Select check boxes in this column to let staff members with this profile read records for the custom object.
Update	Select check boxes in this column to let staff members with this profile update records for the custom object.
Delete	Select check boxes in this column to let staff members with this profile delete records for the custom object.
Personal Notes	Select check boxes in this column to let staff members with this profile create, edit, and delete notes in custom object records. **Note:** This check box displays only for custom objects that contain note fields.
All Notes	Select check boxes in this column to let staff members with this profile edit and delete any notes added to custom object records, regardless of which staff member added the notes. **Note:** This check box displays only for custom objects that contain note fields.

6 Click the Save and Close button on the ribbon to save the changes and close the Profiles editor.

❖ Creating custom objects

Analytics permissions

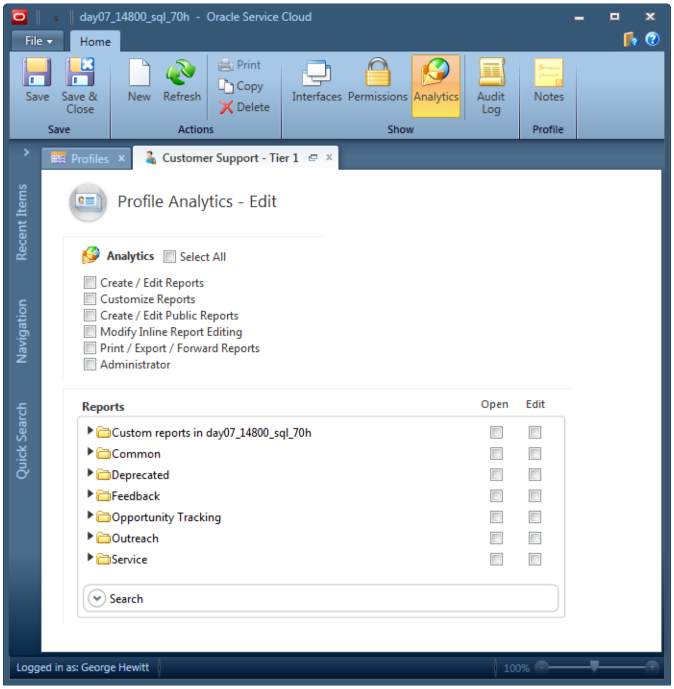
Options on the Analytics page determine the reports that staff members with this profile can access for each available **interface**. You can also assign access to the analytics features, such as creating **custom reports** and **dashboards**.

To select Analytics permissions

1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management and double-click the profile you want to edit. The Profiles editor opens.

3 Click the Analytics button on the **ribbon**.



4 Enter the following field information.

Table 25: Analytics Page Description

Field	Description
Analytics	These options define the analytics permissions for staff members with this profile.
Select All	Select this check box to select all check boxes in the Analytics section.
Create/Edit Reports	Select this check box to let staff members with this profile create custom reports and edit custom reports they have access to. **Note:** This permission is required to open the Reports explorer.
Customize Reports	Select this check box to let staff members with this profile customize a report after it has been generated.
Create/Edit Public Reports	Select this check box to let staff members with this profile create and edit public reports and create public folders on the Reports explorer.
Modify Inline Report Editing	Select this check box to let staff members with this profile create reports with inline editing.
Print/Export/Forward Reports	Select this check box to let staff members with this profile print, export, and forward reports.
Administrator	Select this check box to give staff members with this profile administrator all analytics permissions. This permission is required to edit **standard reports**. **Note:** By selecting this check box, all other check boxes are automatically selected.
Reports	The options in this section let you select which reports staff members with this profile can run and edit. **Note:** Custom folders that do not contain reports do not display in the list of reports.
Open	Select this check box to let staff members with this profile run the reports in each folder. You can expand report folders to select individual reports.

Table 25: Analytics Page Description (Continued)

Field	Description
Edit	Select this check box to let staff members with this profile edit the reports in each folder. You can expand report folders to select individual reports.
Search	Select this option to search for a report. This feature is useful for finding a report and setting its permissions.

5 Click the Save and Close button on the ribbon to save the changes and close the Profiles editor.

❖ Viewing reports

❖ Creating reports

❖ Creating dashboards

Managing staff accounts

Using the Staff Accounts editor, you can add staff members, assign them profiles, and group them according to level, department, area of expertise, manager, or other categories that apply to your organization. These grouping options help you route incidents and opportunities to the appropriate group and to report on groups of staff members that share similar job duties or the same manager.

Adding and editing staff accounts

When you add a staff account, you define the login information for the staff member and associate a profile with the staff member. You can also define a name for the staff member to display in Chat and a signature for responding to incidents. The Staff Accounts editor is also where you enter the default country and currency.

A staff member can send **S/MIME** email using a signature, encryption, or both. To send encrypted S/MIME email, the staff member must be issued a certificate that is then uploaded to the staff account. Certificates can be obtained from an authorized **certification authority** and must contain the staff member's email address. To send signed S/MIME email, the Envelope From/Bounce Address of the outgoing email must be a mailbox address (rather than an individual staff member email address) that includes a **certificate** and a private key. See Configuring S/MIME security.

Prerequisites

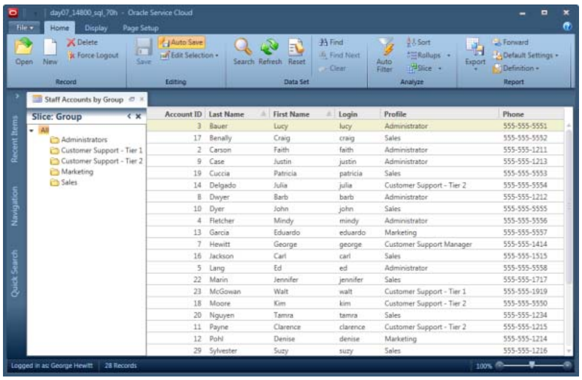
The following items must be created or configured before creating staff accounts.

- Profiles. See Customizing profiles.
- Password security options. See Configuring staff member passwords and Password protection.
- Staff account custom fields (optional). If you use staff account custom fields, we recommend creating them before creating staff accounts. See Adding and editing custom fields.

To add or edit a staff account

1 Click the Configuration button on the **navigation pane**.

2 Double-click Staff Accounts by Group (or another Accounts report) under Staff Management. The report opens on the **content pane**, listing the accounts that have already been created.

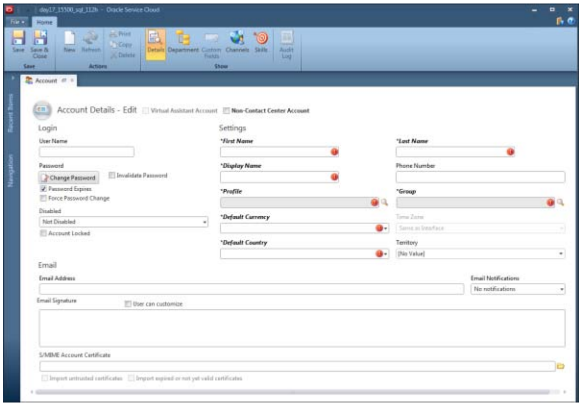


Tip By default, the standard Accounts reports (Staff Accounts by Group, Staff Accounts by Manager, and Staff Accounts by Profile) display only active accounts and accounts that have been temporarily disabled. Accounts that have been permanently disabled are not displayed. To change the accounts displayed, click the Search button on the ribbon and select the accounts you want to view. When displayed on the report, temporarily disabled accounts are shown in italic text and permanently disabled accounts are displayed in gray text.

3 To add a staff account, click the New button on the **ribbon**. The Staff Accounts editor opens.

Or

To edit a staff account, double-click the account on the report.



4 Enter the following field information.

Table 26: Staff Accounts Editor Description

Field	Description
Virtual Assistant Account	This read-only check box is selected if the staff account has been designated as the virtual assistant. Only one staff account can represent the virtual assistant. **Note:** For this check box to display, your site must be integrated with **Oracle RightNow Virtual Assistant Cloud Service** (Virtual Assistant). See Configuring virtual assistant.

Table 26: Staff Accounts Editor Description (Continued)

Field	Description
Non-Contact Center Account	Select this check box to designate this user as a non-contact center account. **Note:** For this check box to display, non-contact center user accounts must be enabled. Contact your Oracle account manager.
***User Name**	Type the staff member's user name in this field. Staff members enter their user name on the Login window. User names are case sensitive.
***First Name**	Type the staff member's first name in this field. The first name and last name appear on the bottom of the Service Console when the staff member is logged in.
***Last Name**	Type the staff member's last name in this field. The first name and last name appear on the bottom of the Service Console when the staff member is logged in.
Change Password	Click Change Password to open the Change Password window. Type the staff member's login password in the window's New Password field and type the same password in the Confirm New Password field. Passwords are case sensitive and encrypted. Keep in mind, the length of the hidden password in the text box does not indicate the length of the actual password. Click the OK button to save the password and close the Change Password window. **Note:** Passwords can be changed by staff members as long as the SSO Login permission is not enabled in the profile assigned to their staff account. If the SSO login permission is enabled, password options on the Staff Account editor are unavailable. See Enabling single sign-on profile permission.
Password Expires	Select this check box to automatically expire the password after the time period specified in the password configuration. See Configuring staff member passwords.
Force Password Change	Select this check box to require staff members to change their password the first time they log in after you update this setting in their staff account. **Note:** This check box remains selected until the staff member changes the password. After the password has been changed, the check box is automatically cleared.

Table 26: Staff Accounts Editor Description (Continued)

Field	Description
Invalidate Password	Select this check box to invalidate the staff member's password. Selecting this check box also disables the Change Password button. **Note:** Staff members without a valid password can reset their password from the Login Help link on the Login window. See Configuring Login Help. The Invalidate Password check box remains selected until the staff member resets the password. After the password has been reset, the check box is automatically cleared.
***Display Name**	Type a name for the staff member to be displayed in email communications and to customers during a chat session.
Phone Number	Type the phone number of the staff member in this field.
***Profile**	Click the Search button in this field to open the Profiles window. Select the profile you want to associate with this staff member and click the OK button to close the Profiles window. See Customizing profiles.
***Group**	Click the Search button on this field to open the Account Groups window where you assign the staff member to a group. See Adding staff accounts to groups.

Table 26: Staff Accounts Editor Description (Continued)

Field	Description
Disabled	Click this drop-down menu to define whether the staff account is disabled. You can choose from the following options. • **Not Disabled**—Select this option to make the account available for assignment to incidents and other types of records and to display the account in report filters. This is the default option. • **Disabled from Assignment**—Select this option to exclude the account from being assigned to incidents and other types of records. • **Disabled from Assignment/Report Filters**—Select this option to exclude the account from being assigned to incidents and other types of records and from appearing in report filters. • **Permanently Disabled**—Select this option to permanently disable the account. Accounts that are permanently disabled display in reports but cannot be re-enabled. The user name of a permanently disabled account can be used for a different staff account. **Note:** If an employee leaves your organization, we recommend disabling the employee's staff account instead of deleting it. When staff accounts are deleted, they no longer display in reports and are not available for use in custom reports used to track staff account actions. See Deleting staff accounts.
Account Locked	Select this check box to temporarily lock the staff account. You might choose to do this if, for example, a staff member takes a leave of absence. This check box is also selected automatically if a staff member has exceeded the number of invalid logins. Clear the check box to unlock the staff account. See Number of Invalid Logins.
***Default Currency**	Click this drop-down menu to select the currency you want to associate with the staff account. The United States dollar (USD) is the only currency option in this menu until you add others through the Currencies editor. See Adding and editing currencies.

Table 26: Staff Accounts Editor Description (Continued)

Field	Description
Time Zone	Click this drop-down menu to select the account's time zone. **Note:** This drop-down menu is unavailable for accounts with any of the following permissions selected for their profile: Administration, Incident Add/Edit, Incident Send Response, Incident Delete, or SLA - Add/Disable/Delete.
***Default Country**	Click this drop-down menu to select the country associated with this staff member. To add countries, See Adding and editing countries and provinces.
Territory	Click this drop-down menu to select the sales territory associated with this staff member. See Adding and editing territories.
External Screen Pop Port	Type the port number that the system will listen on for external screen pop requests. See Screen pops. **Note:** This field displays only if the configuration setting EXT_CONSOLE_WS_ENABLED is enabled on the Configuration Settings editor. The EXT_CONSOLE_WS_PORT configuration setting defines the port value for all staff members. However, if a value is specified in the External Screen Pop Port field, that value overrides the value specified in EXT_CONSOLE_WS_PORT. See Customizing configuration settings.
Email Address	Type the staff member's email address. This is required to receive scheduled reports and system notifications.

Table 26: Staff Accounts Editor Description (Continued)

Field	Description
Email Notifications	Click this drop-down menu to select the email notifications the staff member receives when an event occurs, such as an incident being assigned. The following options are available. • **No Notifications**—Select this option to prevent email notifications from being sent to the staff member. • **Short Notification Once**—Select this option to send a brief email notification when an event occurs and the staff member is not logged in. Subsequent events do not trigger additional notifications until the staff member logs in and logs out again. • **Detailed Notification Once**—Select this option to send a detailed email notification when an event occurs and the staff member is not logged in. Subsequent events do not trigger additional notifications until the staff member logs in and logs out again. • **Detailed Notification Always**—Select this option to send a detailed email notification for every event that triggers a notification, not just the first one. When this option is selected, the staff member receives email even when logged in.
Email Signature	Type a signature for the staff account to be appended to incident responses.
User Can Customize	Select this check box to let the staff member customize the email signature. When staff members who have this permission access options from the file menu (File > Options > Personal Settings), they can type their own signature in the Email Signature field. See Changing your personal settings.

Table 26: Staff Accounts Editor Description (Continued)

Field	Description
S/MIME Account Certificate	Click the Browse button to locate the file containing the public S/MIME account certificate. The certificate must contain the email address of the staff account. **Note:** S/MIME security options are not available for Outreach mailboxes. See Email Management.
Import untrusted certificates	Select this check box to bypass verification that the certificate file being imported or a contact certificate extracted from a signed S/MIME email is signed by a trusted certification authority. The **Techmail** utility will then import public certificates from S/MIME emails sent to this staff account that are not signed by a trusted certification authority. **Note:** Changing this setting does not affect previously imported and stored certificates.
Import expired or not yet valid certificates	Select this check box to bypass verification of the certificate date for the certificate file being imported or a contact certificate extracted from a signed S/MIME email. The Techmail utility will then accept certificates from S/MIME emails sent to this staff account that have expired or are not yet valid. This setting applies to every certificate in the certificate chain, from the root certificate through any subordinate certificates to the POP3 server's certificate. **Note:** Changing this setting does not affect previously imported and stored certificates.

5 To assign the staff account to a manager, click the Department button on the ribbon. See Organizing staff accounts by manager.

Tip The Department page can also be used to assign staff accounts to groups. In addition, the page displays other staff members assigned to the same group and manager.

6 Click the Custom Fields button on the ribbon and enter custom field information on the Custom Fields page. Any staff account custom fields created in your application appear on this page. See Adding and editing custom fields.

7 Click the Channels button on the ribbon and enter channel information using the procedure described in Social channels overview.

8 To view a log of changes that have been made to the staff account, click the Audit Log button.

9 Click the Save and Close button on the ribbon to save the changes.

❖ Customizing profiles

❖ Adding and editing custom fields

Adding staff accounts to groups

Every staff account you create must be assigned to a group. When deciding how to group your staff members, you should plan how you want them organized for reporting. For example, groups can be based on a specialty area of agents or the region of sales representatives.

You can also change the ordering of groups displayed in group lists or of staff accounts displayed in groups, such as in report filters.

To assign a staff account to a group

1 Click the Configuration button on the **navigation pane**.

2 Double-click Staff Accounts by Group (or another Accounts report) under Staff Management.

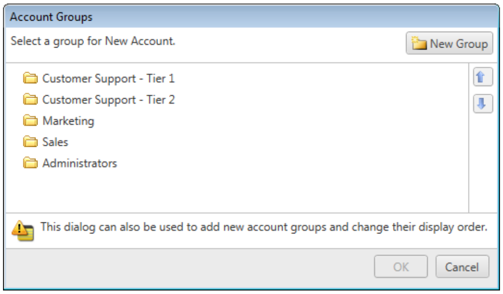
3 Double-click the staff account you want to assign to the group.

4 Click the Search button on the account's Group field. The Account Groups window opens.

Or

Click the Department tab on the **ribbon** and click the Search button on the Group field. For information about the Department page, see Organizing staff accounts by manager.

5 To assign the account to an existing group, select the group you want.

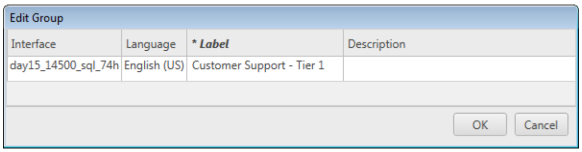


Tip Staff members with the Profiles permission on the Administration tab can change group assignments by dragging staff accounts from the open report to the Group folders on the left side of the report.

6 To assign the account to a new group, click the New Group button and type a name for the group.

7 To change the groups' display order, select the group you want to move and click the up or down arrow to move the group.

8 To rename a group or add a description to a group, right-click the group and select Edit. The Edit Group window opens.



a Type the name you want for the group in the Label field.
b Type notes or other information you want regarding the group folder in the Description field.
c Click the OK button to close the Edit Group window and save the change to the group.

9 To delete a group, right-click the group, select Delete, and click the OK button on the Confirm Delete window. You can delete only those groups that do not have associated staff accounts.

10 Click the OK button to close the Account Groups window.

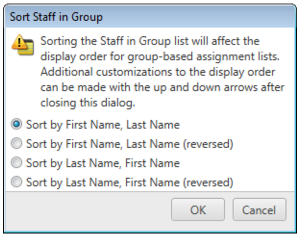
11 Click the Save and Close button on the ribbon to save the changes to the staff account and group.

To sort the staff accounts in a group

1 Open a staff account in the group you want to sort. See Adding and editing staff accounts.

2 Click the Department button on the **ribbon**. All staff members in the account's group display in the Staff in Group list. See Organizing staff accounts by manager for information about the Department page.

3 Click the Sort button above the Staff in Group list to open the Sort Staff in Group window.



4 Select the radio button next to the sort option you want.

- **Sort by First Name**—Select this option to sort the accounts in the group by first name, starting with first names beginning with A.
- **Sort by First Name (reversed)**—Select this option to sort the accounts in the group by first name, starting with first names beginning with Z.
- **Sort by Last Name**—Select this option to sort the accounts in the group by last name, starting with last names beginning with A.
- **Sort by Last Name (reversed)**—Select this option to sort the accounts in the group by last name, starting with last names beginning with Z.

5 Click the OK button to save the sort order and close the window.

6 To customize the sort order, select an account you want to move in the Staff in Group list and click the up or down arrow to move the account.

7 Click the Save and Close button on the ribbon to save the changes to the staff account.

Organizing staff accounts by manager

In addition to organizing staff members by group, you can organize them in a manager hierarchy, with staff members listed beneath their managers or team leads. You create the manager hierarchy, which is used in Opportunity Tracking, and can also be used to help you better report on the performance of managers and their staff. You can create up to twelve levels of accounts in the hierarchy.

Tip You can also view accounts in the manager hierarchy using the standard Staff Accounts by Manager report (Public Reports > Common > Site Administration > Staff Management).

To organize staff members by manager

1 Click the Configuration button on the **navigation pane**.

2 Double-click Staff Accounts by Manager (or another Accounts report) under Staff Management.

3 Double-click the account you want to assign to a manager.

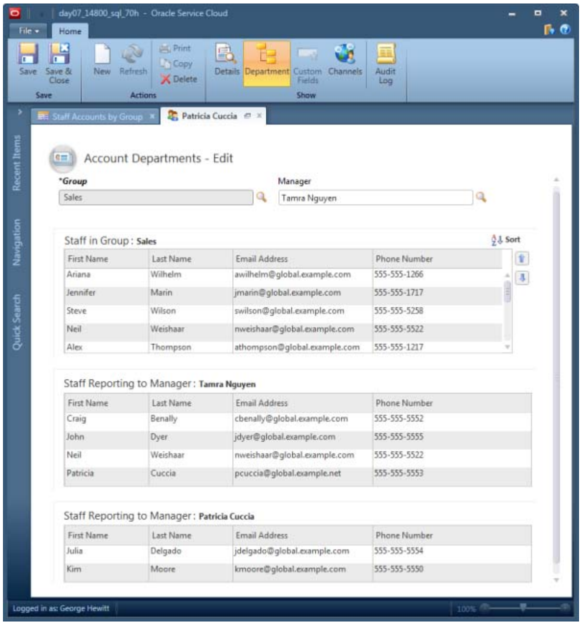
4 Click the Department button on the **ribbon**. The Department page opens where you can specify the account's group and manager hierarchy. You can also view lists displaying the other staff members in the same group and the manager hierarchy.

Tip Staff groups can be managed on the Department page. See Adding staff accounts to groups for information about creating and editing groups and adding and ordering staff accounts in groups.

Or

Staff members with the Profiles permission on the Administration tab can change group assignments by dragging staff accounts from the open report to the Group folders on the left side of the report.

The following figure shows the Department page for a staff account who reports to another manager and who has two subordinates.



5 Click the Search button in the Manager field to open the Account Manager Hierarchy window.

6 Select the manager you want to assign the account to.

7 Click the OK button to close the window.

8 Click the Save and Close button on the ribbon to save the changes to the staff account.

Deleting staff accounts

Staff accounts can be deleted like other types of records in Oracle Service Cloud. However, it is important that you understand what happens when you delete a staff account. Staff accounts that are deleted are completely removed from your site. They no longer display in reports and are no longer available for use in custom reports you use to track the actions of staff accounts. For this reason, when an employee leaves your organization, we recommend disabling the account instead of deleting it. See Adding and editing staff accounts.

To delete a staff account

1 Click the Configuration button on the **navigation pane**.

2 Double-click Accounts by Group (or another Accounts report) under Staff Management.

3 Select the staff account you want to delete.

4 Click the Delete button on the **ribbon**. A message asks you to confirm the deletion.

5 Click the Yes button to delete the staff account.

Configuring staff member passwords

You can enhance your staff members' password security through options that allow you to prevent repeated invalid login attempts and to set password length, character requirements, and expiration options.

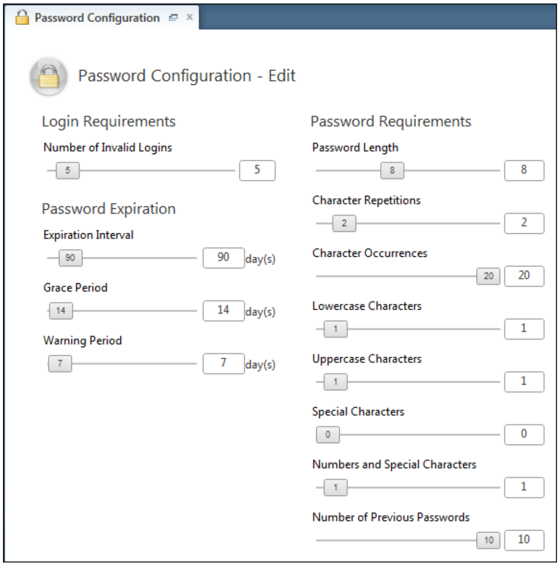
Important You must configure staff member passwords before adding staff accounts.

Password configuration is an important part of security for your organization and for your application. To learn about the tools you can use for password security, see Password protection. Also see Account Self-Service Settings for Passwords and Customer Portal Settings for Passwords.

To configure password requirements

1 Click the Configuration button on the **navigation pane**.

2 Double-click Password Configuration under Staff Management. The **content pane** displays the Password Configuration editor.



3 Enter the following field information.

Table 27: Password Configuration Description

Field	Description
Login Requirements	This section contains the option to establish a limit on invalid login attempts.
Number of Invalid Logins	Drag the slider to the number of failed login attempts you want to allow before the system locks out the account. Alternately, type the number you want to the right of the slider. A value of 0 disables this function. The default value is 5. **Note:** Only administrators possessing Groups/Accounts/Distribution Lists permissions can unlock a staff account. After a successful login, the invalid login count is reset to 0.

Table 27: Password Configuration Description (Continued)

Field	Description
Password Expiration	This section contains options to customize time periods that affect password expiration. **Note:** If the Password Expires check box is cleared for a particular staff account, it overrides any password expirations defined in the password configuration settings.
Expiration Interval	Drag the slider to the number of days that passwords stay in effect. Alternately, type the number you want to the right of the slider. After adding a staff account or updating the account password from the Staff Accounts editor or the Change Password window, the expiration date value is reset. A value of 0 turns password expiration off. The default value is 90.
Grace Period	Drag the slider to the number of days after the password expires in which staff members can enter a new password and still be allowed to log in. Alternately, type the number you want to the right of the slider. Once the grace period ends, staff members' accounts are locked, and you must reset the expiration date or the password. The default value is 14.
Warning Period	Drag the slider to the number of days before the password expires in which staff members will be alerted to the approaching expiration date. Alternately, type the number you want to the right of the slider. During the warning period, staff members can log in normally and are notified of the number of days until the current password expires. The default value is 7.
Password Requirements	This section contains options to customize the format of staff account passwords and limit their reuse.
Password Length	Drag the slider to the minimum number of characters required for a staff account password. Alternately, type the number you want to the right of the slider. The default value is 8. **Note:** Password length cannot exceed 20 characters.
Character Repetitions	Drag the slider to the maximum number of consecutive repeated characters permitted in a password. Alternately, type the number you want to the right of the slider. For example, if Character Repetitions is set to 2, then a password such as 11011011 would be allowed, but 1110000 would *not* be allowed. The default value is 2.

Table 27: Password Configuration Description (Continued)

Field	Description
Character Occurrences	Drag the slider to the maximum number of times a character can be used in a password. Alternately, type the number you want to the right of the slider. For example, if Character Occurrences is set to 2, then a password such as 10123456 would be allowed, but 10101234 would *not* be allowed. The default value is 2.
Lowercase Characters	Drag the slider to the minimum number of lowercase characters required in a password. Alternately, type the number you want to the right of the slider. The default value is 1.
Uppercase Characters	Drag the slider to the minimum number of uppercase characters required in a password. Alternately, type the number you want to the right of the slider. The default value is 1.
Special Characters	Drag the slider to the minimum number of special characters required in a password. Alternately, type the number you want to the right of the slider. The default value is 1.
Numbers and Special Characters	Drag the slider to the minimum number of special characters, including numbers, required in a password. Alternately, type the number you want to the right of the slider. The default value is 1.
Number of Previous Passwords	Drag the slider to the number of passwords that will be stored in memory for each staff account. Alternately, type the number you want to the right of the slider. Staff members cannot use any of the currently stored passwords when changing passwords. The default value is 10.

4 Click the Save and Close button to save the password configuration options.

7

Customizable Menus

When you customize drop-down menus, you increase the likelihood of an organized, accurate, and up-to-date **knowledge base**, which is essential for providing an exceptional customer experience. Customizable menus help you develop logical, consistent ways to organize objects such as contacts, incidents, tracked links, and sales products in ways that are most useful to your organization. The available customizable menu items on your **navigation pane** depend on the Oracle Service Cloud products that are enabled on your site, your **navigation set**, and your **profile** permissions.

Important The Customizable Menus tree contains a System Menus folder, containing default menu items, and a Custom Menus folder, which you can use to create menu items for menu-only **custom objects**. Refer to Adding and editing custom object menus.

If custom objects is not enabled on your site, the tree will not contain any folders and only the default menu items will be listed in the tree. Contact your Oracle account manager to enable custom objects.

Select one of the following customizable menu items to learn how to add and edit the item.

- Answer access levels
- Answer statuses
- Asset statuses
- Billable tasks
- Channel types
- Chat agent statuses
- Chat session queues
- Competitors
- Contact roles
- Contact types

- Countries
- Custom object menus
- Incident queues
- Incident severities
- Incident statuses
- Industry types
- Lead rejection types
- Opportunity statuses
- Organization address types
- Price schedules
- Product catalog
- Products/categories/dispositions
  - ▷ Product linking
- Tracked link categories
- Win/loss reasons

Common customizable menus

Customizing drop-down menus helps organize and classify information in the **knowledge base** beyond the already flexible alternatives that are available. When you add menu options that staff members can select while working with records, you increase the accuracy and usefulness of the knowledge base.

You can add the following types of common menu options.

- Countries—Maintain accurate, consistent address data for contacts and organizations by adding the countries and provinces your organization does business in.
- Organization address types—Add organization address types when you need more flexibility than that offered by the standard billing and shipping addresses.
- Contact types—Add contact types to help you organize contacts in ways that are most useful to your organization.
- Price schedules—Establish various **pricing schedules** that can be applied to **sales products**.
- Product catalog—Use the **product catalog** to add, edit, and categorize sales products and assign price schedules to them.

- Custom object menus—Use **custom object** menus to add, copy, and delete custom object menu items.

Adding and editing countries and provinces

Adding countries and provinces to the **knowledge base** helps maintain accurate address information. Because the countries and provinces appear in drop-down menus when staff members enter contact and organization information, consistent names and abbreviations for unfamiliar countries are guaranteed. You can also define format **masks** to require that staff members use the same format when entering phone numbers and postal codes.

The United States is automatically included, and you can add any other country where you have contacts and organizations. Provinces cannot be added independently, but must be associated with the appropriate country. You can add them when you add the country or at a later time when you edit the country. When staff members enter an address and select a country, the State/Prov field contains a drop-down menu of the states or provinces associated with that country.

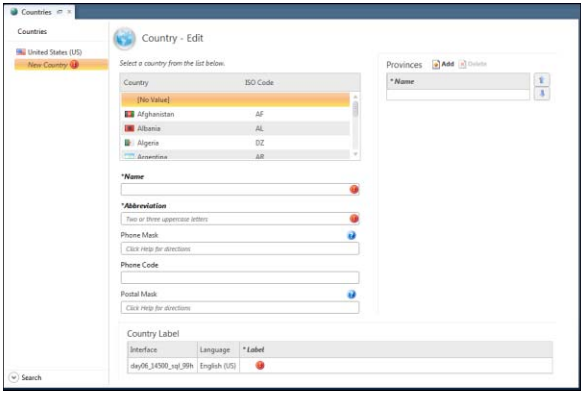
You can also delete countries and provinces on the Countries editor by clicking the Delete button on the ribbon. When you delete a country or province, any contacts and organizations that were associated with that country or province no longer have a country or province association.

To add or edit a country or province

1. Click the Configuration button on the **navigation pane**.
2. Double-click Countries under Internationalization. The Countries tree displays on the **content pane**.
3. To add a country, click the New button on the **ribbon** to display the editor.

   Or

   To edit a country, click it in the tree.



4 Enter the following field information.

Table 28: Countries Editor Description

Field	Description
*Name	Select a country from the Country/ISO Code list at the top of the editor or type the name of the country in the field.
*Abbreviation	When you select a country from the list on the editor, the Abbreviation field is populated with the country's 2- or 3-digit abbreviation. This may or may not be the same as the ISO code for the country, which appears in parentheses after the name in the list of countries. **Note:** If you typed a country name instead of selecting one from the list, the country does not have an ISO code. As a result, the Locate Address button next to the Address field on a contact, organization, or incident is disabled.
Phone Mask	Type a mask to restrict what staff members can type in the phone number field. For information about formatting masks, refer to Input masks.
Phone Code	Type the international phone code for the country.
Postal Mask	Type a mask that restricts what staff members can type when they enter postal codes for contacts in this country. For information about formatting masks, refer to Input masks.

5 To add a province, click the Add button (in the Provinces section on the right side of the editor) to add a field in the Name column, and type the province name in the field.

6 To edit the name of a province associated with the country you are editing, select the province name and type the new name.

Note You can move provinces within the list using the up and down arrows next to the Provinces list.

7 Click the Save and Close button on the ribbon to save the country and provinces before closing the editor.

Adding and editing organization address types

Organization address types allow you to maintain multiple addresses for the organizations in the **knowledge base**. The default address types are Billing and Shipping. When your organization needs other address types, you can add as many as you need. For example, you might find it useful to have an international address type or a headquarters address type. You can delete any address type except Billing by selecting it and clicking the Delete button on the ribbon.

Caution When you delete an organization address type that has been used in an organization record, this action deletes all address data previously associated with that address type.

To add or edit an organization address type

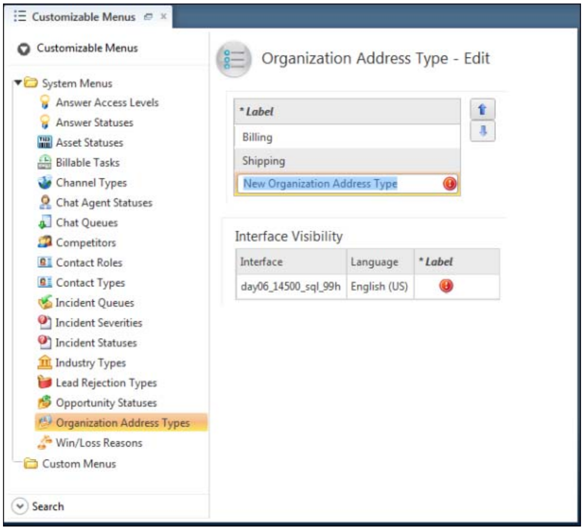
1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

3 Click the arrow next to the System Menus folder to expand the list.

4 Click Organization Address Types to display the editor.

5 To add an address type, click the New button on the **ribbon**.
Or
To edit an address type, click it in the tree.



6 Type a name for a new address type or edit an existing name in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 Click the Save and Close button on the ribbon to save the organization address type and close the editor.

Adding and editing contact types

Using contact types, you can organize the contacts in your knowledge base into classifications that are important to your organization. When staff members add or edit contacts, they can select the contact type from the menu options you add. You might want to add contact types that reflect the position of a contact, such as manager, buyer, agent, and assistant. Or you could add contact types that reflect a contact's function with respect to your organization, such as technical expert, decision maker, and reference.

To add or edit a contact type

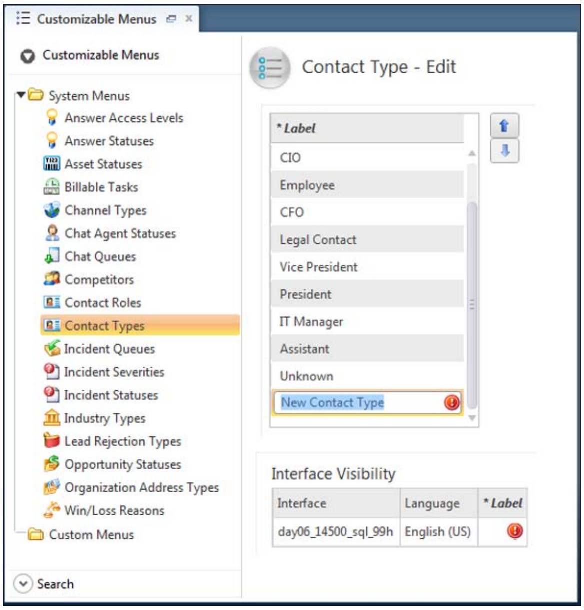
1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

3 Click the arrow next to the System Menus folder to expand the list.

4 Click Contact Types to display the editor.

5 To add a contact type, click the New button on the **ribbon**.
Or
To edit a contact type, click it in the tree.



6 Type a name for a new contact type or edit an existing name in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 Click the Save and Close button on the ribbon to save the contact type and close the editor.

Adding and editing price schedules

Multiple price schedules provide greater flexibility for pricing **sales products**. You may price a sales product differently for preferred customers, or you may have various price schedules for customers in different countries.

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Because products in the **product catalog** can have an associated price schedule, you should add price schedules before you add sales products.

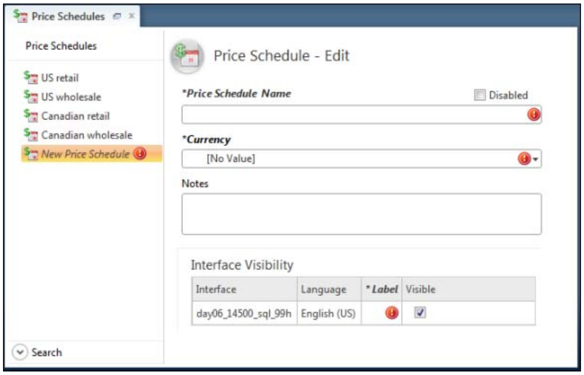
Important The Delete option is not available for price schedules that are associated with sales products. If you want to delete a price schedule associated with a sales product, first edit the sales product to remove the price schedule association.

To add or edit a price schedule

1. Click the Configuration button on the **navigation pane**.
2. Double-click Price Schedules under Opportunity Tracking in the **configuration list**. The Price Schedules tree displays on the **content pane**.
3. To add a price schedule, click the New button on the **ribbon** to display the editor.

   Or

   To edit a price schedule, click it in the tree.



4. Enter the following field information.

Table 29: Price Schedules Editor Description

Field	Description
*Price Schedule Name	Type the name of the price schedule. The item name in the Price Schedules tree on the left side of the content pane and the Label field in the Interface Visibility section are populated or revised as you type.

Table 29: Price Schedules Editor Description (Continued)

Field	Description
Disabled	Select this check box to prevent the price schedule from appearing in the Price Schedule drop-down menu when selecting a price schedule for a sales product.
*Currency	Click this drop-down menu and select a currency. Currency options are added on the Currencies/Exchange Rates editor. Refer to Adding and editing currencies.
Notes	Type any notes you want to add to the price schedule.
Interface Visibility	Clear the check box if you do not want the sales product to be visible on the interface.

5 Click the Save and Close button on the ribbon to save the price schedule and close the editor.

Adding and editing sales products

When you add **sales products**, you define the **product catalog** used to create **quotes** and **Offer Advisor** promotions and suggestions. You also add sales products to use as customer **assets**. Refer to Adding asset products.

You can enable or disable sales products, establish visibility, add identification fields, enter product descriptions, associate **price schedules**, associate a **service product**, and enter custom field values. Since sales products can be associated with price schedules and service products, you should add price schedules and service products first. Refer to Adding and editing price schedules and Adding and editing products, categories, and dispositions.

Important If you try to delete a sales product that is used in an Offer Advisor promotion by selecting it in the tree and clicking the Delete button on the ribbon, a dependency conflict window opens and notifies you that deletion is not allowed.

To add or edit a sales product

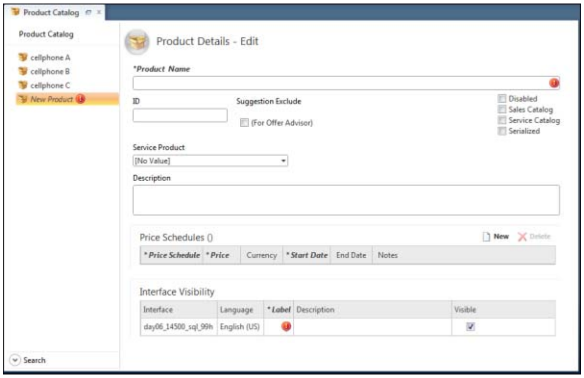
1 Click the Configuration button on the **navigation pane**.

2 Double-click Product Catalog under Opportunity Tracking in the **configuration list**. The Product Catalog tree displays on the **content pane**.

3 To add a sales product, click the New button on the **ribbon**. The Product Details editor opens.

Or

To edit a sales product, click it in the tree.



4 Enter the following field information.

Table 30: Product Details Editor Description

Field	Description
*Product Name	Type the sales product name. The item name in the Product Catalog tree on the left side of the content pane and the Label field in the Interface Visibility section are populated or revised as you type.
ID	Type an identifier for the sales product in this field. This can be a catalog number, product name, or any other identifier your organization wants to use.
Suggestion Exclude	Select this check box to exclude the sales product from being automatically suggested to a customer through Offer Advisor. If cleared, the product is eligible for suggestion to customers who match Offer Advisor's purchase history data. Refer to What is Offer Advisor.
Disabled	Select this check box to prevent the sales product from displaying when creating a quote, promotion, or customer asset or from being available as a suggested product in Offer Advisor.

Table 30: Product Details Editor Description (Continued)

Field	Description
Sales Catalog	Select this check box to make the sales product available for use in Oracle RightNow Opportunity Tracking Cloud Service (Opportunity Tracking) and Offer Advisor. Refer to Adding sales products to quotes and Selecting details for promotions. If cleared, or if the Disabled check box is selected, the sales product will not be available in Opportunity Tracking or Offer Advisor.
Service Catalog	Select this check box to make the sales product available for use in Oracle RightNow Cloud Service (Service). See Adding asset products. If cleared, or if the Disabled check box is selected, the sales product will not be available in Service.
Serialized	Select this check box to prompt customers and agents to enter a serial number when using this sales product as a customer asset. See Adding asset products.
Service Product	Click this drop-down menu to associate a **service product** with the sales product. See Adding asset products.
Description	Type a description of the sales product that can be viewed by sales reps when they add products to quotes. Refer to Adding sales products to quotes.
Price Schedules	Select one or more price schedules as described in Adding price schedules to sales products.
Interface Visibility	Clear the check box if you do not want the sales product to display when staff members add products to quotes while creating or editing an opportunity. **Note:** The sales product will remain displayed on the Promotions editor. Refer to Adding promotions.

5 To add information for any sales products custom fields, click the Custom Fields button on the ribbon and enter the information. Depending on the type of field, you can type text in a field, select a date from a drop-down calendar, select a menu option, or select a radio button. (To add sales products custom fields, refer to Adding and editing custom fields.)

6 Click the Save and Close button on the ribbon to save the sales product and close the editor.

Adding price schedules to sales products

Price schedules provide an additional method for classifying information about sales products, but their use is optional. If you do not create price schedules or add them to sales products, the sales products are not available to staff members creating quotes. Only those products associated with the selected price schedule can be used in a quote. Refer to Adding sales products to quotes.

To add a price schedule to a sales product

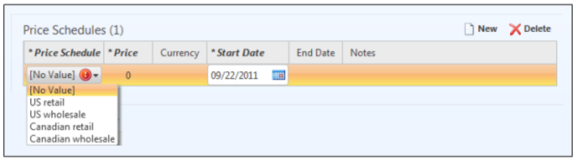
1 Click the Configuration button on the **navigation pane**.

2 Double-click Product Catalog under Opportunity Tracking in the **configuration list**. The Product Catalog tree displays on the **content pane**.

3 Click a product in the tree to open the Product Details editor.

4 Click the New button to the right of Price Schedules. A row is added to the table.

5 Click the Price Schedule drop-down menu and select a price schedule. (The menu options are the price schedules that have already been added. Refer to Adding and editing price schedules.)



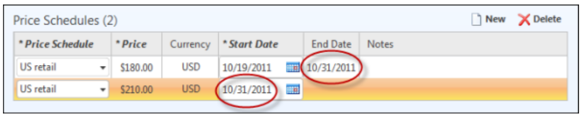
6 Enter the following field information.

Table 31: Price Schedule Field Descriptions

Field	Description
*Price	Double-click this field and type a price.
Currency	This read-only field is determined by the price schedule you select.

Table 31: Price Schedule Field Descriptions (Continued)

Field	Description
*Start Date	Click each month, day, and year component of this date field and type an effective start date for the price schedule. Or click the calendar and select a date. **Note:** When you add a price schedule, this field is populated with the current date.
End Date	This read-only field is blank if you select only one price schedule for the sales product. However, if you add the same price schedule with a different price, the start date for the later-starting price schedule becomes the end date for the earlier-starting price schedule, as shown in the following figure.
Notes	Type any notes you want to add to the price schedule.



7 Click the Save and Close button on the ribbon to save the price schedule for the sales product and close the editor.

Adding and editing custom object menus

After menu-only **custom objects** are created and deployed, you can manage them in Customizable Menus. You can add, copy, and delete custom object menu items through the Custom Object Menu editor. Refer to [Creating menu-only custom objects](#).

To add a custom object menu item

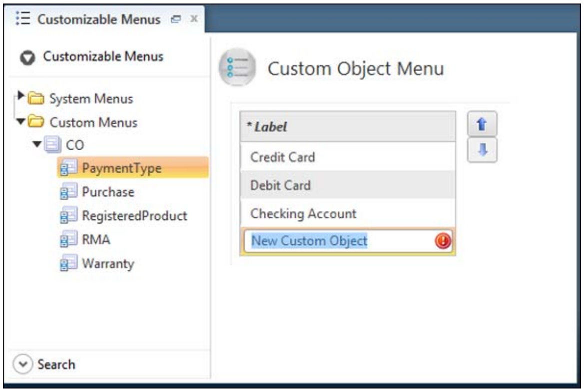
1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree opens on the **content pane**.

3 Click the arrow next to the Custom Menus folder to expand the list.

4 Select a custom menu item in the tree. The Custom Object Menu editor displays on the content pane.

5 Click the New button on the ribbon. The new menu item is added to the Custom Object Menu editor.



6 Type a name for the menu item.

7 Click the Save and Close button on the ribbon.

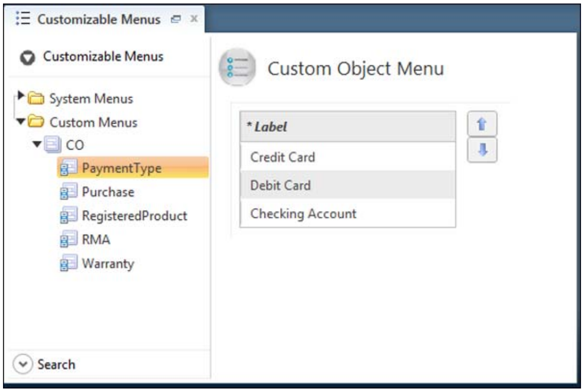
To edit a custom object menu item

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree opens on the **content pane**.

3 Click the arrow next to the Custom Menus folder to expand the list.

4 Select a custom menu item in the tree. The Custom Objects Menu editor displays on the content pane.



5 To change the display sequence of a menu item, select it in the tree and click the up or down arrow next to the Label column.

6 To rename a menu item, select it on the editor and type the new name.

7 To copy a menu item, select it on the editor and click the Copy button on the ribbon.

8 To delete a menu item, select it on the editor and click the Delete button on the ribbon.

❖ Creating custom objects

❖ Creating menu-only custom objects

Service customizable menus

Keeping your knowledge base organized and up-to-date is an important way to provide superior customer service. When you create custom drop-down menus with the exact options you need, staff members can classify **incidents** and **answers** using those options, and customers can select specific **products** and **categories** to refine their searches for answers. Both customers and staff members benefit from the flexibility that results when you classify incidents and answers in ways that make the most sense for your organization.

You can add the following types of classification options in Oracle RightNow Cloud Service (Service).

- Products/categories/dispositions—Add products and categories for grouping incidents and answers, resulting in more accurate search results for staff members and customers. Use dispositions as a way to record the final resolution of a solved incident.

- Product linking—Link products to categories and dispositions so menus display only the links that are relevant to the selected product. This feature ensures more accurate data recording and simplified searching for incidents and answers.
- Incident statuses—Add custom incident statuses to track the state of an incident.
- Incident severities—Define incident severity levels for classifying incidents.
- Incident queues—Identify queues that can be used for routing incidents automatically or manually based on the criteria you establish.
- Chat session queues—Identify queues that can be used for routing chat session requests.
- Chat agent statuses—Add custom statuses to describe an agent's availability to chat with customers and assist other agents with their chat sessions.
- Answer statuses—Add custom answer statuses for increased classification of answers in the knowledge base.
- Answer access levels—Add custom answer access levels for increased control over the information that is visible to staff members and customers.
- Billable tasks—Define billable tasks for classifying and recording how agents spend their time working on incidents.
- Channel Types—Add channel types for contacts so they can associate their Twitter, YouTube, and Facebook user names through the **customer portal**.

Organizing information with products, categories, and dispositions

When you use products and categories to group incidents and answers, your knowledge base is more organized. As a result, staff members and customers can quickly find answers to their questions. For example, a company that manufactures and sells cellular phones might add products such as Smart Phones, Camera Phones, and Accessories. Categories might include Technical Specifications and Warranty Information.

Products and categories organize data in the same ways, and you can choose to use either or both when you configure Service. If you use both, incidents and answers can be organized into specific classifications, and customers can search for answers using product and category filters. You can create up to six levels each of products and categories and specify the number of levels agents must enter when working with incidents. Although products and categories are powerful options for keeping the knowledge base well organized, you are not required to use them.

An incident's **disposition** refers to the way the incident is ultimately solved. You may want to require that agents select a disposition before they save an incident when they change the status to Solved. Dispositions do not appear on the **customer portal**.

Incident dispositions can provide important information and insight about your organization's interactions with customer. You can add as many dispositions as you need, and you can also add sub-levels of dispositions to a total of six levels. For example, you might have a top-level disposition of Sent to Regional Billing. With additional levels, you can organize incidents into specific sub-dispositions such as East Coast, Midwest, Rocky Mountain, and Pacific Northwest. Service lets you define the number of disposition levels agents must select before marking an incident solved.

Use the following steps to configure product, categories, and dispositions.

- **Define levels of products, categories, and dispositions on the administration interface**—Set the number of product, category, and disposition levels you want to require on the administration interface. Refer to Defining number of levels.
- **Define levels of products and categories on the customer portal**—Set the number of product and category levels you want to require customers to select on the Ask a Question page. Refer to Setting the required levels of products and categories.
- **Add products, categories, and dispositions**—Add the products and categories you want to use for grouping answers and incidents in the knowledge base. The products and categories you add appear to staff members who work with answers and incidents on the **content pane**. They also appear on the customer portal for customers to use when searching for and subscribing to answers. Add dispositions so agents can indicate how an incident was ultimately resolved. Refer to Adding and editing products, categories, and dispositions.
- **Link products to categories**—To restrict category selections to only the categories associated with a selected product, enable and configure **product-category linking**. Product-category linking affects staff members working with incidents and customers searching on the customer portal. Refer to Product linking.
- **Link products to dispositions**—To restrict staff member selection of dispositions based on the incident's product, enable and configure **product-disposition linking**. Refer to Product linking.

Defining number of levels

You can use up to six levels of products, categories, and dispositions to classify incidents and answers in the knowledge base. By creating sub-products, for example, you can let your customers further refine their searches. This also lets staff members classify incidents and answers more precisely. If you have created multiple levels of products, categories, and dispositions, you can also define the number of levels that staff members are required to select on the administration interface.

To specify the number of required product levels for incidents

Note Although this procedure describes how to configure the number of product levels on an incident workspace, follow these same steps to define the Minimum Level value for the Category and Disposition fields.

1 Click the Configuration button on the **navigation pane**.

2 Double-click Workspaces under Application Appearance. The Workspaces explorer displays on the **content pane**.

3 Right-click the custom incident workspace where you want to specify the number of product levels and select Open.

Note You cannot edit the standard incident workspace, but you can copy it and edit the copied workspace.

4 Select the Product field on the design space.

5 Click the arrow on the Minimum Level button on the ribbon's Design tab and type the number of required product levels. The acceptable values range from 0 to 6.

6 Click the Save button on the Quick Access Toolbar to save the edited incident workspace.

7 Assign this workspace to the applicable **profile**. Refer to Customizing profiles if you need help with this process.

❖ Editing workspaces
❖ Customizing profiles

Adding and editing products, categories, and dispositions

Customers can use products and categories to narrow their search results on the **customer portal**. Because the search results are filtered through these classifications, the search finds answers that are more likely to resolve customers' questions. Likewise, agents can search for incidents and answers based on products and categories when responding to incidents. They can also classify incidents and answers when they work on them by selecting products and categories, thereby increasing the organization of information within the **knowledge base**.

Before you add products and categories, take some time to plan how you want use them to organize incidents and answers. For example, if you have many products that share a common set of support issues, you might want to add a top-level product name to group them instead of using individual product names. Or you might want to add sub-product levels to further filter the products. Top-level products and categories classify incidents and answers in broad groupings, but you can add five more levels of sub-products and sub-categories to further refine classification.

When agents classify incidents according to their disposition, your knowledge base contains the information you need to understand how incidents have been closed. Additional levels of sub-dispositions allow you to further refine the classification of incidents.

Note Although the following procedures describe working with products, the procedures to add and edit categories and dispositions are identical. Simply replace product information with category or disposition information where appropriate.

To add or edit a product

1 Click the Configuration button on the **navigation pane**.

2 Double-click Products/Categories/Dispositions under Service. The **content pane** displays separate columns for products, categories, and dispositions.

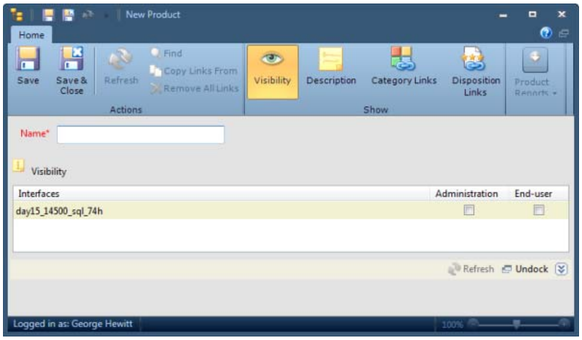
Note By default, the editor displays all three columns, indicated by the highlighted Products, Categories, and Dispositions buttons in the Show group on the **ribbon**. To hide one or more columns, click the associated button so that it is no longer active. The column is removed from the editor until you click the button again or until you close and reopen the editor.

3 To add a product, click in the Products column and click the New button on the ribbon. The New Product window opens.

Or

To edit a product, right-click it and select Edit.

Tip To add a product at the same level as a selected product, right-click the product and select Add Sibling. To add a sub-product, right-click and select Add Child.



4 Type the name of the product in the Name field. The word you type in the Name field is a keyword for all answers associated with this product. When customers search by the product's name, all answers associated with this product are returned.

5 To make the product visible to staff members working with incidents, select the Administration check box.

Note Regardless of interface or visibility settings, all service products and categories are visible when adding or editing answers on any interface.

6 To make the product visible to customers on the **customer portal**, select the End-user check box. (The End-user check box is not available when adding or editing dispositions.)

Important Selecting the visibility settings for a parent level does not automatically set the same settings for the parent's sub-levels. Visibility must be set individually for each. You can also make sub-products visible even if the parent product is not visible.

7 To enter a description for the product, click the Description button on the ribbon and type information in the Description field.

8 Click the Save and Close button on the ribbon. The product appears in the Products column.

To add a sub-product

1 Right-click the product you want to add the sub-product to and select Add Child. The New Product window opens.

Or

Select the product you want to add the sub-product to, click the arrow on the New button on the **ribbon**, and select Child.

2 Type the name of the sub-product in the Name field.

3 To enter information about the sub-product, click the Description button on the ribbon and type comments in the Description field.

4 Select each visibility check box where you want the sub-product to appear.

5 Click the Save and Close button on the ribbon to save the sub-product. The sub-product appears below the product you added it to.

Note You can also define a subordinate relationship by dragging one product and dropping it onto another product. See Reordering products, categories, and dispositions.

To edit visibility settings for multiple products simultaneously

1 In the Products column, press **Ctrl** while selecting each product.

2 Click the Edit button on the ribbon. The Multi-Edit window opens.

3 Select the Visibility check box.

4 To make the products visible to staff members working with incidents, select the Administration check box.

Note Regardless of interface or visibility settings, all service products and categories are visible when adding or editing answers on any interface.

5 To make the products visible to customers on the **customer portal**, select the End-user check box. (The End-user check box is not available when editing the visibility of dispositions.)

6 Click the Save and Close button on the ribbon.

Reordering products, categories, and dispositions

You can reorder products, categories, and dispositions as necessary, including creating subordinate relationships.

Note You cannot move an item when another item of the same type is open on the editor. For example, if you are editing a product, you cannot move any other product until you close the product editor.

To change the order of a product

1. Click the Configuration button on the **navigation pane**.
2. Double-click Products/Categories/Dispositions under Service. The **content pane** displays separate columns for products, categories, and dispositions.
3. Select the product you want to move and hold down the mouse button or other pointing device.
4. Drag it to its new position in the Products column. If you want to make the product a subproduct of another product, drag it onto the other product and drop it.
5. Release mouse button.

Deleting products, categories, and dispositions

You can delete products, categories, and dispositions that do not have sub-levels. When deleting a product or other item that has sub-levels, you must delete all of the sub-levels first. You also cannot delete multiple products, categories, or dispositions simultaneously.

Important You do not receive a dependency conflict warning when you delete products, categories, or dispositions used in rules. Rules that use the deleted item may no longer function as expected, requiring you to edit the rules and reactivate the rule base. Refer to Adding rules.

In addition, you do not receive a dependency conflict warning when deleting products or categories that are used in answers. Answers that are associated with deleted products or categories may not display as expected. We recommend viewing the Answers by Category and Answers by Product reports before deleting products or categories that may be associated with answers.

To delete a product that has sub-products

1. Expand the highest product level to display all sub-products.
2. Right-click each sub-product and select Delete, or click the Delete button on the **ribbon**. A message asks you to confirm each deletion. Repeat this step until all sub-products have been deleted.
3. Right-click the product and select Delete.

Product linking

Service provides you with the flexibility and precision to organize answers and incidents using customizable menu items, including **products**, **categories**, and **dispositions**. However, if your organization has large numbers of categories or dispositions, staff members and customers must review long lists of menu items to find appropriate options. You can simplify their choices with product linking.

When products are linked to categories, only the linked categories are displayed when customers select products on the **customer portal** or when staff members select products while working on incidents. When products are linked to dispositions, only the linked dispositions are displayed when agents select products for incidents. Product linking is a powerful tool for enhancing efficiency for both staff members and customers.

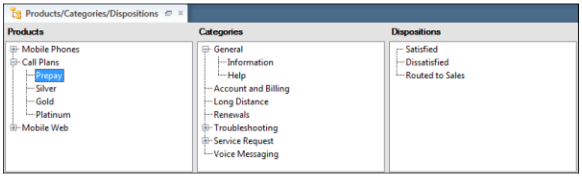
Note When product links have not been defined or product linking has been disabled, all categories and dispositions are available, regardless of the selected product. Product-category linking is independent of product-disposition linking, so you can enable one or the other or both.

Linking overview

Leaf products are those products that do not have any sub-products. Similarly, leaf levels of categories have no sub-categories and leaf-level dispositions have no sub-dispositions. Links can be created only between leaf levels of products and categories and between leaf levels of products and dispositions.

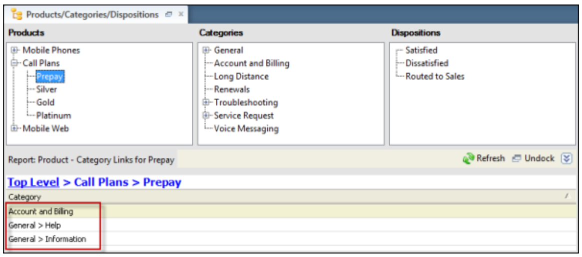
However, implicit linking occurs between the parent levels of products, categories, and dispositions that are linked. Parent products implicitly contain the same links that the leaf products below them contain. In other words, a parent product’s links are “inherited” from their leaf products.

Assume, for example, you want to link a leaf-level product called Prepay to categories, and the Prepay product is a sub-product of Call Plans. Also assume that none of the other leaf products under Call Plans have category links.



When you edit the Prepay product and select the Category Links button, assume you select the General category, which creates two links, one to each of its leaf categories: Information and Help. Also assume you select Account and Billing, which is a leaf category (no sub-categories).

When you save your links, return to the Products/Categories/Dispositions editor, and drill down on the Category-Links report, you see the three categories you just linked to the Prepay product: General > Information, General > Help, and Account and Billing.



Although you linked the leaf product, Prepay, to the categories, its parent product (Call Plans) was implicitly linked to the same categories. So even though you cannot directly link a parent product to categories, you implicitly link it by linking one or more of its leaf products.

Linking products to categories and dispositions

Service can automatically create links to categories and dispositions based on answers and incidents in the **knowledge base**, or you can manually define the links for each product. When you manually link products, you can select and link products one at a time or you can select multiple products to link in one operation.

Note The greater the number of products, categories, and dispositions your organization uses, the more flexibility product linking can offer. However, this requires you to carefully consider how you link products to categories and dispositions. If you create too many links, you risk losing the efficiency product linking offers. If you create too few, you may prevent customers and staff members from selecting the appropriate category or disposition.

To create links automatically

Caution This action replaces all product-category and product-disposition links (including any you have created manually) with the automatically created links. Carefully review this procedure before creating links automatically.

1 Click the Configuration button on the **navigation pane**.

2 Double-click Products/Categories/Dispositions under Service. The top levels of products, categories, and dispositions are listed in columns on the editor.

3 To create product-category links automatically, click the Auto-Build button on the ribbon and select Product-Category Links. A message opens to tell you that you cannot use the editor during the linking process and that all existing product-category links will be deleted.

   a Click the Yes button to continue. This schedules the automatic linking process for the next time **Dbstatus** runs (which happens every fifteen minutes). The editor is inactive until the Auto-Build process is complete, so you cannot edit products, categories, or dispositions during that time.

Note A link is created for every product-category combination of **leaf** products and leaf categories associated to answers in the knowledge base. In other words, in any given answer, every leaf product associated with the answer is linked to every leaf category associated with the answer.

4 To create product-disposition links automatically, click the Auto-Build button on the ribbon and select Product-Disposition Links. A message opens to tell you that you cannot use the editor during the linking process and that all existing product-disposition links will be deleted.

   a Click the Yes button to continue. This schedules the automatic linking process for the next time Dbstatus runs (which happens every fifteen minutes). The editor is inactive until the Auto-Build process is complete, so you cannot edit products, categories, or dispositions during that time.

Note A link is created for every product-disposition combination of leaf products and leaf dispositions associated to incidents in the knowledge base that were created within the last thirty days. In other words, every leaf product associated with an incident is linked to every leaf disposition associated with the incident.

5 To edit the automatically generated list of product links, refer to the following procedures.

Now that you have created links, you must enable product linking for them to take effect. Refer to Enabling linking.

To create links for one product at a time

1 Click the Configuration button on the **navigation pane**.

2 Double-click Products/Categories/Dispositions under Service.

3 In the Products column, identify the product you want to link.

Tip Remember that you can link categories and dispositions only to products that are **leaf** products. If the product you select has sub-products, the Category Links and Disposition Links buttons are disabled on the product editor.

   a To view sub-products under a product, click the + sign next to a product to expand it.
   b To find a product, click the Find button on the ribbon and type a search term in the Find window. The first product that matches your search term is highlighted in the tree. To continue searching, click the Find Next button.

4 Right-click the product you want to link and select Edit. The product editor opens.

5 To create category links, click the Category Links button on the ribbon. The category tree displays on the content pane.

a Select the check boxes for each category you want to link to the product.

Note If you select a category that has sub-categories, all sub-categories are linked to the product. If you select a sub-category, all levels of its parent category are implicitly linked.

b Click the Save button to save the category links for the product.

6 To create disposition links, click the Disposition Links button on the ribbon. The disposition tree displays on the content pane.

a Select the check boxes for each disposition you want to link to the product.

Note If you select a disposition that has sub-dispositions, all sub-dispositions are linked to the product. If you select a sub-disposition, all levels of its parent disposition are implicitly linked.

b Click the Save and Close button on the ribbon to save the disposition links for the product.

Now that you have created links, you must enable product linking for them to take effect. Refer to Enabling linking.

To create or remove links for multiple products simultaneously

1 Click the Configuration button on the **navigation pane**.

2 Double-click Products/Categories/Dispositions under Service.

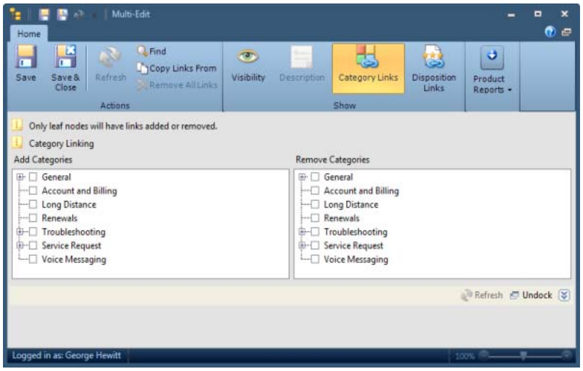
3 On the Products/Categories/Dispositions editor, select the first product you want to link.

4 Press the **Ctrl** key while selecting additional products.

5 After selecting the last product, right-click and select Edit. The Multi-Edit window opens.

6 To create or remove category links, click the Category Links button on the ribbon.

Note Although you can select top-level products on the editor, linking occurs only with **leaf-level** products. If you want to create links for all of a top-level product's leaf products, you must select each of the leaf products separately instead of selecting only the top-level product. Because linking occurs only between leaf-level products, categories, and dispositions, the links you create while multi-editing do not apply to any top-level products you select, but only to the leaf-level products you select. (However, once you have created links to leaf products, the parent product is implicitly linked.)



a To link categories to the selected products, select the check boxes for each category you want to link in the Add Categories column.

b To remove category links from the selected products, select the check boxes for each category you want to remove the link from in the Remove Categories column.

c Click the Save button to save the category links.

7 To create or remove disposition links, click the Disposition Links button on the ribbon.

a To link dispositions to the selected products, select the check boxes for each disposition you want to link in the Add Dispositions column.

b To remove disposition links from the selected products, select the check boxes for each disposition you want to remove the link from in the Delete Dispositions column.

c Click the Save button to save the disposition links.

Now that you have created links, you must enable product linking for them to take effect. Refer to Enabling linking.

Linking categories and dispositions to products

Product linking is bidirectional. Besides linking products to categories and dispositions, you can also link categories and dispositions to products. The following procedures are similar to linking products to categories and dispositions.

To link categories to products

1 Click the Configuration button on the navigation pane.

2 Double-click Products/Categories/Dispositions under Service.

3 In the Categories column, right-click the category you want to link and select Edit. The category editor opens.

Note You must select a leaf category (that is, one that has no sub-categories). If you select a category that has sub-categories, the Product Links button on the editor is disabled.

4 Click the Product Links button on the ribbon. The products tree displays on the content pane.

5 Select the check boxes for the products you want to link to the category.

Tip If you select a product that has sub-products, all sub-products are linked to the category. If you select a sub-product, all levels of its parent product are implicitly linked.

6 Click the Save and Close button on the ribbon to save the product links for the category.

Now that you have created links, you must enable product linking for them to take effect. Refer to Enabling linking.

To link dispositions to products

1 Click the Configuration button on the navigation pane.

2 Double-click Products/Categories/Dispositions under Service.

3 In the Dispositions column, right-click the disposition you want to link and select Edit. The disposition editor opens.

Note You must select a leaf disposition (that is, one that has no sub-dispositions). If you select a disposition that has sub-dispositions, the Product Links button on the editor is disabled.

4 Click the Product Links button on the ribbon. The products tree displays on the content pane.

5 Select the check boxes for the products you want to link to the disposition.

Tip If you select a product that has sub-products, all sub-products are linked to the disposition. If you select a sub-product, all levels of its parent product are implicitly linked.

6 Click the Save and Close button on the ribbon to save the product links for the disposition.

Now that you have created links, you must enable product linking for them to take effect. Refer to Enabling linking.

Enabling linking

Enable product-category linking when you want to restrict the display of categories to only those that are linked to the selected product. This affects agents working with incidents and customers searching on the **customer portal**. Enable product-disposition linking when you want to restrict the dispositions agents can select when working with incidents to only those associated with the product they have selected.

Product-category linking and product-disposition linking are independent, so they are enabled separately. You can enable either or both types of linking.

To enable product linking

1 Click the Configuration button on the navigation pane.

2 Double-click Products/Categories/Dispositions under Service.

3 To enable product-category linking, click the Enable button on the ribbon and select Product-Category Linking.

4 To enable product-disposition linking, click the Enable button on the ribbon and select Product-Disposition Linking.

5 Log out and then log back in for the changes to take effect.

Copying product links

You might want a product to have the same category or disposition links as another product. In that case you can simply copy the category links or disposition links from the original product, and those links are applied to the product you are editing. If you want to copy both category and disposition links, you must copy them each separately as described in the following procedure.

To copy product links

1 Click the Configuration button on the navigation pane.

2 Double-click Products/Categories/Dispositions under Service.

3 Right-click the product you want to copy links to and select Edit to open the product editor.

Or

Select multiple products using the **Ctrl** key, right-click, and select Edit to open the Multi-Edit window.

4 To copy category links, click the Category Links button on the ribbon.

Or

To copy disposition links, click the Disposition Links button.

5 Click the Copy Links From button on the ribbon. The Copy Links from Product window opens.

6 If necessary, expand the product tree to display the product you want to copy links from.

7 Select the product you want and click the OK button. The Copy Links from Product window closes.

8 Click the Save and Close button on the ribbon.

Note If the product you are editing already has existing links, these links are not removed by copying links from another product. Instead, the product now contains both its original links as well as the copied links.

Removing product links

There may be times when you want to remove product-category or product-disposition links, such as when your organization modifies dispositions as a result of a business process change. You can manually remove product links one at a time. You can also remove multiple product links in one operation using the multi-edit mode, described in To create or remove links for multiple products simultaneously.

To remove a link

1 Click the Configuration button on the navigation pane.

2 Double-click Products/Categories/Dispositions under Service.

3 Right-click the product you want to remove links from and select Edit.

4 To remove category links from the product, click the Category Links button.
   - a To remove all category links from the product, click the Remove All Links button.
   - b To remove specific category links, clear the check boxes for the categories you no longer want to link to this product. (All associated implicit links are also cleared.)
   - c Click the Save button.

5 To remove disposition links from the product, click the Disposition Links button.
   - a To remove all disposition links from the product, click the Remove All Links button.
   - b To remove specific disposition links, clear the check boxes for the dispositions you no longer want to link to this product. (All associated implicit links are also cleared.)
   - c Click the Save and Close button.

Disabling product linking

Even after you have created product links, you can disable the product linking feature. When the feature is disabled, staff members can select any product-category and any product-disposition combination when they work with incidents. On the customer portal, customers can select any product-category combination when they conduct a search or request notifications.

To disable product linking

1 Click the Configuration button on the navigation pane.

2 Double-click Products/Categories/Dispositions under Service.

3 To disable product-category linking, click the Enable button and clear the Product-Category Linking check box.

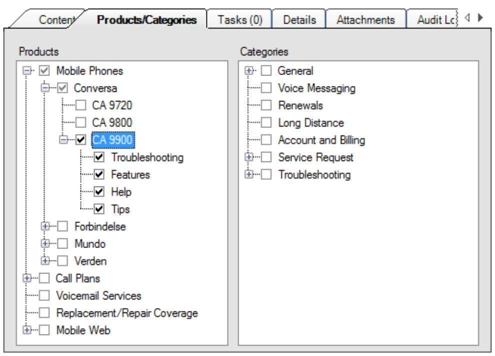
4 To disable product-disposition linking, click the Enable button and clear the Product-Disposition Linking check box.

5 Log out and then log back in for the changes to take effect.

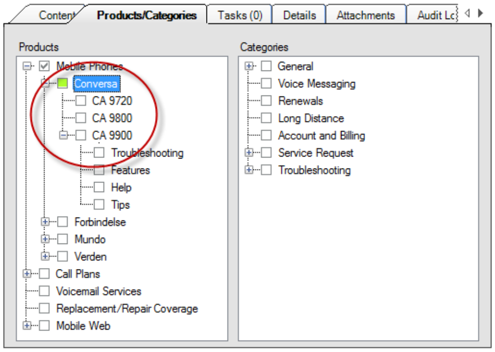
Product linking when working with answers

Regardless of whether product linking is enabled and regardless of what categories are linked to products, all products and all categories are available on the Products/Categories tab when you add or edit an answer.

When you select a product that has sub-products (including one or more levels of sub-products), all sub-products below the product you selected are also selected, all the way down to the leaf level. Any parent product levels are also selected implicitly. In the following figure, selecting CA 9900 automatically selects that product's sub-products. It also implicitly selects the two parent levels: Conversa Phones and Mobile Phones.



There may be times when you want to associate an answer with a top-level product but you do not want to associate that product's sub-products with the answer. In that case, you can right-click the product to select it without selecting any of the sub-products. Instead of a check mark next to the product, you will see the check box filled in with the color green, as shown in the following figure, where the Conversa product is selected but its sub-products are not.



The ribbon for the standard answer workspace contains a Validate Category Links button that lets you determine if the products and categories you selected for the answer are linked. If the categories you selected are linked to selected products, a message informs you that all selected categories are linked to at least one selected product. If you select one or more categories that are not linked to the products you selected, a message lists the categories that are not linked to any of the selected products.

Reports for products, categories, dispositions, and product linking

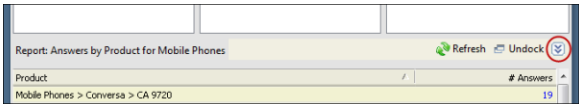
You can view **reports** on the Products/Categories/Dispositions editor.

To view a report

Note This procedure describes how to display a product report, but the procedure is the same for viewing category and disposition reports.

1. Click the Configuration button on the navigation pane.
2. Double-click Products/Categories/Dispositions under Service.
3. Select the product you want to view a report for.
4. Click the Product Reports button and select one of the available options: Visibility, Answers, Incidents, Category Links, or Disposition Links. The report displays on the lower part of the editor.
5. To see the answers, incidents, or category or disposition links associated with the product, click the value in the # column. A list of all records or links is displayed.

6 To minimize the report, click the button with two down arrows at the far right of the report header.



7 To display the same report for a different product, select the product and click the Refresh button (the one in the report header, not the one on the ribbon).

8 To copy information in a report column (for example, to copy an incident reference number so you can search for the incident), right-click the item and select Copy Cell to Clipboard.

Reports can also be viewed when you are editing an individual product, category, or disposition. The reports are available as buttons on the editor ribbon.

The following reports are available for products.

- **Visibility**—Shows the product and all sub-products with check marks in the Admin and End-user columns that indicate where the product is visible on each interface.
- **Answers**—Shows the product, including any sub-products, and the number of answers associated with each. You can then drill down on the number of answers to view all answers associated with the specific product.
- **Incidents**—Shows the product, including any sub-products, and the number of incidents associated with each. You can then drill down on the number of incidents to view all incidents associated with the specific product.
- **Category Links**—Shows the number of category links for the selected product. (If the selected product is a parent product, category links are displayed for each of the sub-products that is linked to a category.) You can drill down on the number of links to view the category links for each product.
- **Disposition Links**—Shows the number of disposition links for the selected product. (If the selected product is a parent product, disposition links are displayed for each of the sub-products that is linked to a disposition.) You can drill down on the number of links to view the disposition links for each product.

The following reports are available for categories.

- **Visibility**—Shows the category and all sub-categories with check marks in the Admin and End-user columns that indicate where the category is visible on each interface.

- **Answers**—Shows the category, including any sub-categories, and the number of answers associated with each. You can then drill down on the number of answers to view those answers.
- **Incidents**—Shows the category, including any sub-categories, and the number of incidents associated with each. You can then drill down on the number of incidents to view those incidents.
- **Category Links**—Shows the number of product links for the selected category. You can drill down on the number of links to view the products linked to each category.

The following reports are available for dispositions.

- **Visibility**—Shows the disposition and all sub-dispositions with check marks in the Admin column that indicate where the disposition is visible on each interface. (Dispositions are not visible on the customer portal so End-user visibility is not an option.)
- **Incidents**—Shows the disposition, including any sub-dispositions, and the number of incidents associated with each. You can then drill down on the number of incidents to view those incidents.
- **Disposition Links**—Shows the number of product links for the selected disposition. You can drill down on the number of links to view the products linked to each disposition.

Adding and editing incident statuses

An incident's status is its state in the **knowledge base**. Service has four default incident statuses: Solved, Unresolved, Updated, and Waiting. Additionally, there are three default **status types**, which are Solved, Unresolved, and Waiting. These are displayed in the drop-down menu in the Status column on the editor. Not surprisingly, the Solved incident status uses the Solved status type. Likewise, the Waiting status uses the Waiting status type, and the Unresolved status uses the Unresolved status type, which is also used by the Updated status. You can rename the default statuses, but you cannot change their types, which are disabled on the Incident Statuses editor. The following list describes the default incident statuses.

- **Solved**—The incident has been resolved.
- **Unresolved**—The incident has been recently added, either by an agent or a customer.
- **Updated**—The incident has been updated by a customer through the Your Account page or by replying to an agent's email.
- **Waiting**—An agent has responded to the incident and is waiting for a response from the customer. If the customer does not respond within the time specified in CI_HOURS (Agedatabase Utility > Batch Processing > Close Incidents), **Agedatabase** sets the incident status to Solved.

Service can automatically set an incident's status when agents send a response. This is a property of the Incident Thread relationship item that can be set when you create an incident **workspace**. The property is called Status Change on Response, and you can set it for one of the following options:

- The status does not change when an agent sends a response.
- The status changes to Waiting.
- The status changes to Solved.

For information about setting properties for relationship items on workspaces, refer to Workspace and Script Elements.

The four default incident statuses may be enough for your organization. However, if additional incident statuses can help you better organize the incidents in the knowledge base, you can add them. When you add an incident status, you must assign it to one of the three default status types.

Important If you delete a custom incident status, all incidents set to that status are changed to the default status with the same status type. For example, if you delete a custom incident status with the status type Solved, all incidents that were associated with that status are changed to the Solved incident status with the Solved status type.

To add or edit an incident status

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

3 Click the arrow next to the System Menus folder to expand the list.

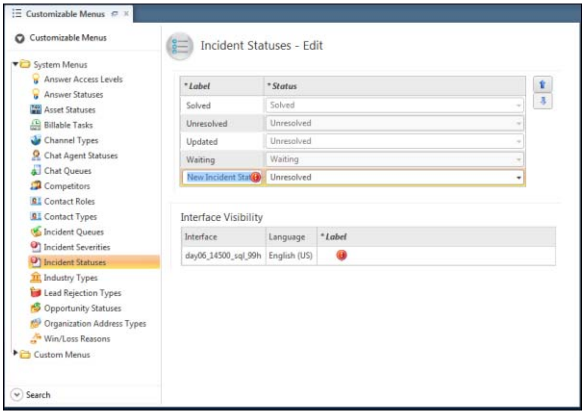
4 Click Incident Statuses to display the editor.

5 To add an incident status, click the New button on the **ribbon**.

Or

To edit an incident status, click it in the tree.

Tip You can change the names of the default incident statuses, but the functionality of each remains the same. Incidents with the same status type behave the same way, regardless of their name.



6 Type a name for a new incident status or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 Click the Status drop-down menu and select a status type. The options include Unresolved, Solved, and Waiting. Once you save an incident status, you cannot change its status type.

8 Click the Save and Close button on the ribbon to save the incident status and close the editor.

Adding and editing incident severities

Your organization might find it useful to classify incidents by their severity level so that agents can resolve the highest severity incidents first. Additionally, reports that include incident severity can be useful management tools.

To add or edit an incident severity level

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

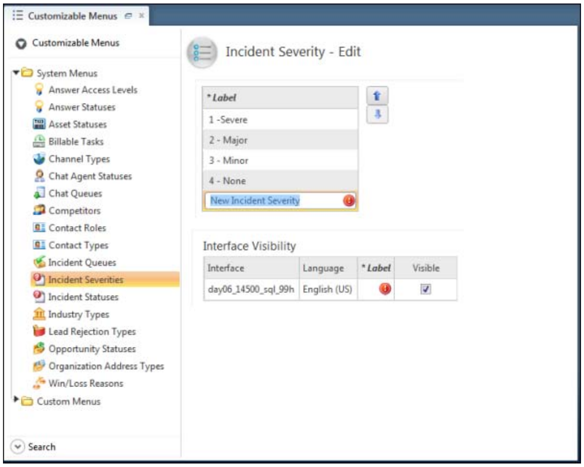
3 Click the arrow next to the System Menus folder to expand the list.

4 Click Incident Severities to display the editor.

5 To add an incident severity, click the New button on the **ribbon**.

Or

To edit an incident severity, click it in the tree.



6 Type a name for a new incident severity or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 If you do not want the incident severity to be visible on the **interface**, clear the Visible check box.

8 Click the Save and Close button on the ribbon to save the incident severity and close the editor.

Incident queues

Using incident **rules**, you can route unresolved incidents into different **queues** based on the criteria you define. For example, you might add queues for different product lines or service areas. Or you might have a first tier for basic customer service and additional tiers for problems of increasing complexity. When you create **profiles** for staff accounts, you can assign one or more queues to each profile and specify how incidents are pulled from that queue. Based on their profile, agents can retrieve a specified number of incidents from the queues to which they have access.

Queues also help you manage incident escalation to meet your organization's service level agreements (**SLAs**), balance agent workload, and track agent productivity and efficiency.

The following steps provide an overview for managing queues.

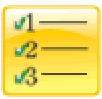
- **Add queues**—You can select a default queue to which all new incidents are automatically routed, and you can add multiple incident queues for effective incident routing. Refer to Adding and editing incident queues.
- **Assign queues to profiles**—You can define available queues, queue ranking, pull policy, pull quantity, and inbox limit for staff members with the profile. Refer to Customizing profiles.
- **Create business rules to populate queues**—You can create business rules to automatically assign incoming incidents to incident queues based on conditions you specify. Incident rules have a Set Field > Queue ID action you can use to route queues based on the conditions of the rule. Refer to Adding rules.
- **Instruct agents about queues**—Agents can manually pull incidents from queues assigned in their profile. When agents log out, the unresolved incidents in their inbox remain there unless they assign them back into a queue. Refer to Reassigning and re-queuing incidents.
- **Monitor queues**—Agents can monitor queuing statistics through the Queues report, where queued incidents and statistics are displayed. Queue statistics can be regenerated at any time. Refer to Monitoring queues.

Adding and editing incident queues

When you add an incident queue, you can define whether the queue uses a **round-robin** incident assignment and specify the queue as the default queue where unassigned incidents are routed. You can also delete queues from the Incident Queues editor.

Important If you try to delete an incident queue that is used in a **business rule**, a window opens to display the rules that depend on the queue. Before you can delete the incident queue, you must first edit the rules so they no longer use the queue.

Prerequisites



Before you can access incident queues, your profile for Service permissions must allow incident queues. In addition to queue access, Service permissions also define queue rank, pull policies and quantities, and inbox limits. See Service permissions.

To add or edit an incident queue

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

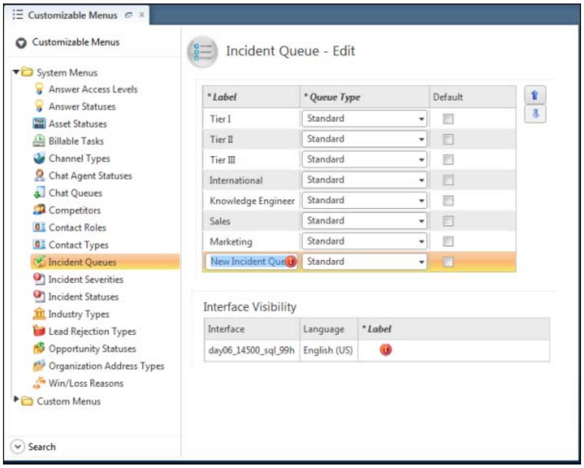
3 Click the arrow next to the System Menus folder to expand the list.

4 Click Incident Queues to display the editor.

5 To add an incident queue, click the New button on the **ribbon**.

Or

To edit an incident queue, click it in the tree.



6 Type a name for a new incident queue or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 Click the Queue Type drop-down menu and select one of the following options: Standard, Round Robin (All), or Round Robin (Logged In).

Tip A round-robin queue automatically assigns incidents in this queue to agents in a rotating fashion. For example, if four agents are assigned to the round robin queue, incidents are assigned in this order: Agent1, Agent2, Agent3, Agent4, Agent1, Agent2, and so on. If you select Round Robin (All), incidents are assigned to all staff members whose profile includes the queue, even if they are not logged in.

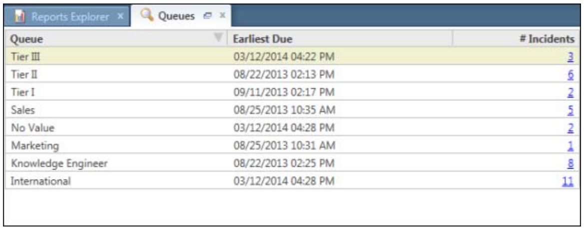
8 If you want this incident queue to be the default queue, select the Default check box.

Note Only one queue can be the default queue. If a default queue has already been identified and you select the default check box for this queue, this queue becomes the default.

9 Click the Save and Close button on the ribbon to save the incident queue and close the editor.

Monitoring queues

Staff members with the appropriate permissions can monitor incident queues using the Queues report. Depending on their **profile**, this report may appear in any **navigation list** designated by the **administrator**. See Service permissions.



Queue	Earliest Due	# Incidents
Tier III	03/12/2014 04:22 PM	3
Tier II	08/22/2013 02:13 PM	6
Tier I	09/11/2013 02:17 PM	2
Sales	08/25/2013 10:35 AM	5
No Value	03/12/2014 04:28 PM	2
Marketing	08/25/2013 10:31 AM	1
Knowledge Engineer	08/22/2013 02:25 PM	8
International	03/12/2014 04:28 PM	11

The Queues report lets staff members drill down to display the agents who are currently handling incidents and the incidents themselves. For a real-time snapshot of all queues at any time, click the Refresh button.

Adding and editing answer statuses

An answer's **status** controls whether it is public and describes its state in the **knowledge base**. Service provides four default answer statuses, described in the following list. Every answer status is associated with a **status type** that is either Public or Private.

- **Private**—The Private answer status prevents answers from being displayed on the **administration interface** and the **customer portal**. It is associated with the Private status type.
- **Proposed**—Answers with the Proposed status are incidents that agents have submitted as potential answers for the knowledge base. Proposed answers are associated with the Private status type.
- **Public**—Answers with the Public status are visible on the customer portal. Public answers have a Public status type.

- **Review**—The Review answer status means the answer should be evaluated to determine if it is still necessary. An answer's status is set to Review when it has been part of the knowledge base for a specified amount of time or when its solved count reaches zero. Refer to Aging of Solved Count. Answers with a Review status are associated with a Private status type by default.

If you want to organize the answers in the knowledge base with a greater level of classification than that offered by the default answer statuses in Service, you can add more answer statuses.

Important If you delete a custom answer status, all answers with that status are changed to have either a Public or Private status, depending on the status type of the deleted answer status. For example, if you delete a custom answer status with a Public status type, all answers that were associated with that status are changed to Public status with the Public answer status type.

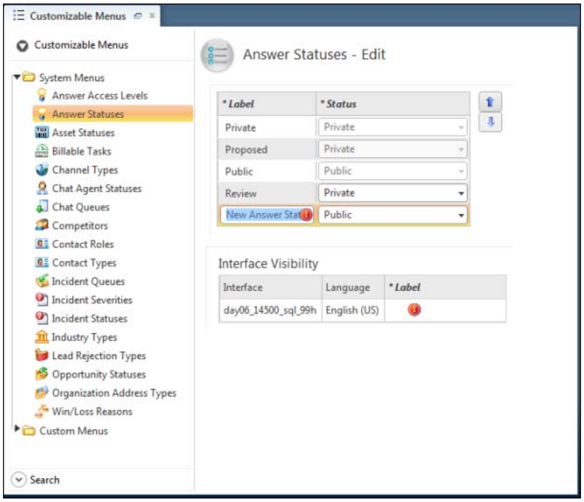
To add or edit an answer status

1. Click the Configuration button on the **navigation pane**.
2. Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.
3. Click the arrow next to the System Menus folder to expand the list.
4. Click Answer Statuses to display the editor.
5. To add an answer status, click the New button on the **ribbon**.

   Or

   To edit an answer status, click it in the tree.

Tip You can change the names of the default answer statuses, but the functionality of each remains the same. Answers with the same status type behave the same way, regardless of their name.



6 Type a name for a new answer status or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 Click the Status drop-down menu and select Public or Private.

Note After you save the answer status, you cannot edit its status type. Answers set to the Private status type are not visible on the customer portal, even if you select end-user visibility on the answer's **access level**. They are also not visible on the administration interface.

8 Click the Save and Close button on the ribbon to save the answer status and close the editor.

Adding and editing answer access levels

Answer access levels provide a way to control which answers in the knowledge base become public and visible to customers. Service has the following default answer access levels.

- **Help**—The Help answer access level provides online help to customers through context-sensitive answers.

- **Everyone**—The Everyone answer access level makes answers visible to all staff members and customers.

Note You cannot delete the Help and Everyone answer access levels, although you can rename them.

In addition to the default answer access levels, you can add custom answer access levels to allow specific contacts and organizations to view certain groups of answers that are not available to all customers. You control the answers customers can view when you create a service level agreement (**SLA**) and select custom access levels to associate with it. Customers with that SLA can view answers having those custom access levels. Refer to Creating SLAs for information about assigning answer access levels to an SLA.

Important In order for answers to appear on the customer portal, the **Status**, **Language**, Access Level, **Product**, and **Category** fields must be set to a visibility that allows access by customers. If even one field does not allow visibility, the answer is not visible on the customer portal. In addition, if you have sections within an answer with restricted visibility, that section must be assigned an access level associated with the answer and have end-user visibility selected. Refer to Controlling answer visibility.

Sibling answers with access levels that are at or below the contact's SLA are visible to the contact. Refer to Sibling answers.

To add or edit an answer access level

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

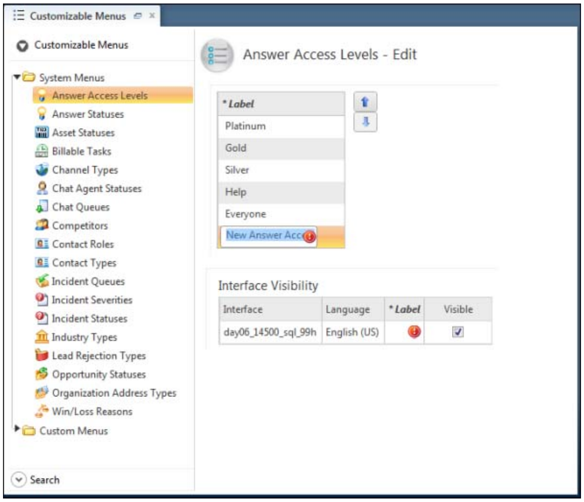
3 Click the arrow next to the System Menus folder to expand the list.

4 Click Answer Access Levels to display the editor.

5 To add an answer access level, click the New button on the **ribbon**.

Or

To edit an answer access level, click it in the tree.



6 Type a name for a new answer access level or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 If you do not want the answer access level to be visible on the **interface**, clear the Visible check box.

8 Click the Save and Close button on the ribbon to save the answer access level and close the editor.

Adding and editing billable tasks

The Time Billed feature in Service lets you track the amount of time agents spend on customer issues and questions. When you enable this feature, agents can add their time to an incident as they work on it.

Service contains one default billable task, Miscellaneous, and you can add any custom billable tasks that meet your organization’s needs. For example, you might add a Telephone billable task to see how much time agents are spending on the telephone answering customer questions. Refer to Tracking your time to learn how agents record billable time when they work on incidents.

Important You cannot delete the Miscellaneous billable task. If you delete a custom billable task, all occurrences of that task in incidents have no value and you may lose valuable time-tracking information.

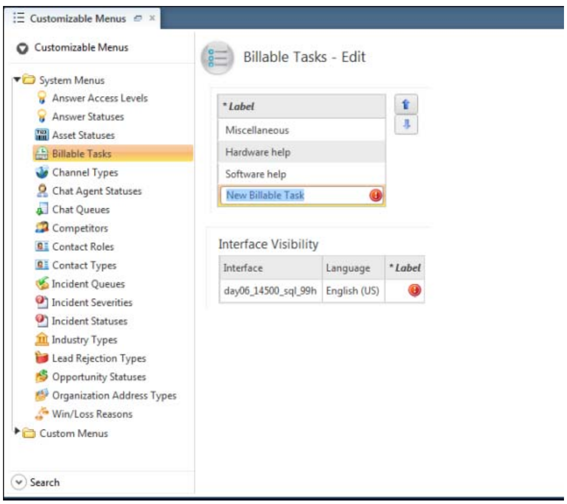
The standard incident **workspace** contains the Time Billed tab. To enable the feature on other workspaces, add the Time Billed relationship item to the workspace. Other Time Billed properties include the ability to require agents to enter time billed before they mark an incident solved or whenever they edit an incident. These properties are Time Required for Edit and Time Required for Solved. Refer to [Creating custom workspaces](#).

To add or edit a billable task

1. Click the Configuration button on the **navigation pane**.
2. Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.
3. Click the arrow next to the System Menus folder to expand the list.
4. Click Billable Tasks to display the editor.
5. To add a billable task, click the New button on the **ribbon**.

   Or

   To edit a billable task, click it in the tree.



6. Type a name for a new billable task or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.
7. Click the Save and Close button on the ribbon to save the billable task and close the editor.

Editing channel types

Channel types are used by contacts to provide their user names for Twitter, YouTube, and Facebook through the **customer portal**. By providing user name information, the contact's incidents are automatically associated with the contact. This assists agents in identifying and responding to contacts who are using Twitter, YouTube, and Facebook. For complete details and procedures about social channels in Oracle Service Cloud, see Channels.

If given the proper visibility through the Channel Types editor, contacts and staff members can add and edit channel type user names.

- Contacts can add and edit their Twitter, YouTube, and Facebook user names through **widgets** on the customer portal. Refer to Input widgets.
- Staff members can add and edit Twitter, YouTube, and Facebook user names for contacts from a custom contact **workspace**.

Important The standard contact workspace does not contain a field for channel usernames. If you want your agents to add information about channel user names, you must add the Channel Usernames field to a custom contact workspace and assign that workspace to the **profile** used by agents. Refer to Creating custom workspaces.

To add the Channel Usernames field to a contact workspace

1. Click the Configuration button on the **navigation pane**.
2. Double-click Workspaces under Application Appearance. The Workspaces explorer opens.
3. Right-click the custom contact workspace you want to add the field to and select Open.

Note You cannot edit the standard contact workspace, but you can copy it and edit the copy.

4. Click the Insert Field tab on the ribbon.
5. Click the Channel Usernames field, move the cursor to where you want to position the field on the workspace, and click to place the field.
6. To change the field label, adjust the size, make it a read-only field, or make it a required field, click the field on the workspace and select options on the ribbon's Design tab.
7. Click the Save and Close button on the ribbon.

8 Assign this workspace to a profile used by your agents. Refer to [Customizing profiles] if you need help with this process.

To edit a channel type

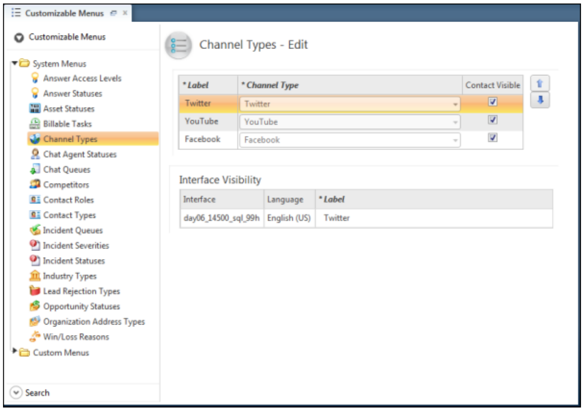
1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree opens on the **content pane**.

3 Click the arrow next to the System Menus folder to expand the list.

4 Click Channel Types in the tree. The Channel Types editor opens on the content pane.

5 To rename a channel type, click it in the Label column. The Interface Visibility section displays.



6 Type the revised channel type name in the Label column in the top section of the Channel Types editor. The Label field in the Interface Visibility section is revised as you type.

Note The Interface Visibility section contains the names of all available **interfaces**, the languages they are implemented in, and the language-specific label of the channel. When using multiple-language interfaces, you must type the label in the Label field in the language of the interface.

7 To remove channel type visibility for staff members and contacts, clear the Contact Visible check box next to the applicable channel type. This removes staff member visibility for the channel type in the Channel Usernames field on the custom contact workspace. In addition, visibility is removed from the applicable widget on the customer portal.

8 To change the display sequence of channel types on the custom contact workspace and the customer portal, click the up or down arrow next to the Contact Visible column.

9 Click the Save and Close button on the ribbon.

Outreach customizable menus

Oracle RightNow Outreach Cloud Service (Outreach) is an email and campaign solution for delivering personalized, richly formatted email communications to targeted segments of customers and prospects and for launching full-scale marketing campaigns. Tracked link categories provide an option for classifying **tracked links** in **mailings** and **surveys** and are useful for reporting purposes.

Tracked link categories

You can add tracked link categories to your Outreach and Oracle RightNow Feedback Cloud Service (Feedback) applications to group and organize tracked links. When tracked links are assigned to categories, you can enhance your reporting on customer clicks of links in your mailings and surveys. You can also see how certain categories performed and which are getting the most hits. For example, you could create tracked link categories for each of your product offerings on your website. You can also delete tracked link categories on the editor.

Important Use care when deleting tracked link categories. When you delete a tracked link category, the category is set to Unspecified and you may lose tracking data as a result.

To add or edit a tracked link category

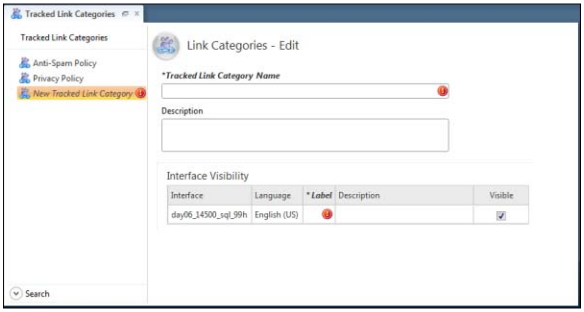
1 Click the Configuration button on the **navigation pane**.

2 Double-click Tracked Link Categories under Outreach. The tree displays on the **content pane**.

3 To add a tracked link category, click the New button on the **ribbon**.
Or

To edit a tracked link category, click it in the tree.

Tip To add another parent-level tracked link category in the same session, you must first press **Ctrl** and click the highlighted category in the tree (to deselect it) before clicking the New button.



4 Type a new name or edit an existing one in the Tracked Link Category Name field. The Label field in the Interface Visibility section is populated or revised as you type.

5 To add a description to the tracked link category, type one in the Description field. The Description field in the Interface Visibility section is populated or revised when you move the cursor to a different field or save the tracked link category.

6 If you do not want the tracked link category to be visible on the **interface**, clear the Visible check box.

7 Click the Save and Close button on the ribbon to save the tracked link category and close the editor.

Adding levels of tracked link categories

By adding levels of tracked link categories to Outreach and Feedback, you can further classify your tracked links. You can add a subordinate category level by selecting a tracked link category and clicking the New button on the ribbon. You can create up to six levels of tracked link categories.

To add levels of tracked link categories

1 Click the Configuration button on the **navigation pane**.

2 Double-click Tracked Link Categories under Outreach. The tree displays on the **content pane**.

3 Click the tracked link category you want to add a level to and click the New button.

4 Type the name and description of the sub-category.

5 Click the Save button. The new category level appears under the category in the tree.

6 Click the Save and Close button on the ribbon to save the sub-category and close the editor.

Opportunity Tracking customizable menus

Opportunity Tracking lets you develop logical ways to organize **opportunities** so sales representatives can find the information they need. With Opportunity Tracking customizable menus, sales representatives can categorize information while they work on opportunities. Based on the data collected in customizable menus, managers and sales representatives can create reports that help identify trends and keep your **knowledge base** up-to-date.

- Contact roles—Add contact roles to classify the role of contacts in opportunities. Contact roles allow staff members to identify the same contact by different roles in different opportunities.
- Opportunity statuses—Use opportunity statuses to identify the current state of opportunities in the knowledge base.
- Competitors—Adding competitors to your knowledge base helps your organization track won and lost opportunities by competitor.
- Win/loss reasons—Identify win/loss reasons to determine what contributes to the outcome of opportunities.
- Industry types—Use industry types to identify those your customers are associated with.
- Lead rejection types—Use lead rejection types to identify reasons for rejecting prequalified opportunities.

Adding and editing contact roles

Contact roles allow sales representatives to identify contacts according to their role in opportunities. Contacts can be associated with multiple opportunities, but their roles in each opportunity can be different. For example, a contact might be a buyer in one opportunity and a reference in another.

By defining contact roles, your sales representatives can select a contact role for the contacts associated with an opportunity. Based on this information, your staff members know which contact to work with at each point in the sales cycle.

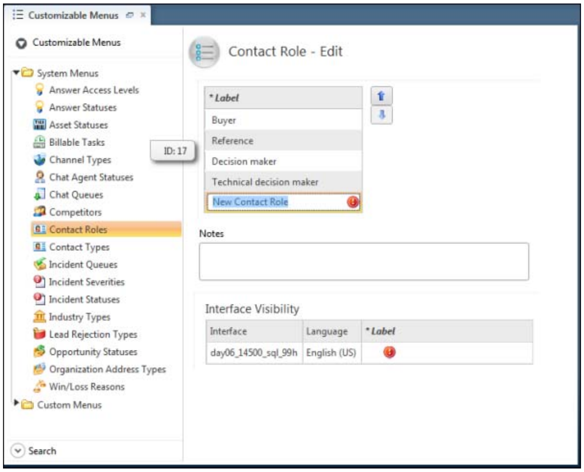
Note Contact roles are specific to Opportunity Tracking. Therefore, staff members see the Set Contact Role button only when they edit contacts that are associated with an opportunity.

To add or edit a contact role

1. Click the Configuration button on the **navigation pane**.
2. Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.
3. Click the arrow next to the System Menus folder to expand the list.
4. Click Contact Roles to display the editor.
5. To add a contact role, click the New button on the **ribbon**.

   Or

   To edit a contact role, click it in the tree.



6. Type a name for a new contact role or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 Type any notes regarding the contact role in the Notes field.

8 Click the Save and Close button on the ribbon to save the contact role and close the editor.

Adding and editing opportunity statuses

Opportunity statuses represent the current state of opportunities in your **knowledge base**. The seven default opportunity statuses include **Lead**, **Reject**, **Active**, **Closed**, **Lost**, **Inactive**, and **Dead**. Besides the default opportunity statuses, you can define additional statuses if you need them.

When staff members assign a status to an opportunity, one of the seven default opportunity **status types** is also assigned. For example, if your organization uses a Pending custom opportunity status that is assigned the Active status type, any opportunities set to the Pending status will be considered active. The default status types are displayed in the drop-down menu in the Status column on the editor.

Important If you delete a custom opportunity status, all opportunities set to that status are changed to the default status with the same status type. For example, if you delete a custom opportunity status with the status type Active, all opportunities that were associated with that status are changed to the Active opportunity status with the Active status type.

To add or edit an opportunity status

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

3 Click the arrow next to the System Menus folder to expand the list.

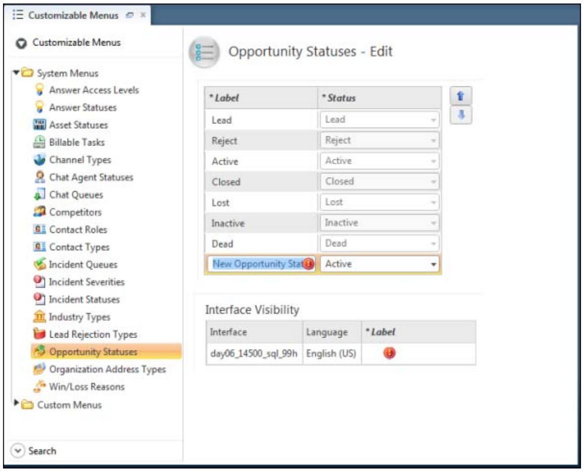
4 Click Opportunity Statuses to display the editor.

5 To add an opportunity status, click the New button on the **ribbon**.

Or

To edit an opportunity status, click it in the tree.

Tip You can change the names of the default opportunity statuses, but the functionality of each remains the same. Opportunities with the same status type behave the same way, regardless of their name.



6 Type a name for a new opportunity status or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 Click the Status drop-down menu and select a status type. Once you save an opportunity status, you cannot change its status type.

8 Click the Save and Close button on the ribbon to save the opportunity status and close the editor.

Adding and editing competitors

A competitor is any individual or organization who is selling goods or services in the same industry as your organization. When adding or editing an opportunity, sales representatives can select from a list of competitors that you define. Using this information, you can track which other parties are competing for your opportunities and whether your organization is winning or losing to them.

To add or edit a competitor

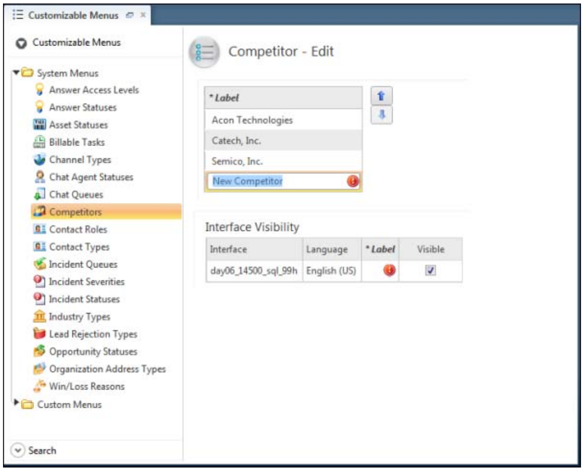
1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

3 Click the arrow next to the System Menus folder to expand the list.

4 Click Competitors to display the editor.

5 To add a competitor, click the New button on the **ribbon**.
Or
To edit a competitor, click it in the tree.



6 Type a name for a new competitor or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 If you do not want the competitor to be visible on the **interface**, clear the Visible check box.

8 Click the Save and Close button on the ribbon to save the competitor and close the editor.

Adding and editing win/loss reasons

When adding or editing an opportunity, sales representatives can select from a list of win/loss reasons that you define. Using this information, you can track the main reasons why your organization is winning or losing opportunities.

To add or edit a win/loss reason

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

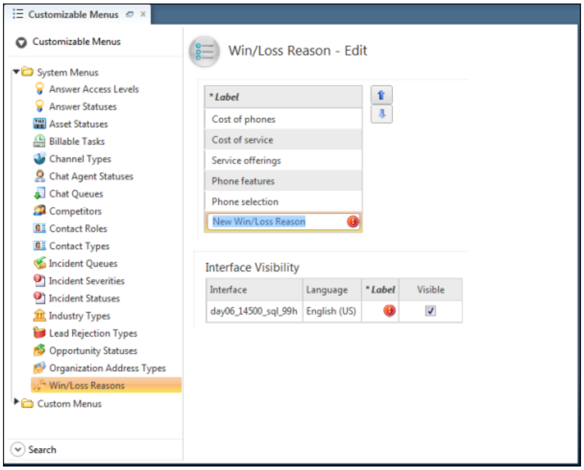
3 Click the arrow next to the System Menus folder to expand the list.

4 Click Win/Loss Reasons to display the editor.

5 To add a win/loss reason, click the New button on the **ribbon**.

Or

To edit a win/loss reason, click it in the tree.



6 Type a name for a new win/loss reason or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 If you do not want the win/loss reason to be visible on the **interface**, clear the Visible check box.

8 Click the Save and Close button on the ribbon to save the win/loss reason and close the editor.

Adding and editing industry types

Industry types allow staff members to classify organizations according to the industry they are associated with. When adding or editing an opportunity, sales representatives can select from a list of industry types that you define. Using this information, you can track which industries your customers are associated with.

Important The standard opportunity **workspace** does not contain a field for industry type. If you want your sales representatives to add information about industry types, you must add the Industry field to an opportunity workspace and assign that workspace to the **profile** used by sales representatives. The following procedure is an overview of adding this field to an opportunity workspace. Refer to Creating custom workspaces.

To add the Industry field to an opportunity workspace

1 Click the Configuration button on the **navigation pane**.

2 Double-click Workspaces under Application Appearance. The Workspaces explorer opens.

3 Right-click the custom opportunity workspace you want to add the field to and select Open.

Note You cannot edit the standard opportunity workspace, but you can copy it and edit the copy.

4 Click the Insert Field tab on the ribbon.

5 Click the Opportunity Fields button and select Organization Fields to view organization fields you can add to the workspace.

6 Click the Industry field, move the cursor to where you want to position the field on the workspace, and click to place the field.

7 To change the field label, adjust the size, make it a read-only field, or make it a required field, click the field on the workspace and select options on the ribbon's Design tab.

8 Save the workspace.

9 Assign this workspace to the profile used by sales representatives. Refer to Customizing profiles if you need help with this process.

To add or edit an industry type

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

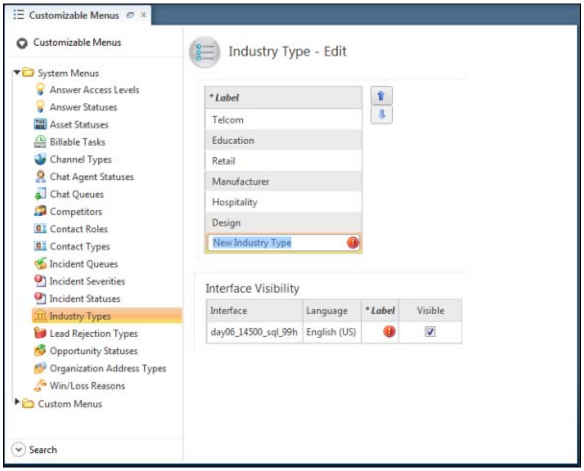
3 Click the arrow next to the System Menus folder to expand the list.

4 Click Industry Types to display the editor.

5 To add an industry type, click the New button on the **ribbon**.

Or

To edit an industry type, click it in the tree.



6 Type a name for a new industry type or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 If you do not want the industry type to be visible on the **interface**, clear the Visible check box.

8 Click the Save and Close button on the ribbon to save the industry type and close the editor.

Adding and editing lead rejection types

A lead is an opportunity that has been prequalified by your marketing or service department, associated to a sales stage with a Lead status type, and assigned to a sales representative. Sales representatives can either accept or reject a lead.

When sales representatives reject leads, they must select from a list of lead rejection types. Using this information, you can track why leads are being rejected.

To add or edit a lead rejection type

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

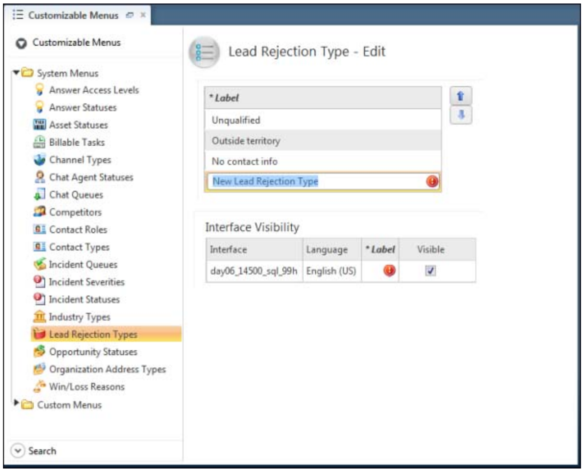
3 Click the arrow next to the System Menus folder to expand the list.

4 Click Lead Rejection Types to display the editor.

5 To add a lead rejection type, click the New button on the **ribbon**.

Or

To edit a lead rejection type, click it in the tree.



6 Type a name for a new lead rejection type or edit an existing one in the Label field. The Label field in the Interface Visibility section is populated or revised as you type.

7 If you do not want the lead rejection type to be visible on the **interface**, clear the Visible check box.

8 Click the Save and Close button on the ribbon to save the lead rejection type and close the editor.

8

Business Rules Management

Business rules are powerful tools for simplifying and automating common business tasks. They link data from all Oracle Service Cloud products in the knowledge base, resulting in a responsive, consistent customer experience.

Business rules route incidents to the suitable support person, notify an engineer when answers in the knowledge base should be reviewed, and automatically answer customer questions. They send marketing emails and surveys. They escalate overlooked opportunities and set strategies based on conditions you define. Rules also update contacts and organizations, set custom fields, and assign tasks. For specific examples of business rules with a discussion of the logic used to create them, see Business rules examples.

Business rules overview

Business rules help you provide a consistent, accurate, and timely experience for customers while streamlining the efficiency of staff members. When the rules engine updates information automatically and immediately, your entire organization has access to a knowledge base that is accurate and current in every customer interaction. For example, marketing staff members always know a customer's email preferences, even when the customer changes opt-in choices. Sales representatives can be sensitive to a prospective customer when they know the customer is experiencing technical support issues. And agents can reinforce your organization's marketing campaigns when they know what emails a customer has received.

Besides the many advantages of keeping the knowledge base accurate and current, business rules also let staff members work efficiently and consistently. When you create rules to answer routine customer questions, customers enjoy an immediate response. At the same time, staff members work more productively without the distraction of repetitive tasks. As a result, they can deliver more responsive customer service and follow-up.

What is a business rule?

A business rule is simply an "if-then" statement: If these conditions apply, then take this action. For example, if a customer has a billing question, then route the incident to an accounting staff member. If a new contact is from the East Coast, then send a marketing email about the opening of a New York store. If an agent proposes an answer for the knowledge base, then route that answer to the knowledge engineer for review.

Business rules can also include an Else clause. If the conditions of the rule are not met, the Else clause specifies the action that should be taken. For example, if a customer has a billing question, a rule can route the incident to accounting. If the question is not about billing (that is, the incident does not match the rule's condition), you can add an Else clause to route it to technical support.

How are rules organized?

Oracle Service Cloud products have eight rule types. These include:

- Oracle Service Cloud
  - ▷ Contact
  - ▷ Organization
  - ▷ Task
- Oracle RightNow Cloud Service (Service)
  - ▷ Incident
  - ▷ Answer
  - ▷ Chat
  - ▷ Offer Advisor
- Oracle RightNow Opportunity Tracking Cloud Service (Opportunity Tracking)
  - ▷ Opportunity

Each of these sets of rules—including the associated states, functions, and variables—is a rule base. The entity to which a rule base applies—answer, incident, contact, chat, opportunity, organization, target (for Offer Advisor rules), or task—is known as the *object type*.

Important Every object type has its own rule base, and every rule base is separate from other rule bases. The contacts rule base processes only contacts, the organizations rule base processes only organizations, and so on.

How are rules processed?

The rules engine is the software that processes the rules in a rule base. The rules engine begins processing when:

- Staff members add or edit answers, contacts, incidents, opportunities, organizations, or tasks.
- Customers submit questions on the Ask a Question page.
- Customers update their contact records or incidents.
- Customers request chat sessions.

The rules engine looks at every new or updated object and checks to see if the conditions of any rules are met. If a rule's conditions are met, the action associated with that rule occurs.

Assume, for example, you add a contact. Adding the contact triggers the rules engine to begin processing rules in the contact rule base. The rules engine applies rules to the contact, checking to see if the contact matches the conditions of any of the rules. If the contact matches the conditions of a rule, the rules engine executes the action in that rule. The action might apply an SLA to the contact, set the state, send a marketing email, or perform any other action in the contact rule base. If the contact matches conditions in multiple rules, the actions of all those rules occur.

The next time the contact record is updated by the customer or a staff member, the rules engine processes the contact again.

Important The rules engine is triggered when the contact (or other object) is updated, not when the rule base is updated. If you create or edit a rule, objects are not evaluated to see if they meet the conditions of the new or updated rule. Rules processing happens only when objects are added or updated.

Incorporating business rules in your organization

Now that you have a basic understanding of rules processing, consider the many ways you can use rules to automate workflow in your organization. The following applications include common ways to use business rules. For specific examples of business rules, see Business rules examples.

Route incoming incidents—Use rules to route incoming questions to the most qualified staff member, group, or queue based on criteria you define, such as product, incident severity, or language.

Escalate answers, incidents, opportunities, and tasks—Assess potential problems and alert managers to critical issues by using escalation levels. Identify tasks with elapsed deadlines, and escalate incidents that have not received timely responses. Escalate answers to ensure adequate review, and follow up on opportunities to prevent ignoring potential sales. See Escalating answers, incidents, opportunities, and tasks.

Update answers, contacts, incidents, opportunities, organizations, and tasks and notify staff members—Create rules to consistently handle and track updates to answers, contacts, incidents, opportunities, organizations, and tasks and notify staff members when assignments have changed.

Suggest answers to incoming questions—Business rules let you suggest answers to customers' questions before they submit them. When rules successfully answer questions, fewer incidents are added, reducing agents' workloads.

Create SLA instances for contacts and organizations—Automatically apply SLA instances for contacts and organizations. For example, create a rule to apply SLA instances to all customers who submit questions about a new product. See Creating SLAs.

Route chat requests to queues—Route requests for chat sessions to a specific queue to manage chats optimally. See Chat for information about chat sessions.

Send marketing email—Send email to contacts who meet specific conditions. For example, send a regional email message to all contacts within a specific geographic area or a product-specific message for opportunities with a certain status. See Creating mailings for complete details about creating, managing, and sending marketing email.

Conduct surveys—Automatically distribute surveys to customers to monitor customer satisfaction and other performance measures. See Creating surveys for complete details about creating, managing, and sending surveys.

Define target customers for promotions—Use Offer Advisor rules to assign customers who meet certain criteria to specific target groups. Then agents who are solving incidents can use Offer Advisor to present offers to eligible customers. See Offer Advisor Administration for information about configuring Offer Advisor and Working with incidents to learn how agents use the feature.

Planning business rules

Before you begin creating rules for your organization, it is important to examine your business processes, including how you update contacts and organizations, handle incidents and answers, route requests for chats, follow up opportunities, and define targets for marketing promotions.

Once you have a clear idea of the processes your organization uses, you can develop an effective method for applying business rules to automate these processes. This section describes the essential steps to help you get started.

Identify and outline business processes—To create a more efficient system for handling routine procedures, first outline the procedures to determine what processes can be automated.

For example, if you routinely assign questions about one product to a certain queue, you can create a rule to automatically route those incidents to the queue. Or if opportunities are not followed up promptly, rules can escalate those opportunities after a certain amount of time.

Review the following list of questions to trigger ideas for designing business rules that can increase efficiency in your organization.

- How do you handle incoming customer questions?
- What is the review process when answers are created?
- What happens when incidents are reassigned to other agents?
- How does management get involved when incidents remain unresolved?
- What happens when sales opportunities are identified?
- How are prospective customers contacted?
- How do you identify target groups for promotions?
- How can you group incoming customer questions and route them most effectively?
- Which inquiries are not being handled properly?
- What other processes can you use to automatically route and manage incoming questions, responses, and updates?

Develop a rules flowchart—Flowcharts are useful for viewing and grouping processes to determine the best way to apply business rules. Creating a flowchart can help you:

- Organize business processes.
- Gain process consensus between management and staff.
- Develop a blueprint for staff training.
- Develop thorough testing methods with less backtracking.
- Create an overview of the information management process.
- Provide a future point of reference.

Review functionality of rules—After mapping your organization's processes, review what rules can do to automate them. When you understand how rules function, you can begin planning ways to implement them. See Elements of rules and rule bases.

Create rules—Once you understand how rules work, you can create rules to automate business processes. Begin by reviewing the flowchart of current processes to determine the most appropriate methods for automating routine processes. See Creating rule bases for procedures to create rules.

Prioritize processes for applying rules—You must consider the organization of states, functions, and rules to ensure that rules perform as you intend them to. Rules in a state process in order until all the rules process or until a rule transitions to a function or a different state or stops processing. For information about how rule actions are executed, see Action execution.

Verify and fine-tune rules—An important part of configuring rules is verifying that they perform as expected. For help with this, see Verifying rules using the rule log.

Train staff—Once you set up rule bases, you must train your staff. They should be familiar with how your organization handles routine business procedures, how rules automate those procedures, and how their positions play a role in rules processing.

Evaluate processes and rules as required—Once you start adding rules to automate processes and become more familiar with them, you can consider more efficient and effective ways to route and manage data. Periodically reevaluate your business processes looking for more effective ways to handle questions, responses, updates, and opportunities. Also reevaluate when your organization experiences workflow changes. For example, update routing rules when staff accounts are added or removed.

As you examine your business processes and think about automating them with rules, it is helpful to understand how to design effective business rules. Elements of rules and rule bases provides an overview of the elements of business rules so you can begin designing and working with rules.

Elements of rules and rule bases

Before you create a rule base, you should be familiar with the elements of rules and rule bases and how these elements are related. The left side of the content pane displays the rules in each of the rule base's states and functions as well as a list of the rule base's variables. The right side of the content pane is the editor, which lets you add and edit states, functions, and variables for a rule base. This is also where you add and edit conditions and actions for individual rules.

States and functions

States and functions provide a way for you to organize business rules and define the sequence for processing rules. Each rule base must have at least one state—the initial state—before rules processing can begin.

The states and functions are listed alphabetically in the Rules tree, and the rules within each state and function are listed in the order in which you want them to execute.

You can add as many states as you need for each stage of your business. You can set up rules in the initial state, for example, that are applied to all new opportunities (or other object type, depending on the rule base). Then, depending on the conditions of rules in the initial state, you can transition the opportunity into another state to continue processing the rules in that state.

For example, you might want to evaluate each new opportunity and assign it to a specific sales group. You could add rules in the initial state that transition to states called Government Agencies, Educational Institutions, or Medical Groups, depending on the industry type of the organization. Those states could contain rules that are unique to opportunities in the different industries.

Like states, functions are also containers for rules. Functions are useful for grouping sets of rules that you want to use in several places. You can set up many separate rules that call the same function, or set of rules, thereby reducing the number of individual rules you need. When a rule in one state calls a function, all the rules within that function process. After all the rules in the function process, the rules engine resumes processing in the original state with the next rule in that state.

Note The primary difference between states and functions is what happens when the rules engine processes the last rule. When the last rule in a state is processed, the rules engine stops processing (unless it encounters a stop processing rule before the last rule or it transitions to a function or another state). When the last rule in a function is processed, the rules engine returns to the next rule in the state from which the function was called.

While functions are powerful tools for grouping rules, avoiding duplication, and making maintenance easier, you are not required to use them in a rule base. You can still take advantage of the powerful features of business rules by adding as many states as you need based on the processes you want to automate and then creating rules within each state.

Variables

A variable is a piece of data with a value that can change during rules processing. You define what its default, or starting, value should be. Then, based on conditions you specify, the variable can be modified by rule actions. You can also use the value of a variable as a condition of a rule. The value of the variable is temporary, existing only during the particular rules processing session. When rules processing is started the next time, the variable's value is reset to the default value.

Conditions

Remember that a rule is basically an "if-then" statement. If something meets this condition, then take this action. The "if" statement is the rule's condition. An example of a condition statement is "If the contact's state equals Montana." Each rule base has a unique set of conditions that the rules engine can use to evaluate the object.

Note Keep in mind that having multiple conditions in a rule is more common than having only one. For the sake of simplified discussion, assume that any singular "condition" referenced in this section may actually be a set of conditions.

Logical expressions

When you add two or more conditions, rules processing uses a logical expression to define the relationship of the conditions. Logical expressions join conditions using an AND (&) or an OR (|) relationship between them. For example, you might want to look for customers who have purchased Product A and who have also purchased a one-year warranty. Or you might want to find customers who have purchased Product A or Product B. The default logical expression joins all condition with AND. If you want all conditions to apply, it is not necessary to edit the logical expressions.

Actions

Actions comprise the "then" part of an "if-then" rule or the "then" and "else" parts of an "if-then-else" rule. If the conditions you specified in a rule are met, then the rules engine implements the rule's actions. The list of available actions depends on the rule's object type. An action can be as simple as stopping the rules processing or more complex, such as assigning an incident to an agent, sending that agent a notification, and defining an escalation process if the incident is not resolved within a certain time frame.

Opening rule bases

When you open a rule base and edit it, the system maintains the active rule base while you edit a copy in the Rules editor. Your changes are not saved until you activate them. This prevents any disruption in rules processing during the editing process and ensures you can revert to a functional rule base should you make any accidental changes while editing.

Because opening a rule base to make changes creates a copy of the active rule base, this action changes the Last Updated column on the Rules editor (or the Edited date when you view active rules), regardless of whether you make any changes.

Viewing active rules

If you want to view the rule base and its rules without making changes, it is a good idea to use the View Active option rather than Edit. This prevents creating an unnecessary copy of the active rule base. Additionally, when you do open a rule base to edit it, you can immediately tell if changes have been made. This prevents overwriting another staff member's work and helps you develop a consistent policy for tracking changes to the rule base. See Viewing rule bases for the procedure to view states, functions, and rules within a rule base and additional information about how changes to a rule base are tracked.

Creating rule bases

An object's rule base includes all the rules, states, functions, and variables associated with that object. The process for creating a rule base consists of creating all the elements that make up the rule base and includes the following main steps, which are explained in greater detail in this section.

- Open the Rules editor and select the object type of the rule base (answer, contact, incident, chat, opportunity, organization, task, or Offer Advisor) on the ribbon.
- Create an **initial state** for the rule base.
- Add additional states, functions, and variables as necessary.
- Add rules to each state and function.
- Reorder the rules within states and functions as necessary.
- Activate the rule base.
- Verify that the rules are performing as expected.

Adding states and functions

Rules processing for new objects begins in the state you have designated as the initial state. (Existing objects begin in whatever rule state they were in when they were last updated.) All the rules in a state process in the order you specify. The only way rules other than those in the initial state process is if rules in that state have actions that transition to another state or call a function. Otherwise, rules processing for new objects ends when the rules engine reaches the last rule in the initial state.

Important The Offer Advisor rule base is an exception to the requirement for an initial state. Because only one state—Targets—is permitted for this type of rule, this state is the default when you open Offer Advisor rules. You cannot add states or functions in Offer Advisor rules. See Setting up Offer Advisor.

By default, when rules processing transitions to another state or calls a function, it begins processing all the rules in that state or function and continues until it reaches the end. However, you can stop processing by adding an action such as Stop Processing Rules, Transition State and Stop, Transition State and Continue, or Call Function. See Choosing actions for descriptions of these actions.

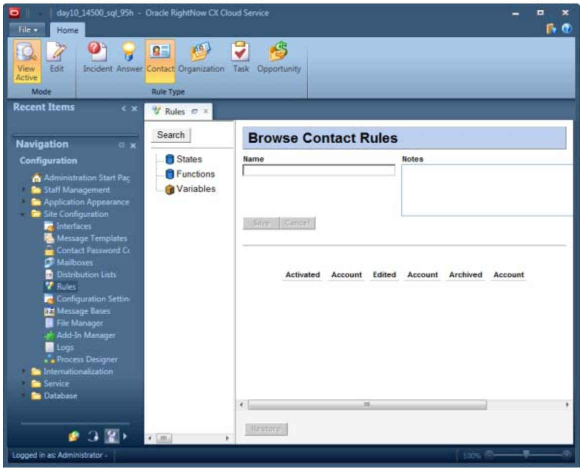
The following procedures explain how to add a state and a function to the contact rule base. However, the steps are the same for adding states or functions to any rule base.

To add a state

1 Click the Configuration button on the navigation pane.

2 Double-click Rules under Site Configuration.

3 Click the Contact button on the ribbon to view active contact rules.



Note When viewing active rules in a rule base, you see the rules that are currently used to manage contacts or other records on your site.

4 Click the Edit button on the ribbon to enter the edit mode. The rules you see in this mode are not used on your site until you activate them. See Compiling and activating rule bases.

5 Right-click States and select New State.

6 Type the name of the state in the State Name field. (Choose meaningful names for states based on the processes you want to automate. For example, you might name the initial state Initial or Created, and name other states Updated, Work in Progress, Review, or whatever best describes the rules within the state.)

7 To add a note about the state, type comments in the Notes field.

8 To make this state the initial state, select the Initial State check box. You must have one state (and only one) designated as the initial state before you can **compile** the rule base.

9 Click the Save button to save the state, which now appears in the Rules tree.

10 To add more states, repeat steps 5 through 9.

To add a function

1 While editing a rule base, right-click Functions in the rules tree and select New Function. The Functions editor is activated.

2 Type the name of the function in the Function Name field. Use a name that identifies the function's performance, for example, "Escalation."

3 To add a note about the function, type comments in the Notes field. After you save the function, you can hover over it in the tree to view the note.

4 Click the Save button to save the function, which appears in the tree.

5 To add more functions, repeat steps 1 through 4.

Adding variables

A variable is a temporary data item that is assigned a default value at the start of rules processing. The variable can be modified by rule actions during processing. Other rules can then use it as a condition for triggering certain actions based on its value. The value of the variable is not stored in the database, so it returns to its default value the next time the **rules engine** begins processing.

Note A custom field can be used to accomplish the same function as a variable. If you are questioning whether to use a custom field or a variable, ask yourself whether you need the data for future reference. A variable is temporary, so it returns to the initial value each time the rules engine is run. The custom field, on the other hand, is fixed. That is, at the end of rules processing, it stores the final value in the database to be available at the start of the next round of rules processing for the object.

Rule variables are useful when you want to accumulate a value and save it conditionally or perform some action based on the accumulated value. A common example of a variable is a score. You can modify a variable based on whether the object being evaluated matches rule conditions. Then you can assign different actions based on the variable's value. For an example of a rule using a variable, see Creating a variable to measure service quality.

The actions for each type of variable are listed in the following table.

Table 32: Rule Actions for Variables

Variable Data Type	Actions
Integer	• Set equal to an absolute value. • Increment by *n*. • Decrement by *n*. • Set equal to the value of another integer variable or custom field.
Text Field	• Set equal to an absolute string. • Prepend character string. • Append character string. • Set equal to the value of another character variable or custom field. **Note:** See Setting custom fields and variables for information about how leading and trailing spaces are handled when rule actions are used to set variables.
Date Field	• Set equal to an absolute value. • Increment by *n* days. • Decrement by *n* days. • Set equal to the value of another date variable or custom field or object date or date/time field.
Date/Time	• Set equal to an absolute value. • Increment by *n* days, hours, or minutes. • Decrement by *n* days, hours, or minutes. • Set equal to the value of another date/time variable or custom field or object date or date/time field.

The following procedure describes the steps to add a variable or edit an existing one.

To add or edit a variable

1 Click the Configuration button on the navigation pane.

2 Double-click Rules under Site Configuration.

3 Click the button on the ribbon for the rule type you want to add the variable to. The incident rule base is selected by default.

4 Click the Edit button on the ribbon.

5 Right-click Variables in the Rules tree and select New Variable. The editor is activated.

Or

Right-click a variable and select Edit Variable.

6 Enter the following field information.

Table 33: Rule Variables Editor Description

Field	Description
Rule Variable Name	Type the name of the rule variable in this field.
Data Type	Select the variable's data type. The options include Integer, Text Field (to a maximum of 255 characters), Date Field, and Date/ Time. After you have saved a variable, you cannot edit its data type.
Default	Type a value that will be the variable's initial value every time the rules engine is invoked in the rule base.
Notes	Type any note you want to add to the variable. The note will be visible when you hover over the variable in the tree.

7 Click the Save button to save the variable.

Note To delete a variable, right-click it, select Delete Variable, and confirm that you want to delete the variable. If the variable you are trying to delete is used in any rule, a variable **dependency** list shows which rules use the variable. You must delete the condition or action of any rule using the variable before you can delete the variable. See Resolving dependencies.

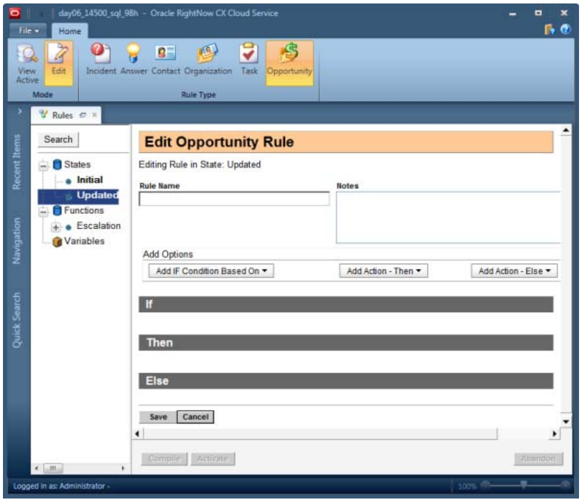
Adding rules

Once you add states and functions for an object type, you can add rules. The basic steps for adding a rule are similar for all types of rules, although the condition and action options available vary by rule type. The following procedure illustrates how to add a rule to route a new sales opportunity to a sales manager.

Caution An extremely high number of complex rules can cause the system to run out of memory and cause errors. If, for example, you have more than 675 highly complex rules (each with 20 conditions, 20 Then actions, and 20 Else actions), memory errors are likely to occur. More than 1,000 rules of moderate complexity (3 conditions, 5 Then actions, and 3 Else actions) can be run without error, although it may take more than a minute to save the rule base.

To add a rule

1. Click the Configuration button on the navigation pane.
2. Double-click Rules under Site Configuration.
3. Click the Opportunity button on the ribbon to view active opportunity rules.
4. Click the Edit button on the ribbon to enter the edit mode.
5. Right-click the state or function you want to add the rule to and select New Rule.



6 Type the name of the rule in the Rule Name field.

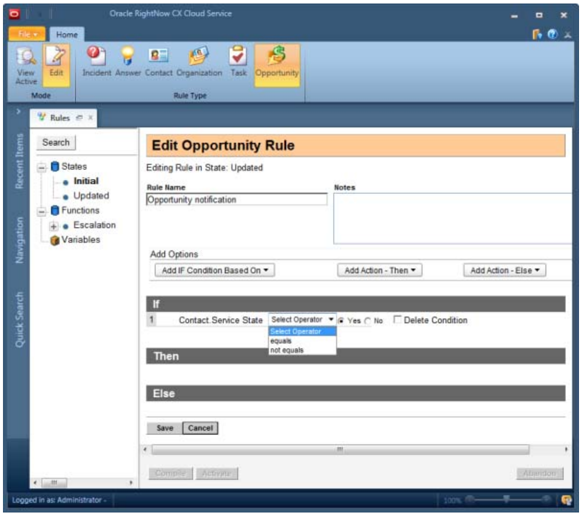
7 To add a note about the rule, type comments in the Notes field. Add any information or special instructions that may be helpful when staff members hover over the rule in the Rules tree.

8 To add a condition, click the Add IF Condition Based On button. Opportunity rule conditions include Opportunity, Contact, Organization, and Rule Variables (if variables have been added), each with a drop-down menu containing the fields for the condition. (Rules for other object types have different menus for selecting conditions. See Choosing conditions for a description of the conditions for each object.)

Note You might decide you want the rule's actions to apply to all opportunities. In that case, you can create a rule that has only actions, but no conditions. The actions must be added to the Then clause.

a Select Opportunity, Contact, Organization, or Rule Variables to display the drop-down menu of fields, and select the field for the condition. (This example uses Contact with Service State as the selected field because the intention is to identify contacts who have entered the system through customer support.)

b Click Select Operator and select the operator that applies to the field you selected. (In this example, the operator is "equals." Different operators appear in the Select Operator drop-down menu when you select different fields.) See Choosing operators for operator descriptions.



c Enter the value. Different fields have different values. For descriptions of the values for each field in the different types of rules, see Choosing conditions.

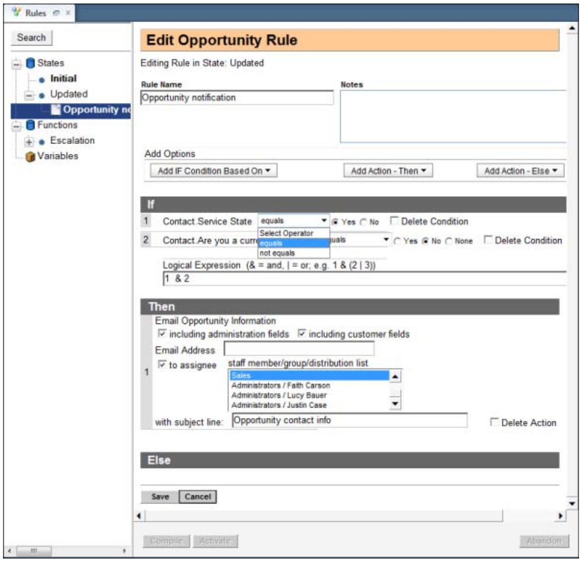
9 To add another condition to the rule, repeat step 8. You can require that only one of the conditions be met before the rule action is executed, that all of them are met, or that some combination is required. To understand the relationships when a rule contains multiple conditions, see Editing logical expressions.

In this example, a second condition using a contact custom field called "Are you a current customer?" is added, and the field is set equal to No. This identifies customers who have expressed enough interest to call customer support, but who are not yet contacts.

Note To delete a condition after you have added it to a rule, select the Delete Condition check box. The editor is refreshed.

10 Click the Add Action–Then button to choose the action that will be executed if the conditions are met. In this example, the action is sending an email to a sales manager. See Choosing actions for a description of the actions for each object type.

11 Select the To Assignee check box. You will also need to select a staff member, group or distribution list from the drop down. For example, to send the opportunity email to Sales, scroll down and select Sales.



12 To add an action to the Else clause, click the Add Action–Else button and select an action. For example, contacts that do not match the rule's conditions have an Opportunities or Outreach state or are already contacts. In that case, you might want to add an action that sends these contacts a survey to determine customer satisfaction.

Note You can delete an action after adding it to a rule by selecting the Delete Action check box. The editor is refreshed.

13 To add more actions to the rule, repeat step 10 or 11, depending on whether you want to add the action to the Then or the Else clause.

14 Click the Save button to save the rule. If the rule is successfully saved, it appears in the Rules tree under the appropriate state or function. If the save is not successful, a message prompts you to replace an invalid value or add a missing value.

Note Rule validation prevents saving meaningless rules. For example, a rule with no condition automatically executes the actions in the Then clause. If the rule also contains an Else clause, the rule is invalid because a non-existent condition cannot be unmatched. Rules with no action are also invalid.

Choosing conditions

The conditions of a rule comprise its "if" statement. If these conditions are met, then perform the action specified in the rule. Examples of conditions include "If the contact's state equals Montana," "If the incident's customer thread contains 'warranty'," or "If the forecast for the opportunity is greater than $5,000." The basic form of a condition is "If [this object] [has this relationship to] [the basis for comparing the object]."

Tip It is not necessary to add conditions to a rule. If, for example, you want the rule's action to be applied to all objects, simply do not add any condition to the rule.

A condition contains these primary elements:

- **Field**—The field is the element you want to consider in the rule. In the previous examples, the fields are state, customer thread, and forecast. Each type of rule (answer, contact, incident, chat, opportunity, organization, Offer Advisor, and task) has a set of fields that are used to add conditions for its rules.
- **Operator**—The operator is the relationship between the field and the value. In the preceding examples, the operators are equals, contains, and greater than. The selection of operators varies with the field. Some are simply "equals" and "not equals," while others express more complex relationships. See Choosing operators.
- **Value**—The value is the comparison you want to make with the field. In the examples, the values are Montana, warranty, and $5,000. The format of the value changes, depending on the field. You might select a menu option, type a string of text, or select a check box or radio button to define the value.

The fields are organized according to their type. In the first example ("If the contact's state equals Montana"), the "state" field is a contact field. The second example has the field "customer thread," which is an incident field, and the third example's field, "forecast," is an opportunity field.

When you click the Add IF Condition Based On button, a list of field types specific to the type of rule appears, each with a drop-down menu of the available fields. For example, contact rules let you select Contact and Organization fields, while incident rules let you select Incident, Contact, and Organization fields. The following table lists the available field types for each rule base.

Table 34: Field Types for Rule Bases

Rule Base	Field Types
Answer	• Answers
Chat	• Incident • Contact • Organization
Contact	• Contact • Organization
Incident	• Incident • Contact • Organization
Opportunity	• Opportunity • Contact • Organization
Organization	• Organization
Offer Advisor	• Incident • Contact • Organization • Purchased Products
Task	• Tasks • Opportunity • Incident • Answers • Contact • Organization

Some conditions depend on how you have configured your site. Customizable menu items, such as products, categories, and dispositions, appear as conditions only if they have been added. If the rules engine does not detect the presence of customizable menu items, custom fields, and other items, such as SLAs, mailboxes, Outreach emails and mailings, and Feedback surveys, they do not appear in the list of conditions. If you add them while you create rules, you must close the Rules editor and reopen it in order for them to display.

Note You can add items to a customizable menu that already has items in it without needing to close the Rules editor for them to be visible.

In addition to the fields that are specific to each type of rule, all rules can use rule variables for rule conditions. If no variables have been defined in the rule base, the Rule Variables field type is disabled.

Relative time conditions

Several rule conditions let you select a date and time. For example, you might want to add a rule with the condition "If the task due date is within the range from April 1 to April 30." The following conditions allow date/time selection.

- Banner Updated for answers, contacts, incidents, opportunities, and organizations
- Acquired and Created for contact rules
- Created, Updated, Initial Contact, Forecast Close, Date Closed, Lost Date, and Recall for opportunity rules
- Acquired for organization rules
- Purchased Products Date Purchased for Offer Advisor rules
- Completed Date, Created, Updated, Due Date, Planned Completion Date, and Start Date for task rules

The ability to set a condition based on a specific date and time (whether that date/time value is before, after, equal to, or within a range you specify) is a useful tool. However, there may be times when you want to set a relative date/time value. For example, you may want a condition "If the task due date is less than 8 hours from now." In that case, you can select a relative time for the rule's condition. Relative time calculates the number of minutes or hours from the current time or from a specific event, such as time created or time updated.

The following procedure shows you how to set a relative time condition using a task's due date, but the procedure is the same for setting other relative time conditions.

To select the relative time condition using a task's due date

1 Click the Configuration button on the navigation pane.

2 Double-click Rules under Site Configuration.

3 Click the Task button on the ribbon.

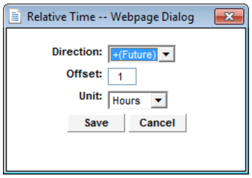
4 Click the Edit button on the ribbon.

5 Right-click the rule you want to add the relative time condition to and select Edit.

6 Click the Add IF Condition Based On button and select Tasks > Due Date. In this example, assume you want to send a reminder email to staff members who have tasks due within the next eight hours.

7 Select the Relative check box to set the condition based on a time relative to the task's due date.

8 Click the drop-down menu above the Relative check box. The Relative Time window opens.



9 Complete the fields on the Relative Time window.

  a Click the Direction drop-down menu and select + (Future).
  b Type 8 in the Offset field.
  c Click the Unit drop-down menu and select Hours.
  d Click the Save button to save your settings and close the Relative Time window.

10 Click the drop-down menu next to the condition's Relative check box and select what the time you specified in step 9 is relative to. For instance, if you wanted the rule to be triggered eight hours after a task is created, you could select *Tasks.Created* from the menu. For our example, you can leave the menu set to the default value of "Now," since you want this rule to be triggered eight hours after any event occurs that causes the rule to be checked (such as when a task is edited).

11 Click the Select Operator drop-down menu and select Less Than, since we want the rule to be triggered when a task's due date is less than the relative time we specified.

With this type of condition, you must add an action before you can save the rule. See Choosing actions.

Custom fields and masks in conditions

Before reviewing the conditions for each type of rule, it is important to understand how custom fields are handled and how to enter conditions for fields that use masks.

If you have added custom fields for contacts, organizations, incidents, answers, or opportunities, they will appear in the condition drop-down menu. See Adding and editing custom fields.

Some fields have masks that let you define a format for a field to ensure that staff members enter them correctly. For example, you might want to define a custom field for a catalog number that uses a mask to force the correct sequence of letters, numbers, and formatting characters.

Important When you add a condition for any field that uses a mask, you must omit the formatting characters when you enter the value for that condition. For example, if you add a custom field with the ULF-M#M#, the entered data consists of an uppercase alphabetic character, a hyphen, and two numbers, such as M-63. If you want to create a rule using the custom field as a condition, the value for the condition must be "M63" and not "M-63" with the hyphen.

Previous fields in conditions

Many conditions have "Previous" fields, including, for example, Previous Status, Previous Escalation Level, Previous Assigned, Previous Group, and Previous Strategy Hierarchy. These fields all contain the value currently stored in the database. The field reflects the value when the object is added or updated or when rules processing begins. The purpose of this field is to allow detection of any changes that occur to this field.

Conditions for each rule base

The following table links describe conditions for the objects in each type of rule base. The first column lists the field, the second column describes what the field refers to, and the third column describes how to select the value, based on its format. For example, formats may include text that you type or a menu option you select. (When the format of a value consists of menu selections, you can choose multiple options by pressing **Ctrl** while making each selection. Or if the value displays check boxes, you can make multiple selections.)

Important Some conditions depend on how you have configured your site. Customizable menu items, such as products, categories, and dispositions, appear as conditions only if they have been added. If the rules engine does not detect the presence of customizable menu items, custom fields, and other items, such as SLAs, mailboxes, Outreach emails and mailings, and Feedback surveys, they do not appear in the list of conditions. If you add them while you create rules, you must close the Rules editor and reopen it in order for them to display.

You can add items to a customizable menu that already has items in it without needing to close the Rules editor for them to be visible.

In addition to the fields that are specific to each type of rule, all rules can use rule variables for rule conditions. If no variables have been defined in the rule base, the Rule Variables field type is disabled.

- Click here for answer conditions.
- Click here for contact conditions.
- Click here for incident conditions.
- Click here for opportunity conditions.
- Click here for organization conditions.
- Click here for purchased product conditions.
- Click here for task conditions.

Answer conditions

When choosing answer conditions, select from the following fields and enter the value in the specified format.

Table 35: Conditions for Answers

Field	Description	Selecting the Value
Answer Access	The answer’s access level.	Select an access level from the menu.
Status	The answer’s status.	Select a status from the menu.
Previous Status	The answer’s previous status.	Select a status from the menu.

Table 35: Conditions for Answers (Continued)

Field	Description	Selecting the Value
Assigned	The staff account in the answer’s Assigned field.	Select a staff account from the menu.
Group	The group in the answer’s Assigned field.	Select a group from the menu.
Previous Assigned	The answer’s previous assigned staff account.	Select a staff account from the menu.
Previous Group	The answer’s previous group.	Select a group from the menu.
Language	The selected language installed from a language pack.	Select a language from the menu.
Escalation Level	The answer’s escalation level. **Note:** This field is set through rules in the database and cannot be edited in the record. To view an answer’s escalation level, click the Info button on the ribbon when the answer is open.	Select an escalation level from the menu.
Previous Escalation Level	The answer’s previous escalation level.	Select an escalation level from the menu.
Updated From	The source of the most recent answer update.	Select the check box that indicates where the answer was most recently updated.
Banner Note	The information entered by a staff member in the banner.	Type text in the field.
Banner Flag	The importance of the banner.	Select an importance level from the menu.
Banner Updated	The date and time the banner was last updated.	Click the drop-down menu to open the current month’s calendar and select a date and time the banner was updated. Or select a relative time.
Banner Updated By	The staff member who last updated the banner.	Select a staff member from the menu.

Table 35: Conditions for Answers (Continued)

Field	Description	Selecting the Value
Product	Products added on the Products/Categories/Disposition editor. For information about adding products, see Adding and editing products, categories, and dispositions.	Select the appropriate product check boxes.
Category	Categories added on the Products/Categories/Disposition editor. For information about adding categories, see Adding and editing products, categories, and dispositions.	Select the appropriate category check boxes.

Contact conditions

When choosing contact conditions, select from the following fields and enter the value in the specified format.

Table 36: Conditions for Contacts

Field	Description	Value Format
Last Name	The contact's last name.	Type text in the field.
First Name	The contact's first name.	Type text in the field.
Source	The source of the contact.	Select the check box for the source of the contact.
Updated From	The source of the most recent contact update.	Select the check box that indicates where the contact was most recently updated.
Email–Primary	The contact's email address.	Type text in the field. **Note:** The maximum number of characters allowed in this field is 80.

Table 36: Conditions for Contacts (Continued)

Field	Description	Value Format
Email–Primary Invalid	Whether the contact's primary email address is determined to be invalid as a result of bounced email processing.	Select the Yes or No radio button.
Email–Alternate #1	An alternate email address.	Type text in the field. **Note:** The maximum number of characters allowed in this field is 80.
Email–Alternate #1 Invalid	Whether the contact's first alternate email address is determined to be invalid as a result of bounced email processing.	Select the Yes or No radio button.
Email–Alternate #2	A second alternate email address.	Type text in the field. **Note:** The maximum number of characters allowed in this field is 80.
Email–Alternate #2 Invalids	Whether the contact's second alternate email address is determined to be invalid as a result of bounced email processing.	Select the Yes or No radio button.
Login	The contact's user ID.	Type text in the field.
Contact Type	Any contact type you have added. See Adding and editing contact types for information about adding contact types.	Select a contact type from the menu.
Marketing Organization Name	The name of the organization as it is used by Outreach.	Type text in the field.
Street	The contact's street address.	Type text in the field.
City	The contact's city.	Type text in the field.
State/Province	The contact's state or province.	Select a state or province from the menu.
Country	The contact's country.	Select a country from the menu.
Postal Code	The contact's postal code.	Type text in the field.

Table 36: Conditions for Contacts (Continued)

Field	Description	Value Format
Office Phone	The contact's office phone number.	Type text in the field using any formatting characters that appear in the record.
Office Phone (Unformatted)	The contact's office phone number regardless of formatting characters.	Type a numeric string in the field.
Mobile Phone	The contact's mobile phone number.	Type text in the field using any formatting characters that appear in the record.
Mobile Phone (Unformatted)	The contact's mobile phone number regardless of formatting characters.	Type a numeric string in the field.
Fax Phone	The contact's fax number.	Type text in the field using any formatting characters that appear in the record.
Assistant Phone	The phone number for the contact's assistant.	Type text in the field using any formatting characters that appear in the record.
Assistant Phone (Unformatted)	The contact's assistant's office phone number regardless of formatting characters.	Type a numeric string in the field.
Home Phone	The contact's home phone number.	Type text in the field using any formatting characters that appear in the record.
Home Phone (Unformatted)	The contact's home phone number regardless of formatting characters.	Type a numeric string in the field.
Service State	The Service check box selection for the **State**.	Select the Yes or No radio button.
Opportunities State	The Opportunity Tracking check box selection for the State.	Select the Yes or No radio button.
Outreach State	The Outreach check box selection for the State.	Select the Yes or No radio button.

Table 36: Conditions for Contacts (Continued)

Field	Description	Value Format
Disabled	The Disabled Flag status on the contact record.	Select the Yes or No radio button.
Global Opt-in	The contact's decision to receive mailings.	Select the Yes or No radio button.
Survey Opt-in	The contact's decision to participate in surveys.	Select the Yes or No radio button.
Email Format Preference	The contact's preference for email format (text, HTML, multipart, or unspecified).	Select a mail type from the menu.
Acquired	The date the contact was acquired as a customer.	Click the drop-down menu to open the current month's calendar and select a date the contact was acquired. Use the arrows at the top to change the month if necessary.
Created	The date the contact record was created.	Click the drop-down menu to open the current month's calendar and select a date the contact was acquired.
Banner Note	The information entered by a staff member in the banner.	Type text in the field.
Banner Flag	The importance of the banner.	Select an importance level from the menu.
Banner Updated	The date and time the banner was last updated.	Click the drop-down menu to open the current month's calendar and select a date and time the banner was updated. Or select a relative time.
Banner Updated By	The staff member who last updated the banner.	Select a staff member from the menu.

Incident conditions

When choosing incident conditions, select from the following fields and enter the value in the specified format.

Incident rules use all fields with the exception of Chat Queue ID. Fields used by the other rule types (chat, Offer Advisor, and task rules) are indicated in the fields' descriptions.

Table 37: Conditions for Incidents

Field	Description	Value Format
Customer Thread	All customer threads in the incident.	Type text in the field.
Staff Thread	All staff response threads in the incident.	Type text in the field.
Proposed Response	The incident's Proposed Response field (uncommitted response thread).	Type text in the field.
Reference #	The incident's Reference # field. (Also used in task rules.)	Type text in the field.
Subject	The subject of an incoming email or incident. This also refers to the Subject field on the Ask a Question page or API incident source. (Also used in task rules.)	Type text in the field.
Status	The incident's status. (Also used in task rules.)	Select a status from the menu.
Previous Status	The incidents's previous status.	Select a status from the menu.
Previous Assigned	The staff member previously assigned to the incident.	Select a staff account from the menu.
Previous Group	The group previously assigned to the incident.	Select a group from the menu.
Channel	The source of an incoming incident or outgoing response. Channels are grouped as standard email channels (CSS Email, MA Email, Phone, Fax, Post, CSS Web, MA Web, Chat, and Email) and social channels (Community, Twitter, YouTube, RSS feeds, and Facebook).	Select a channel from the menu.

Table 37: Conditions for Incidents (Continued)

Field	Description	Value Format
Created By	The staff member who added the incident. (Also used in task rules.)	Select a staff account from the menu.
Assigned	The staff member assigned to the incident. (Also used in task rules.)	Select a staff account from the menu.
Product	Products added on the Products/Categories/Dispositions editor. For information about adding products, see Adding and editing products, categories, and dispositions. (Also used in chat, Offer Advisor, and task rules.)	Select the appropriate product check boxes.
Category	Categories added on the Products/Categories/Dispositions editor. For information about adding categories, see Adding and editing products, categories, and dispositions. (Also used in chat, Offer Advisor, and task rules.)	Select the appropriate category check boxes.
Disposition	Dispositions added on the Products/Categories/Dispositions editor. For information about adding dispositions, see Adding and editing products, categories, and dispositions. (Also used in task rules.)	Select a disposition from the menu.
Language	The selected language installed from a language pack. (Also used in chat and task rules.)	Select a language from the menu.
Created	The time the incident was added.	Type text in the field using the format hh:mm or use the up or down arrows to scroll to a time. **Note:** This condition can use the unique "in/not in response interval" operators. See Choosing operators.

Table 37: Conditions for Incidents (Continued)

Field	Description	Value Format
Group	The group assigned to the incident. (Also used in task rules.)	Select a group from the menu.
Interface	The interface of the Ask a Question, incident, or API incident source. (Also used in chat, Offer Advisor, and task rules.)	Select an interface from the menu. **Note:** Use this field to apply a rule to a specific interface. For information about applying rules when multiple interfaces have been implemented, see Multiple Interfaces.
Mailbox	The Service and Outreach mailboxes that have outgoing email enabled. (Also used in task rules.)	Select a mailbox from the menu.
Customer SmartSense	The SmartSense rating calculated for all customer threads in the incident. See SmartSense Emotive Rating.	Select a SmartSense rating from the menu.
Staff SmartSense	The SmartSense rating calculated for all staff response threads in the incident. See SmartSense Emotive Rating.	Select a SmartSense rating from the menu.
Email Header	Text in the header of an email that adds an incident. **Note:** EGW_SAVE_EMAIL_HEADERS (RightNow Common > Service Modules > RightNow Email) must be enabled for this condition to appear on the drop-down menu. Only current header information is available for rules processing. If the incident header is updated by an agent or customer, the original header information is no longer available. (Also used in task rules.)	Type text in the field.
Source	The source of the incident.	Select the check box for the source of the incident.

Table 37: Conditions for Incidents (Continued)

Field	Description	Value Format
Updated From	The source of the most recent incident update.	Select the check box that indicates where the incident was most recently updated.
Escalation Level	The incident's escalation level. (Also used in task rules.) **Note:** This field is set through rules in the database and cannot be edited in the record. To view an incident's escalation level, click the Info button on the ribbon when the incident is open.	Select an escalation level from the menu.
Previous Escalation Level	The incident's previous escalation level.	Select an escalation level from the menu.
Queue ID	The incident's assigned queue. See [Adding and editing incident queues](). (Also used in task rules.)	Select a queue ID from the menu.
Mailing ID	The mailing that prompted a response, thereby adding the incident. This field appears only if you have created mailings in Outreach. See [Creating mailings](). (Also used in task rules.)	Select a mailing from the menu.
Response Sent	The agent selection in the Send Response check box when solving the incident.	Select the Yes or No radio button.
Last Survey Score	The score from the most recent survey associated with this incident. (Also used in task rules.)	Type a numerical value in the field.
Severity	The incident's severity. See [Adding and editing incident severities](). (Also used in task rules.)	Select an incident severity option from the menu.
Banner Note	The information entered by a staff member in the banner.	Type text in the field.
Banner Flag	The importance of the banner.	Select an importance level from the menu.

Table 37: Conditions for Incidents (Continued)

Field	Description	Value Format
Banner Updated	The date and time the banner was last updated.	Click the drop-down menu to open the current month's calendar and select a date and time the banner was updated. Or select a relative time.
Banner Updated By	The staff member who last updated the banner.	Select a staff member from the menu.
Incoming Mailbox	The Service and Outreach mailboxes that have incoming email enabled.	Select a mailbox from the menu.
SLA Instance ID	The SLA that has been applied to the incident. See Creating SLAs.	Select an SLA from the menu.
Chat Queue ID	The incident queues for chat rules. See Adding and editing chat session queues.	Select a Chat Queue ID from the menu.

Opportunity conditions

When choosing opportunity conditions, select from the following fields and enter the value in the specified format.

Table 38: Conditions for Opportunities

Field	Description	Value Format
Status	The opportunity's status (lead, reject, active, closed, lost, inactive, dead, or unspecified).	Select a status from the menu.
Previous Status	The opportunity's previous status.	Select a status from the menu.
Escalation Level	The opportunity's escalation level. **Note:** This field is set through rules in the database and cannot be edited in the record. To view an opportunity's escalation level, click the Info button on the ribbon when the opportunity is open.	Select an escalation level from the menu.
Previous Escalation Level	The opportunity's previous escalation level.	Select an escalation level from the menu.

Table 38: Conditions for Opportunities (Continued)

Field	Description	Value Format
Assign	The staff member assigned to the opportunity.	Select a staff account from the menu.
Previous Assigned	The staff member previously assigned to the opportunity.	Select a staff account from the menu.
Interface	The interface where the opportunity was added.	Select an interface from the menu.
Name	The name of the opportunity.	Type text in the field.
Source	The source of the opportunity.	Select a check box for the source of the opportunity.
Updated From	The source of the most recent opportunity update.	Select the check box that indicates where the opportunity was most recently updated.
Strategy Hierarchy	The strategy hierarchy for the opportunity. See Adding and editing strategies.	Select a check box for the opportunity's strategy hierarchy.
Previous Strategy Hierarchy	The opportunity's previous strategy hierarchy.	Select a check box for the opportunity's previous strategy hierarchy.
Created	The date and time the opportunity was added.	Click the drop-down menu to open the current month's calendar and select a Created date. Use the arrows at the top to change the month if necessary.
Created By	The staff member who added the opportunity.	Select a staff account from the menu.
Updated	The date and time the opportunity was updated.	Click the drop-down menu to open the current month's calendar and select an Updated date. Or select a relative time.
Updated By	The staff member who updated the opportunity.	Select a staff account from the menu.

Table 38: Conditions for Opportunities (Continued)

Field	Description	Value Format
Manager Forecast	The manager forecast for the opportunity.	Click the drop-down menu and type a value in the Amount field. Click the Currency drop-down menu and select the currency.
Manager Forecast Committed	The Yes or No selection in the Manager Commit field.	Select the Yes or No radio button.
Rep Forecast	The sales representative's forecast for the opportunity.	Click the drop-down menu and type a value in the Amount field. Click the Currency drop-down menu and select the currency.
Rep Forecast Committed	The Yes or No selection in the Rep Commit field.	Select the Yes or No radio button.
Closed Value	The value the opportunity closed at.	Click the drop-down menu and type a value in the Amount field. Click the Currency drop-down menu and select the currency.
Summary	Information entered in the Summary text field of the opportunity.	Type text in the field.
Territory	The territory for the opportunity. See Adding and editing territories for information about adding territories.	Select a check box for the opportunity's territory.
Initial Contact	The date of the opportunity's initial contact.	Click the drop-down menu to open the current month's calendar and select the date of initial contact.
Forecast Close	The date the opportunity is forecasted to close.	Click the drop-down menu to open the current month's calendar and select a date when the opportunity is forecasted to close.

Table 38: Conditions for Opportunities (Continued)

Field	Description	Value Format
Date Closed	The date the opportunity closed.	Click the drop-down menu to open the current month's calendar and select a date when the opportunity closed.
Cost of Sale	The total cost of a sale.	Click the drop-down menu and type a value in the Amount field. Click the Currency drop-down menu and select the currency.
Returned Value	The value of products returned by a customer.	Click the drop-down menu and type a value in the Amount field. Click the Currency drop-down menu and select the currency.
Last Survey Score	The score from the most recent survey associated with this opportunity.	Type a numerical value in the field.
Lost Date	The date the opportunity status was set to Lost.	Click the drop-down menu to open the current month's calendar and select the date when the opportunity was lost.
Recall	The date the contact for the opportunity should be called again.	Click the drop-down menu to open the current month's calendar and select the date for calling the contact for the opportunity.
Lead Rejection	The lead rejection reason selected by the staff member for the opportunity. See Adding and editing lead rejection types.	Select a lead rejection reason from the menu.
Lead Rejection Description	The text stored in the lead rejection reason field in the opportunity.	Type text in the field.
Win/Loss Factor	The win/loss factor selected by the staff member for the opportunity. See Adding and editing win/loss reasons.	Select a win/loss factor from the menu.

Table 38: Conditions for Opportunities (Continued)

Field	Description	Value Format
Win/Loss Description	The text entered as the win/loss description in the opportunity.	Type text in the field.
Banner Note	The information entered by a staff member in the banner.	Type text in the field.
Banner Flag	The importance of the banner.	Select an importance level from the menu.
Banner Updated	The date and time the banner was last updated.	Click the drop-down menu to open the current month's calendar and select a date and time the banner was updated. Or select a relative time.
Banner Updated By	The staff member who last updated the banner.	Select a staff member from the menu.

Organization conditions

When choosing organization conditions, select from the following fields and enter the value in the specified format.

Note Two default organization address types are included by default: Billing and Shipping. When selecting the Street, City, State/Province, Country, and Postal Code fields under Organization, you can see separate entries for each address type, as well as for any custom organization address types that have been added. See Adding and editing organization address types.

Table 39: Conditions for Organizations

Field	Description	Value Format
Organization Name	The name of the organization.	Type text in the field.
Source	The source of the organization.	Select the check box for the source of the organization.

Table 39: Conditions for Organizations (Continued)

Field	Description	Value Format
Updated From	The source of the most recent contact update.	Select the check box that indicates where the organization was most recently updated.
Street	The organization’s street address.	Type text in the field.
City	The organization’s city.	Type text in the field.
State/Province	The organization’s state or province.	Select a state or province from the menu.
Country	The organization’s country.	Select a country from the menu.
Postal Code	The organization’s postal code.	Type text in the field.
Service State	The Service check box selection for the **State**.	Select the Yes or No radio button.
Opportunities State	The Opportunity Tracking check box selection for the State.	Select the Yes or No radio button.
Outreach State	The Outreach check box selection for the State.	Select the Yes or No radio button.
Industry Type	The organization’s industry. See Adding and editing industry types.	Select an industry type from the menu.
Acquired	The date the organization was acquired as a customer.	Click the drop-down menu to open the current month’s calendar and select a date the organization was acquired. Use the arrows at the top to change the month if necessary.
Banner Note	The information entered by a staff member in the banner.	Type text in the field.
Banner Flag	The importance of the banner.	Select an importance level from the menu.

Table 39: Conditions for Organizations (Continued)

Field	Description	Value Format
Banner Updated	The date and time the banner was last updated.	Click the drop-down menu to open the current month's calendar and select a date and time the banner was updated. Or select a relative time.
Banner Updated By	The staff member who last updated the banner.	Select a staff member from the menu.

Purchased products conditions for Offer Advisor rules

Offer Advisor rules have a single purpose: to define targets—that is, groups of customers—that meet the conditions you specify. Regardless of the condition you select, the default action is always "Contact will match this target."

In addition to incident, contact, and organization conditions for Offer Advisor rules, you can also select a unique Purchased Products condition. This condition is a combination of three conditions, all of which must be met by a purchased product entry in order for the Purchased Products condition to be met. These criteria are product, price, and date purchased.

When choosing conditions for an Offer Advisor rule, select from the following fields and enter the value in the specified format.

Note Offer Advisor must be enabled on your site for this object type to appear. Contact your Oracle account manager.

Table 40: Conditions for Purchased Products

Field	Description	Value Format
Product	Sales products purchased by the customer. See Adding and editing sales products.	Select a product from the menu.
Price	The dollar value of a customer's purchases.	Click the drop-down menu and type a value in the Amount field. Click the Currency drop-down menu and select the currency.

Table 40: Conditions for Purchased Products (Continued)

Field	Description	Value Format
Date Purchased	The date of a customer's purchases.	Click the drop-down menu to open the current month's calendar and select a purchase date. Use the arrows at the top to change the month if necessary.

Task conditions

When choosing task conditions, select from the following fields and enter the value in the specified format.

Table 41: Conditions for Tasks

Field	Description	Value
Status	The task's status.	Select a status from the menu.
Previous Status	The task's previous status.	Select a status from the menu.
Assign	The staff member the task is assigned to.	Select a staff account from the drop-down menu.
Previous Assigned	The staff member previously assigned to the task.	Select a staff account from the menu.
Completed Date	The date the task was completed.	Click the drop-down menu to open the current month's calendar and select a task completion date. Use the arrows at the top to change the month if necessary.
Created	The date the task was added.	Click the drop-down menu to open the current month's calendar and select the date the task was added.

Table 41: Conditions for Tasks (Continued)

Field	Description	Value
Updated	The date the task was last updated.	Click the drop-down menu to open the current month's calendar and select the date the task was updated.
Updated From	The source of the most recent task update.	Select the check box that indicates where the task was most recently updated.
Due Date	The date the task is due.	Click the drop-down menu to open the current month's calendar and select the task's due date.
Escalation Level	The task's escalation level. **Note:** This field is set through rules in the database and cannot be edited in the record. To view a task's escalation level, click the Info button on the ribbon when the task is open.	Select an escalation level from the menu.
Previous Escalation Level	The task's previous escalation level.	Select an escalation level from the menu.
Name	The name of the task.	Type the task's name in the field.
Percent Complete	The percentage of the task that is complete.	Type a value in the field.
Planned Completion Date	The date the task is scheduled to be completed.	Click the drop-down menu to open the current month's calendar and select the planned completion date for the task.
Priority	The task's priority.	Select a priority from the menu.
Start Date	The date the task is started.	Click the drop-down menu to open the current month's calendar and select a start date for the task.

Table 41: Conditions for Tasks (Continued)

Field	Description	Value
Type	The type of task, which means the type of record the task is associated with.	Select a task type from the menu.

Choosing operators

An operator expresses the relationship between a condition's field and its value, determining how the field is applied to the value of the condition. For example, in the condition "If an answer's assignment equals customer support," the operator is "equals." Each field has its own set of operators, depending on what is logical for that field. A rule with the condition "If an answer's assignment is greater than or equal to customer support," for example, has no relevance and cannot be applied to an answer.

The following table describes the operators used in business rules.

Table 42: Operators Description

Operator	Description
equals	The field matches the value exactly, including case.
not equals	The field does not match the value.
is null	The field does not contain a value.
is not null	The field contains a value.
less than	The field is less than the value.
less than or equal to	The field is less than or equal to the value.
greater than	The field is greater than the value.
greater than or equal to	The field is greater than or equal to the value.
in range	The field is within the range you specify. You must indicate a beginning and ending value when you select this operator.
not in range	The field is not within the range you specify. You must indicate a beginning and ending value when you select this operator.

Table 42: Operators Description (Continued)

Operator	Description
contains	The field matches only text string values. This operator uses word stemming, but only in the Summary field, Subject field, and incident threads. Stemmed searches are not case sensitive. For example, if you want the rule to apply to different forms of a word, such as singular, plural, or a different verb tense, select "contains" and enter the singular form as the value. When you include multiple words in the value, the rule applies when the text strings contain all the words, which do not have to occur sequentially.
does not contain	The field does not contain the text string in the value. This operator uses word stemming, but only in the Summary field, Subject field, and incident threads. Stemmed searches are not case sensitive. **Note:** Word stemming is not supported for custom fields, only text strings.
matches regular expression	The field matches the regular expression entered in a text string value. **Note:** The regular expression compiler validates the expression. If an error code is returned, the rule is not saved. For information about regular expressions, which can allow greater matching flexibility, see Regular Expressions.
does not match regular expression	The field does not match the regular expression entered in a text string value. **Note:** The regular expression compiler validates the expression. If an error code is returned, the rule is not saved. For information about regular expressions, which can allow greater matching flexibility, see Regular Expressions.
in response interval	This operator is used only with the Incident Created condition for incident rules to indicate that the incident was added within normal working hours. That is, the incident was added within the response requirements of the SLA associated with the incident or within the default response requirements if no SLA is associated with the incident. The data in the condition's hh:mm field is not used when this operator is selected.

Table 42: Operators Description (Continued)

Operator	Description
not in response interval	This operator is used only with the Incident Created condition for incident rules to indicate that the incident was not added within normal working hours. That is, the incident was added outside the response requirements of the SLA associated with the incident or outside the default response requirements if no SLA is associated with the incident. The data in the condition's hh:mm field is not used when this operator is selected.
modified this edit	This operator indicates that the field's value has been changed during the current edit of the object. This change can occur manually as a result of staff member or customer edits or automatically through a utility or rule action. All values use this operator.
not modified this edit	This operator indicates that the field's value was not changed during the current edit of the object. All values use this operator.

Editing logical expressions

Logical expressions use AND (&) and OR (|) to define the relationship between a rule's conditions. The following shows an example of a logical expression in an incident rule.

To edit the logical expression after you have defined conditions, simply click in the Logical Expressions field and make the changes. Use logical expressions when you want to link the conditions in the following ways.

- You want all conditions to apply in order for the rule to initiate its action. Use AND (&) to link the conditions. The expression 1 & 2 & 3 means that the rule's action occurs only when all three conditions are met.

Note Because the default logical expression is AND, it is not necessary to use a logical expression when you want all conditions to apply. If you delete the logical expression in this case, the conditions remain linked by AND.

- You want any one of the conditions to apply in order for the rule to initiate action. Use OR (|) to link the conditions. The expression 1 | 2| 3 means that the rule's action occurs if any one of the three conditions are met.

- You want to group the conditions. Using parentheses, you can create an expression such as 1 & (2 | 3). This expression requires that condition 1 be met and that either condition 2 or condition 3 must also be met.

Note If you do not use parentheses, AND always has precedence over OR, which determines the order of execution. In that case, 1 & 2 | 3 requires that both conditions 1 and 2 be met or that condition 3 be met.

Choosing actions

The condition is the "if" part of a rule's "if-then" statement, and the action is the "then" part. The action specifies what occurs to the object (answer, contact, incident, chat, opportunity, organization, target, or task) when the condition is met.

Actions are also used in the optional **Else clause** when you want to specify what actions should occur when the object does not match the rule's conditions.

Every action that is available in an object's Then clause is also available for the Else clause. An action that is restricted to a single use in the Then clause (for example, the action of setting an incident status can be used only once) is also restricted to a single use in the Else clause, although you can use the same action in both clauses of a rule.

Before you define actions for rules, review the following descriptions to learn how actions are executed. This section also describes actions that move an object from one state to another, call functions, and stop rule processing.

Action execution

The rules engine can execute actions immediately when a record is saved, or it can defer the action until a later time. All actions that modify an object (answer, contact, incident, chat, opportunity, organization, target, or task) are executed immediately upon saving the record. For example, an action can change the status of an incident, set an answer access level, or set a custom field. These actions are executed before the next condition is evaluated. Actions that transition to another state or function or those that stop processing are also executed immediately.

All other actions are passed to the API as deferred actions. Some of these delayed actions are executed immediately after the rules engine finishes processing, while others are flagged to be handled later. Examples of actions that are executed immediately after rules processing include applying SLA instances and sending email. Events such as escalation are scheduled to be handled later.

You must select an object event handler from the Execute Object Event Handler drop-down menu to trigger an external event action.

Note For objects to display in the Execute Object Event Handler drop-down menu, they must be added on the process designer and then the process model must be deployed. See Adding object event handlers.

Important External events have been deprecated and might be permanently removed in a future release. The Execute External Event option was disabled in the February 2015 release.

When business rules are triggered (by adding or updating an object), the rules engine processes every rule in the initial state, and continues processing until it reaches the last rule, regardless of how many rules have already been matched. Unless otherwise directed, the rules engine processes only the rules in the initial state. To process rules in other states or functions, you must set an action for one or more rules in the initial state to transition to another state or function. The following actions are available for all rule bases (assuming that additional states and functions exist to be transitioned to).

- **Stop Processing Rules**—Stops processing, regardless of how many rules remain in the state. Use this action when you do not want the object compared to any more rules in this or any other state.

  When you select the Stop Processing Rules action, the rules engine stops evaluating the object against the rules base. However, the action does not prevent future processing of the object. When the object is updated, the rules engine will process it again. If you want to prevent the object from being processed in future updates, create a state that has no rules and transition the object into it.
- **Call Function**—Transitions to the function you specify and processes the rules in the function. Once the actions in the function rules are executed, control returns to the next action in the rule that called the function.

  If you call a function that contains a rule with either an action to stop processing or to transition to another state, the rules engine never returns to the rule that called the function. For example, assume the calling rule contains two actions in the following order: 1) call a function containing a rule with a stop processing action, and 2) assign the incident to a specific queue. In this example, the queue assignment is never made because the prior action stopped processing.
- **Transition State and Stop**—Transitions to the state you specify and stops processing. Use this action when you want the object moved from one state to another, such as from the Created state to the Updated state, but you do not want processing to con-

tinue. In effect, you are setting up the object for the next edit so rules processing starts at the appropriate state. For example, depending on your business process, you may want to set up a separate state for incidents that have been updated so they do not continue to be compared to rules in the initial state.

- **Transition State and Continue**—Transitions to the state you specify and continues processing all the rules in that state until all of those rules process (unless you add another action to stop processing, transition to another state, or call a function). Use this action when you want the object to continue to be compared to the rules in the state you transition to.

You can add certain actions without selecting a value. With this functionality, the rule actions are consistent with values that can be set to No Value in records. For example, you can save an incident without assigning it to a staff member (by selecting the No Value option). Actions that can be added without selecting a value (that is, the value is set to No Value) include:

- Set Product
- Set Category
- Set Disposition
- Set Mailbox
- Set Assigned
- Set Queue

Note Keep in mind, however, that you must assign a value to any required field. For example, if products and categories are required, you cannot select a No Value option to the Set Product action in a rule.

Action order

In general, the order of a rule's actions is unimportant. The exceptions are the Append Thread actions and the Do Not Send Response action.

Append Thread actions depend on order because the appended information is added to the outgoing email response in the same order that the rule's actions occur in the rule.

The following Append Thread to Response actions are added to the response thread in whatever order you specify in the rule's actions so that you can effectively format the outgoing email response.

- Append Response Template to Response Field
- Append Existing Solution (by Answer ID) to Response Field

- Append SmartAssistant Response to Response Field

Important If the Append Response to the Uncommitted Response Buffer action is used in conjunction with multiple Append Thread actions, all appended items are added to the uncommitted response rather than the incident thread. This does not apply to the Append Response Template to Notes Field action.

The Do Not Send Response action is used to prevent automatic incident update responses if you use a message system outside of Oracle Service Cloud to deliver your responses. The Do Not Send Response action should always be added as the last rule to ensure that it is applied to all responses. If it does not execute last, another rule could request a response causing an automatic response through Oracle Service Cloud.

Rule dependencies for Send actions

If you delete an email or survey that is used in a Send action in a contact, incident, or opportunity rule, you can still activate the rule base but the rules engine will not process the action. No error will be logged to indicate that the mailing or survey was not sent.

Setting custom fields and variables

You can define rule actions that set custom fields and variables. When a custom field or variable has a text field data type or a custom field has a text area data type, you can create a rule to perform any of the following actions on the custom field or variable.

- Set equal to a literal text string
- Prepend with a literal text string
- Append with a literal text string
- Set equal to the value of another custom field or variable

When you enter a text string, the system removes any leading or trailing spaces before it inserts the custom field or variable in the database. For example, if you set a custom field to the value **hello** and then add an action that appends the word **there** to the same field, the resulting value will be **hellothere**. To create spaces between the words, use quotation marks. In this example, set the custom field to **"hello"** and append **" there"** (with a space before the **t** in **there**) to get the result **hello there.**

Note Notice that the quotation marks are removed in the result. The quotation marks at the beginning and end of a string are removed, but any quotation marks that are embedded in the string will remain in the string.

Escalation actions

Escalation actions can help your organization track answers, incidents, opportunities, and tasks. You define the conditions that will schedule an object's escalation and what actions you want to occur when that escalation level is reached. Escalation is discussed in detail in Escalating answers, incidents, opportunities, and tasks.

Actions for rule bases

This section contains descriptions of the actions available for rules within each object type. The available actions depend on the rule's object type. The following four actions, available in all rule bases and described in Action execution, are not included in these tables.

- Stop Processing Rules
- Call Function
- Transition State and Stop
- Transition State and Continue

Important Some actions depend on items you have added. This includes customizable menu items, such as products, categories, and dispositions, as well as custom fields, SLAs, mailboxes, Outreach emails and mailings, and Feedback surveys. If you have not entered any menu options for incident severity, for example, "Severity" will not appear as an action for incident rules. You can add incident severity levels, but you must close the Rules editor in order for them to appear in the list of actions. If, however, you already have severity levels and add another one, it will appear without you needing to close the Rules editor.

- Click here for actions for answer rules.
- Click here for actions for contact rules.
- Click here for actions for incident rules.
- Click here for actions for chat rules.
- Click here for actions for opportunity rules.
- Click here for actions for organization rules.
- Click here for actions for Offer Advisor rules.
- Click here for actions for task rules.

Actions for answer rules

When choosing actions for an answer rule, select from the following fields.

Table 43: Actions for Answer Rules

Action	Description
Set Field	Select Set Field to set or change one of the following fields for an answer. The changes are evident when working with an answer. When you select a field for the action, make a selection from the menu options that appear.
Answer Access	Sets the Access Level field to the access level you select. To select multiple access levels, press **Ctrl** while making each selection.
Assigned	Sets the Assigned field to the staff account you select.
Status	Sets the Status field to the status you select.
Banner Flag	Sets the importance of the flag to the level you select from the drop-down menu and adds any text you type in the Banner Note field.
Set Custom Field	Select an answer custom field and set the value. **Note:** You must add an answer custom field to your site in order for it to display. See Adding and editing custom fields.
Set Variable	Set the variable to an absolute value, increment or decrement the variable, or append or prepend a character string. The available actions depend on the variable's **data type**. **Note:** In order for variables to display, they must be added to the Rules tree. See Adding variables.
Email	Select this action to send the following email notifications.
Send Escalation Notification	Sends an escalation notification to the staff member, group, or distribution list you select. You can also select a check box to send the escalation notice to the staff person assigned to the answer. **Note:** If multiple recipients are selected, press **Ctrl** and click a recipient to add it to (or clear it from) the list of selected recipients.

Table 43: Actions for Answer Rules (Continued)

Action	Description
Execute Object Event Handler	Select this action to trigger an external event and then select the type of object event handler from the drop-down menu. **Note:** For objects to display in the Execute Object Event Handler drop-down menu, they must be added on the process designer and then the process model must be deployed. See Adding object event handlers.
Send Notification to Answer Sibling Assignee(s)	Sends a notification to the owners of sibling answers.
Escalate	Escalate the answer to the selected level and set other escalation settings. See Escalating answers, incidents, opportunities, and tasks.
Clear Escalation	Clear the escalation level. See Escalating answers, incidents, opportunities, and tasks.

Actions for contact rules

When choosing actions for a contact rule, select from the following fields.

Table 44: Actions for Contact Rules

Action	Description
Set Field	Select one of the following options and make a selection to set the field. **Note:** At least one of a contact's **state** fields must be set to Yes. If the contact has two of its three states (Service, Opportunities, and Outreach) set to No and a rule's action sets the third state to No, the action will not be executed.
Service State	Select Yes or No to set the Service state on the contact record.
Opportunities State	Select Yes or No to set the Opportunity Tracking state on the contact record.
Outreach State	Select Yes or No to set the Outreach state on the contact record.
Global Opt-in	Select Yes or No to set the contact's global opt-in choice.

Table 44: Actions for Contact Rules (Continued)

Action	Description
Survey Opt-in	Select Yes or No to set the contact's survey opt-in choice.
Disabled	Select Yes or No to disable the contact record. **Note:** You might want to use this action to disable any contact records that have been created through spam email. To do this, create a rule with a condition for an email address containing the domain name and an action to set the contact to disabled.
Contact Type	Click this drop-down menu and select an option.
Banner Flag	Sets the importance of the flag to the level you select from the drop-down menu and adds any text you type in the Banner Note field.
Set Date Acquired	Click the drop-down menu on the left, select one of the following options, and then click the drop-down menu on the right. • Equals—With the current month's calendar open, select the date acquired. Use the arrows to change the month if necessary. • Increment by—In the open window, select direction, offset, and units for incrementing the acquired date. • Decrement by—In the open window, select direction, offset, and units for decrementing the acquired date. • Equal to the Value of—Select one of the following time options: now, the date the contact was acquired, or the date the organization was acquired.
Modify Service Level Agreements	Select one of these options to create or terminate an SLA instance.
Create SLA Instance	Lets you select an SLA from the drop-down menu and apply it to the contact.
Terminate Existing SLA Instance	Terminates the contact's SLA instance. This action does not terminate an SLA instance that was created during the current editing session, only a previously existing one.
Set Custom Field	Select a contact custom field and set the value. **Note:** You must add a contact custom field to your site in order for it to display. See Adding and editing custom fields.

Table 44: Actions for Contact Rules (Continued)

Action	Description
Set Variable	Set the variable to an absolute value, increment or decrement the variable, or append or prepend a character string. The available actions depend on the variable's **data type**. **Note:** In order for variables to display, they must be added to the Rules tree. See Adding variables.
Email	Select one of these options to send an email to the contact. **Note:** If you delete an email or **transactional survey** that is used in a rule, the rule base can still be activated, but the action will not be executed, and you will not be notified that the email was not sent.
Send Marketing Email	Sends the **mailing** you select from the drop-down menu to the contact. The default time for sending the mailing is 0 hours, but you can specify the number of minutes, hours, or days after rules processing ends that you want to send the mailing.
Send Transactional Survey	Sends the survey you select from the drop-down menu to the contact. The default time for sending the survey is 0 hours, but you can specify the number of minutes, hours, or days after rules processing ends that you want to send the survey. The survey will only be sent to the contact once per incident regardless of how many times the rule is matched.
Execute Object Event Handler	Select this action to trigger an external event and then select the type of object event handler from the drop-down menu. **Note:** For objects to display in the Execute Object Event Handler drop-down menu, they must be added on the process designer and then the process model must be deployed. See Adding object event handlers.
Execute External Event	This option was disabled in the February 2015 release. **Important:** External events have been deprecated and might be permanently removed in a future release. Instead, use the Execute Object Event Handler action described in the previous row.

Actions for incident rules

When choosing actions for an incident rule, select from the following fields.

Table 45: Actions for Incident Rules

Action	Description
Set Field	Select Set Field to set or change one of the following fields for an incident. The changes are evident when working with the incident. When you select a field for the action, make a selection from the menu options that appear. If customizable menu options have not been created, the Set Field action for that option (product, category, disposition, queue, or severity) does not appear on the menu.
Assigned	Sets the Assigned field to the staff account you select.
Status	Sets the Status field to the status you select.
Product	Sets the Product field to the product you select.
Category	Sets the Category field to the category you select.
Disposition	Sets the Disposition field to the disposition you select.
Interface	Sets the Interface field to the interface you select.
Queue ID	Sets the Queue field to the queue you select.
Mailbox	Sets the Mailbox field to the mailbox you select. Only those mailboxes enabled for outgoing mail are options on this menu.
Severity	Sets the Severity field to the severity level you select.
Banner Flag	Sets the importance of the flag to the level you select from the drop-down menu and adds any text you type in the Banner Note field.
Apply SLA Instance	Credits the incident against the SLA for the contact or organization and lets you apply an SLA instance if one does not exist.
Set Custom Field	Select an incident custom field and set the value. **Note:** You must add an incident custom field to your site in order for it to display. See Adding and editing custom fields.

Table 45: Actions for Incident Rules (Continued)

Action	Description
Set Variable	Set the variable to an absolute value, increment or decrement the variable, or append or prepend a character string. The available actions depend on the variable's **data type**. **Note:** In order for variables to display, they must be added to the Rules tree. See Adding variables.
Append Thread	Select this action to append any of the following to the incident Note or Response fields. **Note:** These actions should appear in the order you want the response to be formatted. For example, if you want standard text to appear before suggested answers in the response, add the Append Response Template to Response Field action before adding the Append SmartAssistant Response to the Response Field action. The Append Response Template to Notes Field appears only in the incident thread, not in the response.
Append Response Template to Notes Field	Appends the **standard text** you select to the incident's Note field. This action is available only if you have added standard text and selected the Rule Text check box on the Standard Text editor. See Adding standard text.
Append Response Template to Response Field	Appends the standard text you select to the incident's Response field. This action is available only if you have added standard text and selected the Rule Text check box on the Standard Text editor. See Adding standard text.
Append Existing Solution (by Answer ID) to Response Field	Appends the solution for the Answer ID you enter to the incident's Response field. See Standard answer workspace for information about answer fields, including Answer ID.
Append SmartAssistant Response to Response Field	Appends the **SmartAssistant** suggested answer links to the incident's response. **Note:** If you restrict the SmartAssistant suggested answers by product or category, the product or category value must appear in the subject or message text of the incident in order for matching answer links to be generated.

Table 45: Actions for Incident Rules (Continued)

Action	Description
Append Response to the Uncommitted Response Buffer	Use this action in conjunction with any of the Append Thread actions except Append Response Template to Notes Field. This action appends the content you add to the incident response to the incident's proposed response field rather than the incident thread. Content in the proposed response can be edited before it is saved to the thread.
Email	Select this action to send the following email notifications. **Note:** If you delete an email or transactional survey that is used in a rule, the rule base can still be activated, but the action will not be executed, and you will not be notified that the email was not sent.
Send Email Response to Sender	Sends an email to the sender containing the incident subject and response. To also include the question and incident details in the email, select the appropriate check boxes. Do not add this action unless you have selected one of the incident rule actions that append a thread to an incident response. See actions available under Append Thread in this table.
Email Incident Information	Sends a copy of the Question Receipt email message to the address you type in the field or select from a menu. You can also send the information to the staff person assigned to the incident. To include administration fields and customer fields, select the appropriate check boxes. Administration fields must be selected before you can select customer fields. Administration fields include the reference number, subject, date created, date last updated, status, assigned staff member, and the incident thread, including private notes. Customer information includes the contact's email address, first and last names, contact type, title, office phone number, organization, and any contact and organization custom field data.
Send Escalation Notification	Sends an escalation notification to the staff member, group, or distribution list you specify. You can also select a check box to send the escalation notice to the staff person assigned to the incident. **Note:** If multiple recipients are selected, press **Ctrl** and click a recipient to add it to (or clear it from) the list of selected recipients.

Table 45: Actions for Incident Rules (Continued)

Action	Description
Send Marketing Email	Sends the mailing you select from the drop-down menu to the contact for the incident. The default time for sending the mailing is 0 hours, but you can specify the number of minutes, hours, or days after rules processing ends that you want to send the mailing. **Note:** This option does not appear if Outreach is not enabled and if no mailings have been created.
Send Transactional Survey	Sends the survey you select from the drop-down menu to the contact for the incident. The default time for sending the survey is 0 hours, but you can specify the number of minutes, hours, or days after rules processing ends that you want to send the survey. The survey will only be sent to the contact once per incident regardless of how many times the rule is matched. **Note:** At least one transactional survey (set for rule visibility) must have been added in order for this option to appear.
Send Receipt Email	Sends a receipt email to the contact associated with an incident that was created through **channels** other than email or the Ask a Question page. In other words, if an incident is created by an agent on behalf of a customer, this action sends an email to the contact.
Execute Object Event Handler	Select this action to trigger an external event and then select the type of object event handler from the drop-down menu. **Note:** For objects to display in the Execute Object Event Handler drop-down menu, they must be added on the process designer and then the process model must be deployed. See Adding object event handlers.
Execute External Event	This option was disabled in the February 2015 release. **Important:** External events have been deprecated and might be permanently removed in a future release. Instead, use the Execute Object Event Handler action described in the previous row.
Do Not Create Incident	Select this action to prevent an incident from being added. **Note:** When an incident is being updated, this action has no effect.
Do Not Send Email Receipt Message	Select this action to prevent the normal transmission of the email receipt message to the sender. If the incident meets the rule conditions, an automatic response is not sent to the customer.

Table 45: Actions for Incident Rules (Continued)

Action	Description
Do Not Send Response	Select this action to prevent an automatic response from being sent when an incident is updated. For example, if your responses are delivered through a message system outside of Oracle Service Cloud, you can use this rule to suppress an automatic response. **Note:** To ensure all responses are suppressed, this rule must be executed last.
Assign Incident to Staff Member Assigned the Answer	Select this action to assign the incident to the same staff member who is assigned the answer. **Note:** This action has meaning only when the incident source is End-User Pages > Feedback on Answers. A rule with this action fires only when an incident is created, not when it is subsequently edited.
Escalate	Select this action to escalate the incident to the level you select and set other escalation settings. See Escalating answers, incidents, opportunities, and tasks.
Clear Escalation	Select this action to clear the escalation level. See Escalating answers, incidents, opportunities, and tasks.

Actions for chat rules

When choosing actions for a chat rule, select from the following fields.

Note Actions that send or open a survey display only if surveys are enabled for use in chat rules.

Table 46: Actions for Chat Rules

Action	Description
Chat Queue ID	Select this action to assign the chat to the queue you select from the drop-down menu.
Set Variable	Set the variable to an absolute value, increment or decrement the variable, or append or prepend a character string. The available actions depend on the variable’s **data type**. **Note:** In order for variables to display, they must be added to the Rules tree. See Adding variables.

Table 46: Actions for Chat Rules (Continued)

Action	Description
Send Survey When Chat Completes	Select this action to send a **transactional survey** when a chat session ends. You can select the survey you want to send, and the period of time to wait before the survey is sent.
Pop-Up Survey when Chat Completes	Select this action to open a **website link survey** in a new window when a chat session ends. You can select the survey you want to display and the percentage of times you want to show the survey.
Pop-Up Survey when Chat Request Canceled	Select this action to open a weblink survey in a new window when a chat session is canceled. You can select the survey you want to display and the percentage of times you want to show the survey.
Terminate Chat Request	Select this action to terminate the chat request.
ReQueue Chat Request in	Select this action to re-queue the chat request in the number of seconds you specify.

Actions for opportunity rules

When choosing actions for an opportunity rule, select from the following fields.

Table 47: Actions for Opportunity Rules

Action	Description
Set Field	Select Set Field to set or change one of the following fields for an opportunity. The changes are evident when working with the opportunity. When you select a field for the action, make a selection from the menu options that appear.
Assign	Sets the Assigned field to the staff account you select from the drop-down menu.
Status	Sets the Status field to the status you select from the drop-down menu.
Reject Lead	Identifies the reason the lead was rejected. Select a status from the first drop-down menu of available statuses with the Reject status type. Then select a lead reject type from the second drop-down menu. Finally, type a lead rejection description in the text field.

Table 47: Actions for Opportunity Rules (Continued)

Action	Description
Interface	Sets the Interface field to the interface you select from the drop-down menu.
Banner Flag	Sets the importance of the flag to the level you select from the drop-down menu and adds any text you type in the Banner Note field.
Set Strategy Hierarchy	Sets the strategy hierarchy to the strategy you select from the drop-down menu.
Territory	Sets the territory hierarchy to the territory you select from the drop-down menu.
Set Territory Hierarchy Based on Assigned	Sets the territory hierarchy to the territory of the staff member to whom the opportunity is assigned.
Set Date Initial Contact	Sets specific opportunity dates. For each of these date fields, click the drop-down menu on the left, select one of the following options, and then click the drop-down menu on the right. • Equals—With the current month's calendar open, select the date. Use the arrows to change the month if necessary. • Increment by—In the open window, select direction, offset, and units for incrementing the date. • Decrement by—In the open window, select direction, offset, and units for decrementing the date. • Equal to the Value of—Select one of the available options from the drop-down menu.
Set Lost Date	
Set Recall Date	
Date Closed	
Win/Loss Factor	Identifies the reason for winning or losing the opportunity. Select a win/loss factor from the drop-down menu and type a win/loss description in the text field.
Set Custom Field	Select an opportunity custom field and set the value. **Note:** You must add an opportunity custom field to your site in order for it to display. See Adding and editing custom fields.
Set Variable	Set the variable to an absolute value, increment or decrement the variable, or append or prepend a character string. The available actions depend on the variable's **data type**. **Note:** In order for variables to display, they must be added to the Rules tree. See Adding variables.

Table 47: Actions for Opportunity Rules (Continued)

Action	Description
Email	Select this action to send the following email notifications. **Important:** If you delete an email or **transactional survey** that is used in a rule, the rule base can still be activated, but the action will not be executed, and you will not be notified that the email was not sent.
Email Opportunity Information	Sends the opportunity information to the email address you select from a menu of staff members, groups, and distribution lists. (Press **Ctrl** to make multiple selections.) You can also select a check box to send the information to the staff person assigned to the opportunity. To also include administration fields and customer fields, select the appropriate check boxes.
Send Escalation Notification	Sends an escalation notification to the staff member, group, or distribution list you specify. You can also select a check box to send the escalation notice to the staff person assigned to the opportunity.
Send Marketing Email	Sends the **mailing** you select from the drop-down menu to the contact for the opportunity. The default time for sending the mailing is 0 hours, but you can specify the number of minutes, hours, or days after rules processing ends that you want to send the mailing.
Send Transactional Survey	Sends the survey you select from the drop-down menu to the contact for the opportunity. The default time for sending the survey is 0 hours, but you can specify the number of minutes, hours, or days after rules processing ends that you want to send the survey. The survey will only be sent to the contact once per incident regardless of how many times the rule is matched.
Execute Object Event Handler	Select this action to trigger an external event and then select the type of object event handler from the drop-down menu. **Note:** For objects to display in the Execute Object Event Handler drop-down menu, they must be added on the process designer and then the process model must be deployed. See Adding object event handlers.

Table 47: Actions for Opportunity Rules (Continued)

Action	Description
Execute External Event	This option was disabled in the February 2015 release. **Important:** External events have been deprecated and might be permanently removed in a future release. Instead, use the Execute Object Event Handler action described in the previous row.
Escalate	Select this action to escalate the opportunity to the level you specify and set other escalation settings. See Escalating answers, incidents, opportunities, and tasks.
Clear Escalation	Select this action to clear the escalation level. See Escalating answers, incidents, opportunities, and tasks.

Actions for organization rules

When choosing actions for an organization rule, select from the following fields.

Table 48: Actions for Organization Rules

Action	Description
Set Field	Select one of the following options and make a selection to set the field. **Note:** At least one of an organization's **state** fields must be set to Yes. If the organization has two of its three states (Service, Opportunities, and Outreach) set to No and a rule's action sets the third state to No, the action will not be executed.
Service State	Select Yes or No to set the organization's Service state.
Opportunities State	Select Yes or No to set the organization's Opportunity Tracking state.
Outreach State	Select Yes or No to set the organization's Outreach state.
Banner Flag	Sets the importance of the flag to the level you select from the drop-down menu and adds any text you type in the Banner Note field.

Table 48: Actions for Organization Rules (Continued)

Action	Description
Set Date Acquired	Click the drop-down menu on the left, select one of the following options, and then click the drop-down menu on the right. • Equals—With the current month's calendar open, select the date acquired. Use the arrows to change the month if necessary. • Increment by—In the open window, select direction, offset, and units for incrementing the acquired date. • Decrement by—In the open window, select direction, offset, and units for decrementing the acquired date. • Equal to the Value of—Select one of the following time options: now, the date the contact was acquired, or the date the organization was acquired.
Modify Service Level Agreements	Select one of these options to create or terminate an SLA instance.
Create SLA Instance	Lets you select an SLA from the drop-down menu and assign it to the organization.
Terminate Existing SLA Instance	Terminates the organization's existing SLA instance. This action does not terminate an SLA instance that was created during the current editing session, only a previously existing one.
Set Custom Field	Select an organization custom field and set the value. **Note:** You must add an organization custom field to your site in order for it to display. See Adding and editing custom fields.
Set Variable	Set the variable to an absolute value, increment or decrement the variable, or append or prepend a character string. The available actions depend on the variable's **data type**. **Note:** In order for variables to display, they must be added to the Rules tree. See Adding variables.
Execute Object Event Handler	Select this action to trigger an external event and then select the type of object event handler from the drop-down menu. **Note:** For objects to display in the Execute Object Event Handler drop-down menu, they must be added on the process designer and then the process model must be deployed. See Adding object event handlers.

Table 48: Actions for Organization Rules (Continued)

Action	Description
Execute External Event	This option was disabled in the February 2015 release. **Important:** External events have been deprecated and might be permanently removed in a future release. Instead, use the Execute Object Event Handler action described in the previous row.

Action for Offer Advisor rules

Regardless of the conditions for Offer Advisor rules, the only action that occurs is pre-defined: "Contact will match this target." See Creating target rules.

Actions for task rules

When choosing actions for task rules, select from the fields described in the following table.

Important Task rules are executed first when a task is updated at the same time as another object. Therefore, task actions based on non-task conditions are executed using the current value for the object rather than the updated value. For example, assume you have created a contact rule that sets a contact's Opportunities state to Yes if the contact's global opt-in value is Yes. Also assume you have created a task rule that escalates a task if the contact's Opportunities state equals Yes. If a staff member updates the contact for a task by setting the global opt-in to Yes and then saves the task, the task will not be escalated. Because the task rule is executed before the contact rule, the contact's Opportunities state is not yet updated to Yes, so the task's escalation does not happen.

Table 49: Actions for Task Rules

Action	Description
Set Field	Select Set Field to set or change one of the following fields for a task.
Assign	Sets the Assigned field to the staff account you select.
Status	Sets the Status field to the status you select.
Priority	Sets the task's priority to the priority you select.
Set Due Date To	Sets the task's due date to the date you select.

Table 49: Actions for Task Rules (Continued)

Action	Description
Set Planned Complete To	Sets the task's planned completion date to the date you select.
Task Start Date	Sets the task's start date to the date you select.
Task Complete Date	Sets the task's complete date to the date you select.
Set Custom Field	Select a task custom field and set the value. **Note:** You must add a task custom field to your site in order for it to display. See Adding and editing custom fields.
Set Variable	Set the variable to an absolute value, increment or decrement the variable, or append or prepend a character string. The available actions depend on the variable's **data type**. **Note:** In order for variables to display, they must be added to the Rules tree. See Adding variables.
Email	Select this action to send the following email notifications.
Email Task Information	Sends the task information to the email address you select from a menu of staff members, groups, and distribution lists. **Note:** Press **Ctrl** to make multiple selections.
Send Escalation Notification	Sends an escalation notification to the staff member, group, or distribution list you specify. You can also select a check box to send the escalation notice to the staff person assigned to the task.
Escalate	Select this action to escalate the task to the level you specify and set other escalation settings. See Escalating answers, incidents, opportunities, and tasks.
Clear Escalation	Select this action to clear the escalation level. See Escalating answers, incidents, opportunities, and tasks.

Escalating answers, incidents, opportunities, and tasks

The escalation function in business rules helps your organization track answers, incidents, opportunities, and tasks. You can use rules for escalation to scan for problems, such as lack of follow-up by a staff member. Then the rule's actions occur, such as reminding the assigned staff member, notifying a manager, or sending an email to a customer.

Every escalation requires two rules. The first one specifies the conditions that schedule an escalation and create an escalation level. The second rule defines the actions that occur when the escalation level is reached.

To help you start thinking about escalation functions, the following questions might remind you of situations you want to automate.

- How are answers, incidents, opportunities, and tasks assigned to staff members?
- How soon should answers be reviewed after being proposed or created?
- What is an acceptable response time for incidents?
- What time frame is acceptable for sales representatives to contact new opportunities?
- What happens if a task is not completed by its scheduled completion date?
- Who should be notified if answers, incidents, opportunities, or tasks are not handled in a timely manner?
- What happens if the next level responder does not take action?

Escalation overview

The following overview describes the main steps necessary to create and implement rules that escalate incidents. (The process is the same to escalate answers, opportunities, and tasks.) The following sections describe the procedure in greater detail.

Step 1—Outline the chain of events for responding to an incident. For example, be sure you understand how much time an agent has to respond to an incident before the agent's supervisor should be notified. Continue this process through all levels of escalation.

Step 2—Add an escalation function to the incident rule base. See Adding states and functions.

Step 3—Add the first rule to the escalation function. This rule creates the escalation level and defines the conditions that cause the rules engine to set an escalation level. For example, the condition might be a previous escalation level or an Unresolved incident status. This is the first rule of the escalation function. See To create a rule that sets the escalation level.

Step 4—Add the second rule to the escalation function. This rule specifies the action to take when the incident reaches the defined escalation level. For example, you might add an action to notify a supervisor. See To create a rule that triggers actions on an escalated object.

Step 5—Repeat steps 3 and 4 for every escalation level.

Step 6—Now you must add a rule that calls the escalation function. Create a rule with no conditions and an action that calls the escalation function you created in step 2, and add this rule to the initial state as the second-to-last rule.

Note Normally, you want the other rules in the state to be applied prior to escalation, and the last rule in a state is usually an action to transition to the next state.

Step 7—Repeat step 6 for every state in the incident rule base.

What happens now when an incident is added or updated? The rules engine applies all rules in the initial state to the incident, including the rule that calls the escalation function. When it calls the escalation function, the rules engine begins processing the rules in the function, comparing the incident to the conditions of each rule. If the incident matches the conditions of a rule, the rules engine schedules the escalation and defines when it should escalate to the specified escalation level.

Then, during a scheduled run, the **Dbstatus** utility compares the incident to the escalation schedule and, if the time indicated in the escalation action has passed, it sets the incident's escalation level to the one defined in the rule.

Because the incident has just been modified by having an escalation level set, the rules engine reprocesses the incident. When it applies the rules in the escalation function to the updated incident, the escalation level now matches the conditions of the second rule in the escalation function. Consequently, the escalation action (such as notifying a supervisor) occurs. Rules can escalate an incident multiple times before it is solved.

The scheduling of escalation involves the following escalation options.

- **Relative time**—Calculates the number of minutes or hours from a specific day of the week or from an event, such as time created or time updated. The relative time field must have a value for this option to be meaningful. For example, if you escalate an incident based on initial response and a response has not been sent yet, escalation cannot be scheduled.

- **Response interval**—Uses the work hours defined in your default response requirements. When you select this option, only working hours are used to determine relative time. If you clear this check box, incidents may escalate during non-working hours.

Note The Response interval escalation option is available only in incident rules.

- **Revalidate**—Verifies that the object continues to match the rule's conditions after being updated. If it no longer matches, the object is removed from the scheduled escalation queue.
- **Recalculate**—Reschedules escalations that are based on events (such as time updated or time of last response) when the object is updated and continues to meet the rule's conditions. For example, if you schedule an escalation four hours after an incident is updated, the original escalation schedule is recalculated if the incident is updated before four hours elapse. The updated escalation is scheduled for four hours after the most recent update.

Note When the rules engine schedules an escalation but the Recalculate option is not selected, updating the object does not update the scheduled escalation. The escalation remains scheduled until it is executed or until revalidation removes it. For example, if you set an incident escalation action +4 hours relative to "Now," the rules engine schedules escalation when the rule first executes. If the incident is updated and the conditions still match, the escalation time continues to be based on the original time, not the updated time.

- **Clear Escalation action**—Prevents escalation. For example, you might schedule escalation to ensure that a response is sent within a certain time frame, but you should clear escalation after the response has been sent. It is a good practice to select the Revalidate option to cancel the scheduled escalation when the Clear Escalation action is executed.

Important Unlike incidents and tasks, answers and opportunities never reach a state where they cannot be escalated, as incidents do when they are solved and tasks do when they are completed. To help you manage these escalations, use the Clear Escalation action to prevent escalation and the Revalidate option to ensure scheduled escalations are removed.

Before you create escalation levels, you must understand the **Dbstatus** utility, which escalates objects and runs by default four times an hour.

What is Dbstatus?

One function of the Dbstatus utility is updating the escalation level of answers, incidents, opportunities, and tasks. Although the rules engine sets the escalation level for an object, Dbstatus updates the object. During one of its scheduled runs, Dbstatus notes the time, then searches the knowledge base looking for answers, incidents, opportunities, and tasks that have a scheduled escalation time less than the current time. It then updates those objects with the defined escalation level.

After Dbstatus updates the object, the rules engine reprocesses the object to see if it now matches other rules in the escalation function. This allows multiple steps of escalation based on the number of escalation levels you created.

Important Rules to escalate tasks, incidents, and opportunities use the configuration settings and message bases associated with the interface of the object being escalated. Answer escalations process using the configuration settings and message bases of the interface from which Dbstatus runs.

Adding rules for escalation

While escalation processes are most commonly applied to incidents, as in the following example, they can also be useful for managing answers, opportunities, and tasks. To see an example of rules for escalation, see Escalating incidents.

The following procedures show you how to create a rule that sets an escalation level and how to create a rule that performs an action when the escalation level is applied to the incident.

Tip We recommend creating a separate function where you can place escalation rules. The following procedures assume that the rules you create are placed in an escalation function. See To add a function.

Escalation rules always come in pairs. The following procedure describes how to create the escalation level for any incident that matches the rule's conditions. It tells **Dbstatus** to set the incident's escalation to the defined level when the time for escalation has passed. The next rule must specify what you want to happen after the incident reaches this escalation level. To do this, create another rule in the escalation function, as described in the second procedure, (creating a rule that triggers actions on an escalated object).

To create a rule that sets the escalation level

1 Click the Configuration button on the navigation pane.

2 Double-click Rules under Site Configuration.

3 Click the button on the ribbon for the rule type you want to create. The incident rule base is selected by default.

4 Click the Edit button on the ribbon.

5 Right-click the escalation function where you want to place the new rule and select New Rule.

6 Type the rule's name in the Rule Name field.

7 Add the conditions that will trigger the escalation. See To add a rule.

Tip When you create a rule to escalate an incident or other object that has not yet been escalated, you can add a condition of Escalation Level equals Unspecified to ensure that you don't escalate an object that already has an escalation level previously set by another rule.

8 Click the Add Action–Then button and select Escalate.

9 Enter the following field information.

Table 50: Escalation Action Description

Field	Description
Escalate to Level	Type a name for the escalation level you are creating in this field.
Relative	Select this check box to trigger escalation at a time relative to a day or event, which you select from the drop-down menu to the right of the check box. In the drop-down menu to the left of the check box, select a value to establish the time relationship to the event. For example, you might select a relative time such as +4 hours relative to Time Created. Clear this check box to base escalation on absolute time.

Table 50: Escalation Action Description (Continued)

Field	Description
	This field lets you schedule the escalation using absolute time. That is, you set the specific time you want rather than scheduling escalation relative to another time. Click the drop-down menu to open the current month's calendar and select the escalation date. To change the date or time, click the value you want to change and type a new value. Click anywhere in the date or time to set the exact date and time you want the answer, incident, opportunity, or task to escalate to this level. **Note:** This option appears only if the Relative check box is cleared.
	Click the arrow to open a window for selecting direction, offset, and units for the relative time value. +1 Hours is the default. Enter direction, offset, and unit for this field, and click the Save button. **Note:** This option appears only if the Relative check box is selected.
Direction	Select + (future) or – (past) to indicate the direction of the offset for the escalation time from the relative time you define. For example, you might want to escalate an incident 8 hours after (+8 Hours) the time of the last response or an opportunity 4 hours before (– 4 Hours) the Forecast Close time.
Offset	Select this field and type a new value to change the number of minutes or hours before or after the relative time.
Unit	Click the drop-down menu and select minutes or hours.

Table 50: Escalation Action Description (Continued)

Field	Description
	Click the arrow to display the drop-down menu and select Now, Today, Tomorrow, any day of the week, or any of the answer, incident, opportunity, or task options listed below. This establishes the base time to which **Dbstatus** applies the relative escalation time. You must select the Relative check box to display the menu. If you select Today, Tomorrow, or any day of the week, the time associated with that date field is midnight. Therefore, if you create a rule to escalate an answer or an opportunity +3 hours relative to Wednesday, the escalation would be scheduled for the next Wednesday at 3 A.M. The same scenario holds true for incident escalation only if the Use Response Intervals check box is cleared. If the Use Response Intervals check box is selected, the schedule for escalation depends on the work hours that have been set since only work hours are counted. If, for example, work hours on Wednesdays begin at 6:00 A.M., escalation for the incident would be scheduled for Wednesday at 9:00 A.M.
Answers	Select one of the following escalation options based on the time the answer was added or updated or is scheduled to be reviewed or published.
Answers.Created	Select this option if you want the escalation time to be calculated from the time the answer was added.
Answers.Updated	Select this option if you want the escalation time to be calculated from the time the answer was updated.
Answers.Review On	Select this option if you want the escalation time to be calculated from the time the answer is scheduled to be reviewed.
Answers.Publish On	Select this option if you want the escalation time to be calculated from the time the answer is scheduled to be published.
Incidents	Select one of the following escalation options based on the time the incident was added, updated, or responded to, or the time it is due.
Incident.Created	Select this option if you want the escalation time to be calculated from the time the incident was added.
Incident.Updated	Select this option if you want the escalation time to be calculated from the time the incident was updated.

Table 50: Escalation Action Description (Continued)

Field	Description
Incident.Date Last Responded	Select this option if you want the escalation time to be calculated from the time the incident was last responded to. **Note:** If the database contains no value for this field (because only the initial response has been recorded with no subsequent responses), the escalation action will not occur.
Incident.Date Initial Solution Response	Select this option if you want the escalation time to be calculated from the time of the initial solution to the incident. **Note:** If the value for this field in the database is null (because the incident has not been responded to yet), the escalation action will not occur.
Incident.Date Due	Select this option if you want the escalation time to be calculated based on the relative time due set in your default response requirements.
Opportunities	Select one of the following escalation options for opportunities.
Opportunity.Created	Select this option if you want the escalation time to be calculated from the time the opportunity was added.
Opportunity.Updated	Select this option if you want the escalation time to be calculated from the time the opportunity was updated.
Opportunity.Initial Contact	Select this option if you want the escalation to be calculated from the date the customer for the opportunity was initially contacted by a sales representative. The time associated with this date field is midnight. Therefore, if you create a rule to escalate +3 days relative to Time Initial Contact and the initial contact occurred on Monday morning, the escalation would be scheduled for midnight on Thursday. **Note:** If the value for this field in the database is null (for example, if the customer for the opportunity has not been contacted yet), the escalation action will not occur.

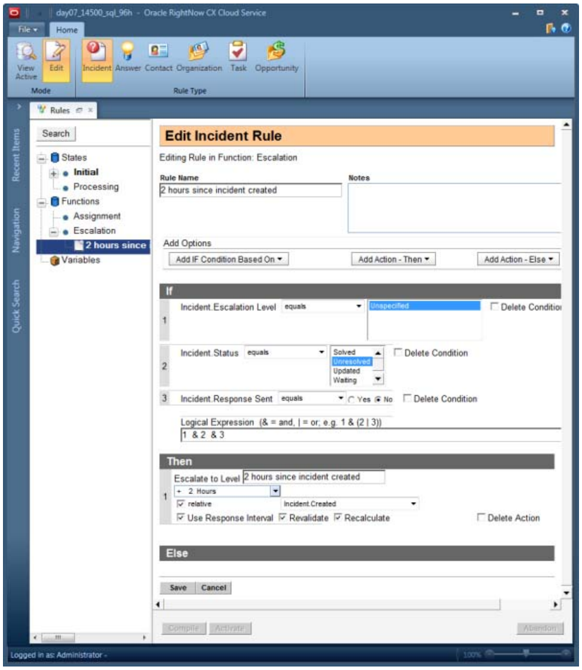
Table 50: Escalation Action Description (Continued)

Field	Description
Opportunity.Forecast Close	Select this option if you want the escalation to be calculated from the date the opportunity is forecasted to close. The time associated with this date field is midnight. Therefore, if you create a rule to escalate 12 hours before the forecasted close (that is, –12 hours relative to Time Close Forecasted) and the opportunity was forecasted to close on Friday, the escalation would be scheduled for Friday noon. **Note:** If the value for this field in the database is null (for example, the opportunity does not have a forecasted close date yet), the escalation action will not occur.
Opportunity.Date Closed	Select this option if you want the escalation to be calculated from the date the opportunity closes. The time associated with this date field is midnight. Therefore, if you create a rule to escalate 6 hours after the close date and the opportunity closed on Tuesday, the escalation would be scheduled for 6:00 A.M. Wednesday. **Note:** If the value for this field in the database is null (for example, the opportunity has not closed yet), the escalation action will not occur.
Opportunity.Lost Date	Select this option if you want the escalation to be calculated from the date the opportunity was lost.
Opportunity.Recall	Select this option if you want the escalation to be calculated from the date the customer for the opportunity should be called again.
Tasks	Select one of the following escalation options for tasks.
Tasks.Completed Date	Select this option if you want the escalation time to be calculated from the date the task was completed.
Tasks.Created	Select this option if you want the escalation time to be calculated from the date the task was added.
Tasks.Due Date	Select this option if you want the escalation time to be based on the task's due date.
Tasks.Planned Completion Date	Select this option if you want escalation to be based on the planned completion date of the task.

Table 50: Escalation Action Description (Continued)

Field	Description
Tasks.Start Date	Select this option if you want escalation to be based on the task's start date.
Tasks.Updated	Select this option if you want escalation to be based on the date the task was updated.
Use Response Interval	Select this check box to use the work hours defined in the default response requirements set up for your organization. If you clear this check box, incidents meeting the conditions may escalate during non-working hours and holidays. For information about default response requirements, see Defining response requirements. **Note:** This check box applies only to incident escalation and does not appear with escalation actions for tasks, answers, and opportunities.
Revalidate	Select this check box to revalidate the answer, incident, opportunity, or task, which means that if it is edited and no longer matches the conditions of this rule, the escalation action is removed from the scheduled escalations queue. Once an escalation that requires revalidation has been scheduled, the conditions of the rule must continue to match when the object is updated. If they do not, the pending escalation is canceled.
Recalculate	Select this check to recalculate escalation time for the answer, incident, opportunity, or task when it is updated. The rules engine reschedules escalation based on the relative time value, such as four hours after Time Updated. **Note:** You must select a relative time value that is not static in order for the Recalculate feature to be meaningful. If you select a static value, for example, Time Created, escalation is not rescheduled because Time Created remains static even when the object is updated. If, however, you select Time Updated, escalation is rescheduled because the Time Updated value changes when the object is updated.

The following shows a rule that sets an escalation level.



10 Click the Save button to save the rule.

To create a rule that triggers actions on an escalated object

1 Click the Configuration button on the navigation pane.

2 Double-click Rules under Site Configuration.

3 Click the button on the ribbon for the rule type you want to create. The incident rule base is selected by default.

4 Click the Edit button on the ribbon.

5 Right-click the escalation function where you want to place the new rule and select New Rule.

6 Type a name for the rule in the Rule Name field.

7 Click the Add IF Condition Based On button and select Escalation Level equals <Escalation Level>. This is the name of the escalation level created in the rule that sets the escalation level. See To create a rule that sets the escalation level.

8 Click the Add Action–Then button to add the appropriate actions based on your business process. For example, the rule's action could be to send an escalation email to the incident's assigned staff member. See Choosing actions.

9 Click the Save button to save the rule.

You have now created a rule that sets the escalation level and a rule that specifies the actions to be taken when the escalation level is detected during rules processing. As you create additional rules to set escalation levels and perform actions, remember that only rules in the initial rule state initially process unless those rules transition to another state or call a function. In order for the rules engine to process the rules in the function you place your escalation rules in, you must have a rule that calls the escalation function.

To add more escalation levels and actions, perform the steps described in To create a rule that sets the escalation level and To create a rule that triggers actions on an escalated object. Once you have created your escalation rules, activate the rule base. See Compiling and activating rule bases.

Searching rule bases

You can search for names of states, functions, rules, and variables in rule bases, whether you are viewing active rules or editing them. This lets you easily find the items you need to view or edit, especially when working in a rule base that contains a large number of rules and other items.

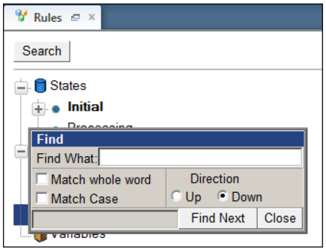
To search a rule base

1 Click the Configuration button on the navigation pane.

2 Double-click Rules under Site Configuration.

3 Click the button on the ribbon for the rule base you want to view. The incident rule base is selected by default.

4 Click the Search button located above the tree. The Find window opens.



5 Type the text you want to find in the rule base tree in the Find What field. By default, the search is not case sensitive.

Tip Wildcards are automatically added to the beginning and end of the text you type. This lets you search for items using text strings that are in the items' names but that are not at the beginning or end of the names. For example, typing b in the Find What field returns all items containing the letter b.

6 To make the search case sensitive, select the Match Case check box.

7 To locate items in the tree only if their names exactly match the search value you enter, select the Match Whole Word check box.

8 To search for items starting at the bottom of the tree and proceeding up, select the Up radio button. To reverse the order of the search, select the Down radio button.

9 Click the Find Next button to locate the first state, function, rule, or variable in the rule base that matches the text you entered. Click Find Next again to locate subsequent items in the tree that match the text.

10 Click the Close button when you are finished with the search to close the window.

Compiling and activating rule bases

Whenever you make changes to a rule base, you must compile it to ensure that no errors exist, and you must activate it so the changes take effect. Compiling lets you examine the state transitions and function calls to ensure that the rule base correctly reflects your intentions. You can compile the rule base as many times as necessary to ensure that it functions as planned.

You can activate the rule base when the compiling process convinces you that it functions the way you intend it to. Activating the rule base archives the version of the rule base that existed before you began making changes and incorporates the changes into the current rule base. Until you activate the rules you have been editing, they will not process any records. To view the rules that are currently active, see Viewing rule bases.

Important Whenever you make any changes to a rule base, you must activate the rule base in order for the changes to take effect. However, activating the rule base does not automatically evaluate items in the knowledge base and execute rules in the updated rule base. Assume, for example, you have updated the incident rule base to include a rule that applies an SLA instance to all incidents from a specific organization. Activating that rule base does nothing to change existing incidents from that organization because the rules engine is invoked only when incidents are added or updated, not when rule bases are activated.

The following procedures use contact rules as an example, but you can compile or activate any type of rule using the same procedure.

To compile a rule base

1 Click the Configuration button on the navigation pane.

2 Double-click Rules under Site Configuration.

3 Click the Contact button on the ribbon and then click the Edit button on the ribbon to view the contact rules you will compile.

4 Click the Compile button. A message asks you to confirm that you want to compile the rule base.

5 Click the OK button. The compiler engine checks rules, states, and functions. If no errors occur, a message lets you know the rule base compiled correctly.

6 Click the OK button. You can now continue editing the rule base.

To activate a rule base

1 Click the Configuration button on the navigation pane.

2 Double-click Rules under Site Configuration.

3 Click the Contact button on the ribbon and then click the Edit button on the ribbon to view the contact rules you will activate.

Tip You can check whether changes to a rule base have been activated by comparing the Created and Last Updated dates. If these dates and times are not the same, then changes have been made, but the updated rule base has not been activated. In addition, the date in the Last Updated column is red to alert you that changes have not been activated.

4 Click the Activate button. A message asks you to confirm that you want to activate the rule base.

5 Click the OK button. The compiler engine checks rules, states, and functions. If no errors occur, a message lets you know the rule base compiled correctly.

6 Click the OK button. If objects are in the Null state or a state that has been removed, see Objects in the Null state. If no objects need to be reassigned to a different state, a message lets you know that the rule base has been activated.

7 Click the OK button to close the message and stop editing rules.

To abandon changes to a rule base

Caution This action deletes all of the changes you have made to the rules, functions, states, and variables in the current editing session.

1 Click the Configuration button on the navigation pane.

2 Double-click Rules under Site Configuration.

3 Click the button on the ribbon for the rule base you want to abandon. The incident rule base is selected by default.

4 Click the Edit button on the ribbon to view the rules currently in the edit state.

5 Click the Abandon button on the Rules editor. A message asks you to confirm that you want to delete all of the changes made in this editing session.

6 Click the OK button to delete the copy of the rule base you are editing, including all states, functions, rules, and variables. All of the changes you have made are deleted, and the rule base reverts to the last activated version.

Objects in the Null state

If the knowledge base contains records that were created before the rule base for that record type was activated, those records are considered to be in a null state. This means they will not be processed by the rule base when they are next edited unless you move them into an active state in the rule base. Records may also need to be reassigned to an active state if you delete the state where they previously existed so that the rule base will process them when they are updated.

If records associated with the rule base are in a null state when you activate the rule base, you will see a message similar to:

Move the 114362 contacts in state with ID value of Null to ____

You can then click the drop-down menu to select the state where the records should be assigned.

The records you move to an active state are not processed by the rule base just because you move them to a new state. However, they will be processed the next time they are edited unless they remain in the Null state or a state that has been deleted. In those cases, they will never be processed.

Note If you have deleted escalation levels when editing a rule base, you must also select new values for those levels. If you select Null to replace the existing escalation level value, pending escalations are deleted and the objects are not escalated. See Escalating answers, incidents, opportunities, and tasks.

To change state values when activating a rule base

1. When you see a message about moving records in a null state, click the drop-down menu and select the state you want to move the records to.
2. Click the Save button. A message lets you know the rule base was activated.
3. Click the OK button to exit the rule base.

Viewing rule bases

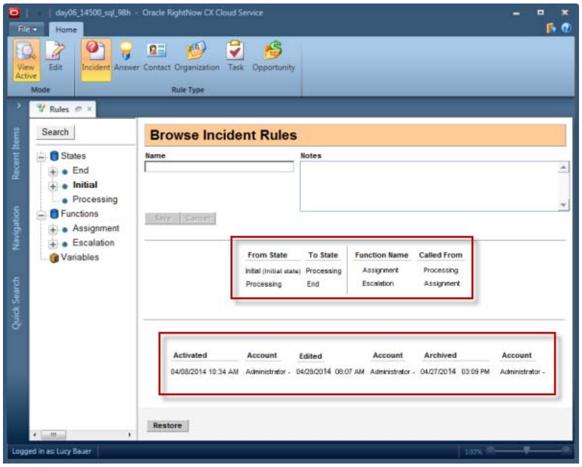
When you open the Rules editor, the View Active button on the ribbon is selected. When you view active rules, you see the rules, states, functions, and variables in the selected rule base that are currently active that impact the incidents and other types of records on your site. Unless you intend to make changes to your rule base, it is a good idea to use the View Active option instead of Edit to prevent accidental modification of the rule base and help you track changes to the rule base. When changes to the rule base are necessary, you can tell if someone else has already begun making changes by looking at the Last Updated column on the Rules editor or the Edited date when reviewing the active rule base.

In addition to viewing the rule base without editing it when you select View Active, you also have the option of restoring the archived rule base. If, after viewing the rule base, you decide you want to revert to the previously archived version of the rule base (that is, the last one that had been activated prior to the current version), you can restore the archived version. After restoring the archived rule base, you must activate it in order for the restored version to become the new current version.

Note Remember that you can prevent staff members from editing rules by clearing the Rules Edit check box on the Administration permissions tab of the Profiles editor, but still allow them to view rules by selecting the Rules View check box. See Administration permissions.

To view a rule base

1. Click the Configuration button on the navigation pane.
2. Double-click Rules under Site Configuration.
3. Click the button for the rule type you want to view. Since the View Active button is selected on the ribbon by default, the rules displayed on the content pane are the active rules on your site. The incident rule base is selected by default.



The content pane displays the dates the rule base was activated, edited, and archived and the staff member who performed these actions. It also displays the transitions from one state to another and the states from which functions are called.

An entry in the Edited column indicates that a copy of the active rule base has been created. A staff member may have made changes or simply used the Edit option to open the rule base.

4 To view a state, right-click the state and select View State.

5 To view a function, right-click the function and select View Function.

6 To view a rule, right-click the rule and select View Rule.

To restore the archived version of the rule base

1 Click the Configuration button on the navigation pane.

2 Double-click Rules under Site Configuration and select the rule type button for the rule base you want to restore. The incident rule base is selected by default.

3 Click the Restore button. You are asked to confirm that you want to restore the archived rule base.

4 Click the OK button to confirm the restoration of the archived rule base.

5 Click the Activate button to activate the restored version of the rules base.

Important If you close this window without activating the rules base, the restored version is abandoned and the current version of the rules base remains active.

Modifying rule bases

You can modify a rule base, including all states, functions, and the rules contained in each. You can change the names of states, functions, and rules, and change the conditions and actions in rules. You can also duplicate, reorder, and delete rules, and move rules to other states or functions.

Caution If you delete a state or function, you also delete all the rules within the state or function.

Modifying a rule base lets you:

- Edit a rule to change any of its properties.
- Duplicate a rule to change its name, conditions, or actions. This option makes it easy to add a rule with similar properties.
- Delete a rule.
- Temporarily disable a rule to prevent it from being considered when the system is processing workflow.
- Move a rule to another state or function or change the order of a rule within a state or function by dragging and dropping.

Note Regardless of how you modify a rule base, you must activate it in order for the changes to take effect. See Compiling and activating rule bases.

Right-click any rule in the rule base and select one of the following options.

- **Edit**—Make the changes and save the rule. If the rule was not successfully updated, a message indicates the value that is not valid.
- **Duplicate**—Rename the rule, make the necessary changes, and save the new rule.

- **Delete**—A message asks you to confirm the deletion.
- **Disable/Enable**—The tree refreshes and a lock icon appears next to the rule to reflect its disabled status. The menu option changes to Enable when you right-click a disabled rule.

Verifying rules using the rule log

You can use the rule log to view the list of rules that have fired against a specific answer, contact, incident, opportunity, organization, or task. This lets you verify that the new rule base works as intended and that no unintended actions occur as a result. The rule log also identifies whether the Then or Else clause was used to process the rule.

When testing escalation, you may have to run **Dbstatus** manually. However, keep in mind that manually running Dbstatus to confirm an object's escalation also escalates everything that has reached the scheduled escalation time, not just the object you are testing. See What is Dbstatus?

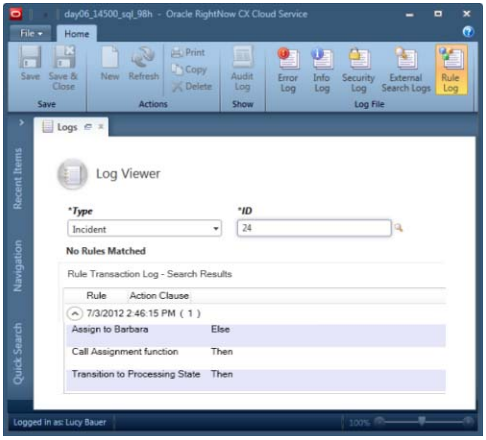
Note Be certain to configure email settings before you construct rules to check inquiries and responses that were sent by email. See Email Management for information about customizing email configuration settings.

To verify a rule

1. Add and save a record, such as an incident, that matches the conditions of the rule.
2. Obtain the ID number of the object you want to view.
   a. Open the record on a workspace, click the Info button on the ribbon, note the ID number, and close the record.
   Or
   b. Open a report that includes the ID number of the record, such as the incident ID (*incidents.incident_id*) field. Note the ID number and close the report.
3. Click the Configuration button on the navigation pane.
4. Double-click Logs under Site Configuration.
5. Click the Rule Log button on the ribbon. The rule log opens on the content pane.
6. Click the Type drop-down menu and select the type of record you want to view.

7 Type the ID in the field and click the Search button.

The following figure shows a rule log for an incident that hit three rules.



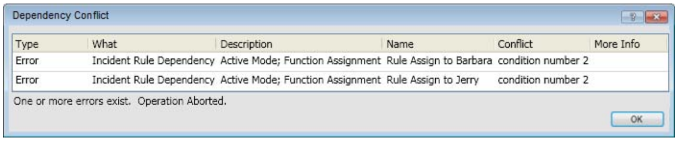
8 Check that the appropriate rules were applied to the record. If not, check the rules' conditions and actions to see why the record processed as it did. (See procedures beginning with Creating rule bases.)

Note The rule log may contain more than one entry, depending on when it was last purged. The **Agedatabase** utility purges the log after a configurable period of time (with a default of 30 days). The rule log may also indicate no matching rules.

Resolving dependencies

If any of your rule conditions or actions refer to specific Oracle Service Cloud items (such as rule variables, staff accounts, or queues) and you attempt to delete that item, the system first checks to see if the item is related to business rules. If it is, a dependency conflict may occur.

You will not receive a dependency conflict warning if you delete a product, category, or disposition used in a rule. However, if you try to delete a custom field that is used in incident rules, you will see a Dependency Conflict window that describes the conflicts.



Before you can delete the custom field, you must resolve the dependency by editing or deleting the rule that causes the dependency.

Important If you delete an email or survey that is used in a Send action in a contact, incident, or opportunity rule, you can still activate the rule base but the rules engine will not process the action. No error will be logged to indicate that the mailing or survey was not sent.

Business rules examples

Business rules are useful tools that help you simplify and automate common business tasks. This section provides examples of rules to help you better understand rules and create rule bases that can streamline your organization's business practices.

Keep in mind there may be more than one way to accomplish the same objective using business rules. You may find other conditions and actions that let you achieve the same results as the sample rules described in this section. For complete details about working with business rules, including an overview of rules as well as procedures for creating rule bases, adding and editing rules, activating rule bases, and troubleshooting, see Business Rules Management.

Routing customer support questions

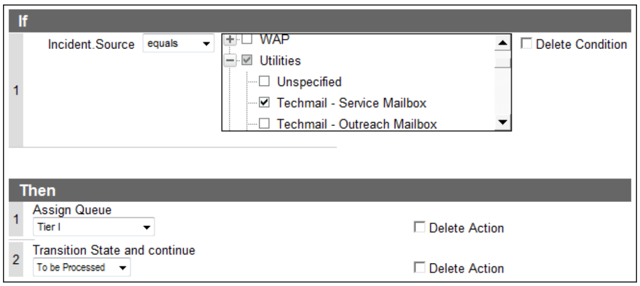
One of the more common uses of business rules is to route incidents to the most appropriate staff member, group, or queue based on the criteria you define. These conditions can be related to the incident itself or to a field in the contact or organization record associated with the incident.

It might make sense to route certain types of incidents to a specific staff member. But the rules engine cannot determine what staff members are logged in, so you risk having the incident assigned to a staff member who is not at work when the incident is routed. To ensure a timely response for your customers, a better practice is to assign incidents to queues that all logged-in agents can pull from.

In the examples in this section, each rule has two actions: to route the incidents that match the criteria to the queue for Team A and then to move the incidents to a different state called "To be Processed." (Best practice recommends you move incidents out of the initial state after the rules engine has routed them so the rules engine does not continue to process an incident using the rules of the initial state whenever it is updated.) In reality, you might have additional actions in any given rule. For example, after assigning an incident to a queue, you may want to append **SmartAssistant**-suggested answers to the incident before you transition it to a different rule state.

Routing incidents by source

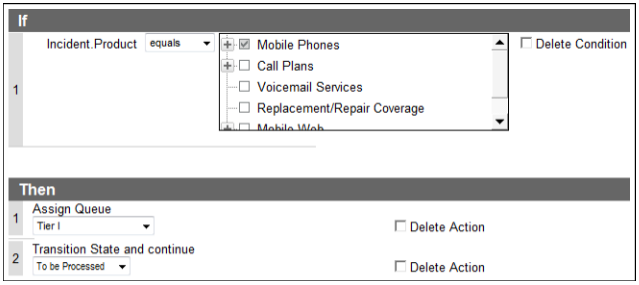
You may have one queue dedicated to handling incidents that originate from the Ask a Question page on your customer portal, another one for replying to email incidents, and another for chat requests. If this is how your support team is organized, you will need a rule in the initial state for each type of incident source. The following figure shows the kind of rule you can use to route incidents to a specific queue or staff member.



It is also a good idea to add a final rule to catch any incidents that enter your system through other sources so they can be assigned to a staff member instead of being overlooked.

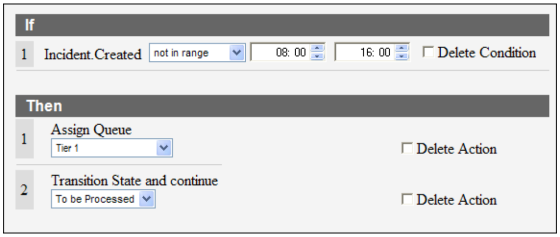
Routing incidents by products or categories

Routing incidents by products or categories lets you direct them to the staff members who are experts in those areas. This may be especially useful if members of your support team have highly specialized areas of knowledge. The following figure is an example of a rule that routes incidents by their associated product.



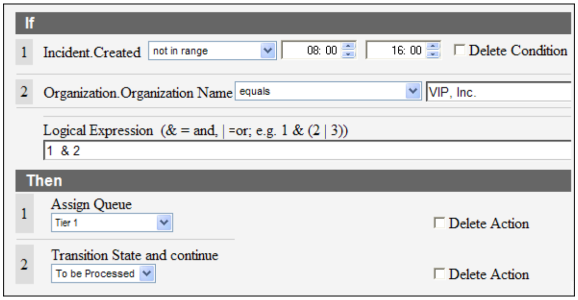
Routing incidents by time created

You may decide to route incidents based on the time of day they are created. If a customer submits a question before or after your support staff's normal working hours, you may want to route the incident to a backup staff member or queue who can respond to the customer. The following figure shows a rule that routes an incident to Team A anytime an incident is submitted outside the normal working hours of 8:00 A.M. to 4:00 P.M.



Note You can accomplish the same goal by using the operator In Response Interval. This operator is used only with incident rules to indicate that the incident was added within normal working hours. "Normal working hours" means either the **response requirements** of the SLA associated with the incident or the default response requirements if no SLA is associated with the incident.

You might not want to route every incident created outside working hours to a backup queue. Instead, you may decide to route only those that are added by certain customers. In that case, you can add another condition for the type of SLA the customer has or for the customer's organization.



Note The default logical expression joins the conditions with AND, meaning that both conditions must be met to trigger the action. If the logical expression used OR (|), the action would be triggered if either one of the conditions was met.

Other incident routing conditions

Besides source, products, categories, and time created, you can route incidents based on several other conditions. The following list describes some of the more common incident conditions. For a complete list, refer to Incident conditions.

- **Subject and threads**—You might want to find all incidents that contain a specific word or phrase or, conversely, exclude those incidents from being impacted by a rule's actions. You can set conditions to search for text in the incident's subject as well as customer and staff threads.
- **Status**—Setting the incident status as a rule condition lets you find and act on all incidents with the specified status. For example, you might want to send a reminder email to all customers who have an incident with the status **Waiting**.
- **Previous fields**—It might be useful to note when an incident's status, assigned staff member or group, or escalation level changes during rules processing. You can specify the previous value (that is, the value for the field stored in the database when the incident is added or updated or when rules processing begins) for these fields as conditions for incident rules.
- **Assigned staff member, group, or queue**—If one of your staff members is out of the office unexpectedly, you might want to create a rule to reassign that person's incidents. Similarly, one group or queue might have a heavier than normal volume of incidents and you may want to create a rule to direct some or all of those incidents to a different group or queue.

- **SmartSense ratings**—You might want to email incidents that have strongly positive customer **SmartSense** ratings to the staff member's supervisor so that management can recognize agents who are serving customers well. It might also be useful to let management know when a staff member's SmartSense rating is negative so corrective action can be taken if necessary. Refer to SmartSense Emotive Rating.

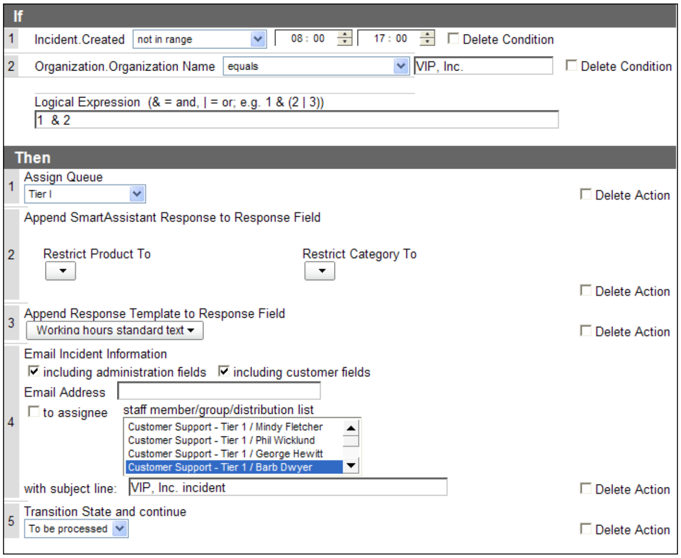
You can also route incidents based on rules you create using conditions for contacts and organizations. For example, you might want to route incidents based on a customer's geographic region, the date your organization acquired them as a customer, or their industry.

Building on basic incident routing rules

You can see from the examples presented so far that rules for routing incidents can be simple. But they serve as the building blocks for developing more complex rules. In this section, you will add to the rule that routes incidents created outside working hours by customers from a particular organization. (Click here to see the figure of the original rule.)

Assume that your organization wants to send a reply email to the customer who submits the incident. The reply should include suggested **SmartAssistant** responses to the question and list normal working hours. Also assume that you want to set the banner **flag** to high importance and send the incident to a customer support supervisor who can follow up if necessary to ensure that the customer receives a reply.

The rule will resemble the following figure.



Note Notice in the revised rule that the Transition State action must be last in order for the other actions to be processed. Once you have added an action to stop processing rules or transition the state, the Add Action button is no longer available. As a result, you must first delete the existing Transition State and Continue action from the original rule, add the intermediate actions, and then add the Transition State and Continue action.

Using the Else clause when routing incidents

Rules are if-then statements: If this condition occurs, then take this action. And you can probably use rules to accomplish everything you want to without ever using the Else clause. But using the Else clause can simplify your rules. Maybe you want incidents with a high severity level to be routed to one queue and those with any other severity level to be routed to a second queue.

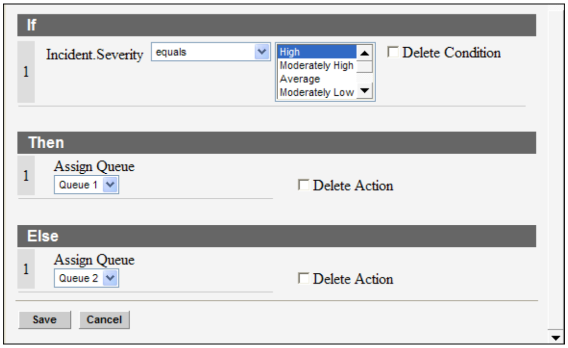
Your rules could look like this:

- If Incident.Severity equals High, set queue ID to Queue 1.
- If Incident.Severity equals Average, set queue ID to Queue 2.
- If Incident.Severity equals Low, set queue ID to Queue 2.
- If Incident.Severity equals None, set queue ID to Queue 2.

Depending on the number of severity levels your organization uses, you can see that this could get unwieldy rather quickly. So instead, you might create a different set of rules to accomplish the same thing:

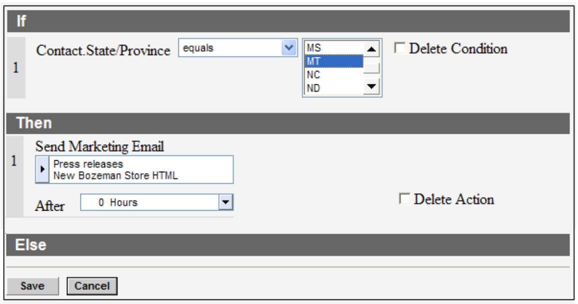
- If Incident.Severity equals High, set queue ID to Queue 1.
- If Incident.Severity not equals High, set queue ID to Queue 2.

Even though this is more manageable than the first scenario, the Else clause offers you a single-rule solution.

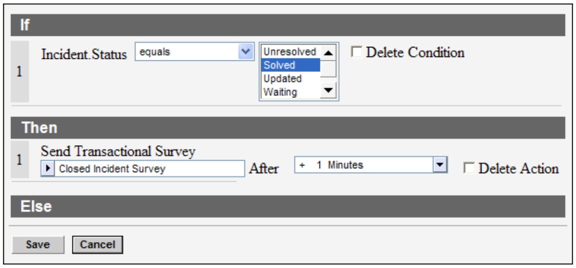


Sending emails and surveys

Rules can automate some of your marketing efforts. Assume, for example, that you want to send a message to all new customers in a specific geographic area to let them know about a new store opening in their region. To accomplish this, your contact rule might look like the following figure.



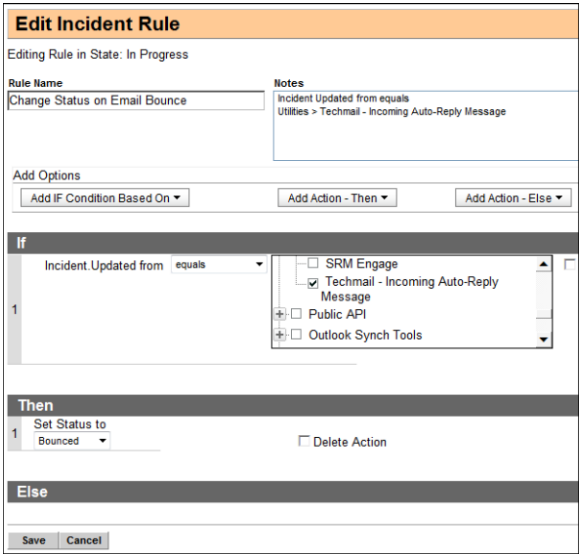
Sending a survey is similar. The following figure shows an incident rule that sends a customer support satisfaction survey when an incident is solved.



Tip We recommend setting the survey to send at least +1 minute after the incident is solved. Otherwise, if you leave the setting to its default value of zero hours, the customer would receive the survey before they receive the Incident Solved notification.

Setting incident status in response to an event or action

You can set rules to change the status of an incident when an event occurs or an action is taken. In this example, when an email is not delivered to the recipient and triggers an automated reply instead (that is, it bounces), the incident status is set to Bounced. This alerts staff members that the email wasn't received. They can then resend the email or use an alternate contact method. This example uses the "From Techmail–Incoming Auto-Reply Message" source in the Transactions (transactions) table.



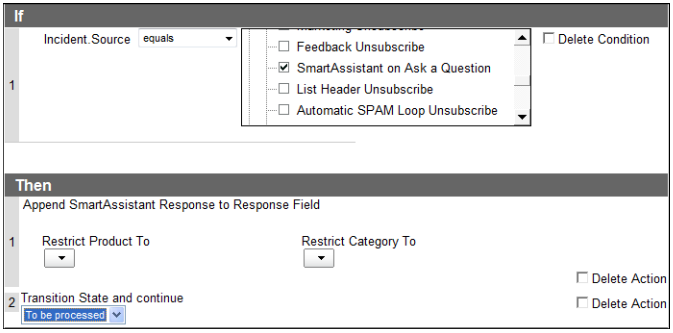
Suggesting answers before questions are submitted

The example rule described in Building on basic incident routing rules contained the action Append SmartAssistant Response to Response Field. This action offers suggested solutions to your customers when they submit an incident and may help them resolve their issue themselves without requiring help from your support team.

SmartAssistant works by evaluating the text of the customer's question and determining which answers in the knowledge base best match the question. It then presents a list of these answers (to the maximum number specified in SA_NL_MAX_SUGGESTIONS) to the customer in one or both of two ways:

- On the Ask a Question page of the customer portal before the customer completes submitting the question
- In the response thread of the incident that gets sent to the customer

To display the suggested solutions when the customer clicks the Continue button on the Ask a Question page but not append them to the incident response thread, the incident source condition must be equal to SmartAssistant on Ask a Question.



To append the suggested solutions to the incident response thread but not display them when the customer submits a question, the incident source must be equal to Ask a Question.

And to offer the suggested solutions to the customer when they ask the question and in the incident response thread, the condition for the incident source should have the check boxes for both SmartAssistant on Ask a Question and Ask a Question selected.

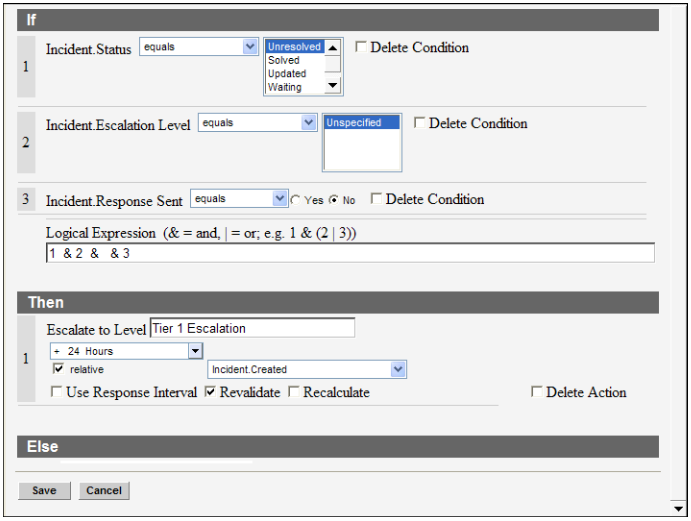
Escalating incidents

Business rules let you escalate answers, incidents, opportunities, and tasks according to the conditions you define. Escalation lets you identify potential problems and take action before actual problems ensue. You might want to escalate incidents that have not been resolved within your organization's default **response requirements**. You can escalate answers that have been lingering in the review process and prevented from being published. Task escalation lets you notify staff members when tasks are pending, and opportunity escalation prevents a potential sale from being overlooked.

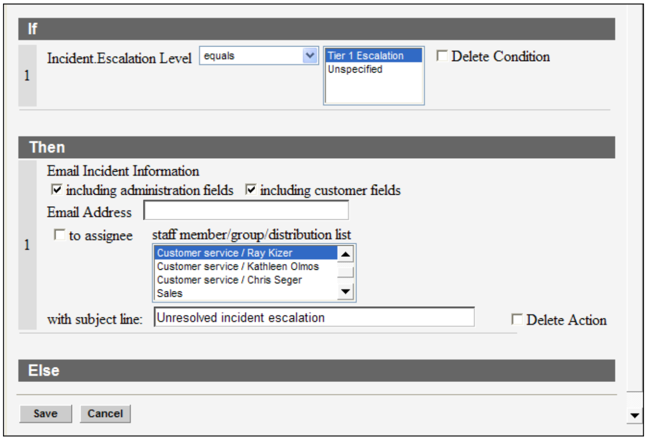
This example shows how to create rules to escalate incidents. You will first want to create a separate function that contains all the rules for escalation so that you can call the escalation function from any state in the incident rule base.

Each escalation action contains two rules. The first rule specifies when the incident should be escalated and creates an escalation level, and the second rule spells out what must happen when the escalation level defined in the first rule is reached.

The following figure shows an example of the first escalation rule. In this case, assume you want to trigger escalation if the incident status is unresolved, the incident has no current escalation level, and no response has been sent to the customer. In its action, this rule creates an escalation level called Tier I escalation, which will be triggered 24 hours from the time the incident was created. (Because the Use Response Interval check box is cleared, the 24 hours is calculated based on actual clock time. If it were selected, only your organization's normal working hours would be used to calculate the time.) The Revalidate check box is selected, which means that any updates to the incident will cause the rule's conditions to be evaluated to see if they still match. If, for example, an agent responds to the customer, you do not want the escalation to occur. The Recalculate check box is cleared because the escalation time is relative to the time the incident was created, which is a static value that does not change during rules processing.



This first rule tells the **Dbstatus** utility to set an incident's escalation level when the incident matches the rule's conditions. Now you need to create a rule that says what should happen when the incident reaches this escalation level. The second rule resembles the following figure. Notice that one of your conditions must be that the incident escalation level equals the level you created in the first rule. If necessary, you can also add other conditions to this rule.



Now you have created a rule to set the escalation level for any incident that matches the conditions and a rule to specify what action should be taken when the escalation level is detected during rules processing.

Creating a variable to measure service quality

A variable is a temporary data item that is assigned a default value at the start of rules processing. You can define rule actions that update the variable during rules processing, and you can also define conditions based on the value of the variable.

Note A custom field can also accomplish the same function as a variable. The difference is that the value of the custom field is stored in the database at the end of rules processing. If its value changed during rules processing as a result of actions applied to it, that value remains and is the one the custom field contains the next time the object is processed by the rules engine. In contrast, the value of a variable is not stored in the database so its value is always 0 when rules processing begins the next time.

A common example of a variable is a score that you set and modify according to the conditions you define. Then you can assign different actions based on the variable's value.

Assume, for example, that you want to be sure your management team is aware of high priority service issues. For the purpose of this example, the following assumptions are made.

- Your organization expects your agents to communicate positively with all customers.

- Because the XYZ Corporation constitutes a significant part of your business, you want to be sure that contacts from that company are satisfied with the service they receive from your organization.
- You want to be especially sure that managers from the XYZ Corporation are happy with your service.

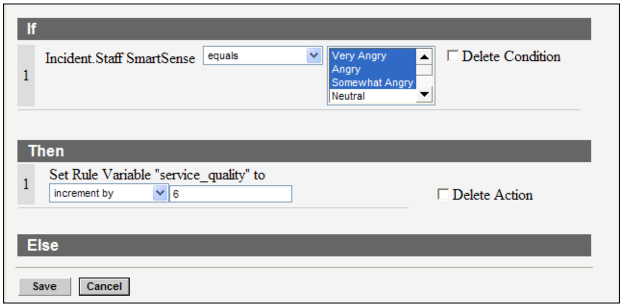
Here are the steps you can take to create rules based on service quality measurements.

Step 1—Create a variable called *service_quality*.

Step 2—Create rules that set the value of the variable. Because you want the variable to change based on different conditions, you will need multiple rules to accomplish this. Rather than add these rules to a state, it is a good idea to create a function that scores the incident. Then you can call the function from multiple states instead of having to add the set of rules to each state you want to run them from.

First create a function called Service Quality Scoring. Then create rules within the Service Quality Scoring function that assign the appropriate weighting to the various factors you want to track. You might choose to create a set of incident rules similar to the following to identify service issues.

- If the staff member's **SmartSense** rating is Somewhat Angry, Angry, or Very Angry, increment the variable *service_quality* by +6.



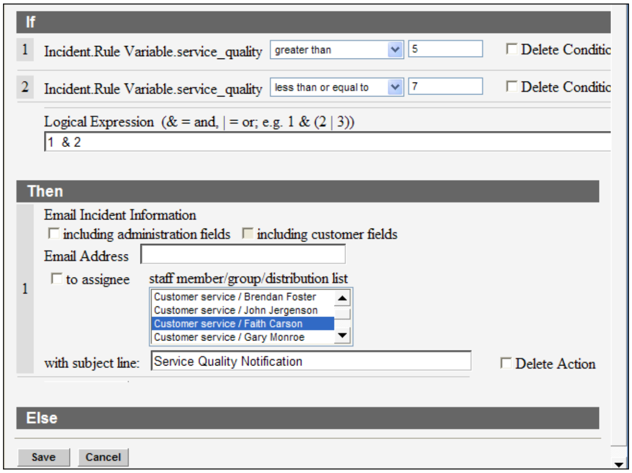
Next add the following rules to the function.

- If the staff member's SmartSense rating is Neutral, increment the variable by +1.
- If the organization is the XYZ Corporation, increment the variable by +2.
- If the customer SmartSense is Somewhat Angry, Angry, or Very Angry, increment the variable *service_quality* by +6.
- If the **contact type** is Manager or Vice-President, increment the variable by +2.

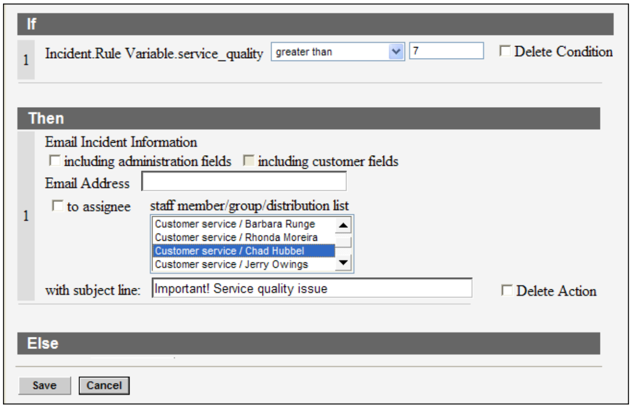
Now you have created five rules within the Service Quality Scoring function that will increment the *service_quality* variable when any of the conditions are met. You might decide that high values of this variable warrant attention from a customer support supervisor or manager, so you can now create rules that depend on the value of the variable.

Step 3—Create rules that specify the actions for different values of the variable. Your rules might look like those in the following two figures.

- If *service_quality* is greater than 5 and less than or equal to 7, email the incident information to the customer support supervisor at your organization.



- If *service_quality* is greater than 7, email the incident information to the manager of customer support.



Using these rules, you can see that no email is triggered if a manager (+2) at XYZ (+2) is happy or neutral (no change because rule conditions are not met) and if the agent SmartSense rating is neutral (+1 for neutral). In this situation, the variable is 5 (2+2+1).

Any time a staff member's SmartSense rating registers anywhere in the angry range, the customer support supervisor is notified because the variable is at least 6. Also notice that any angry customer will trigger a notification to the supervisor because the variable is also 6.

An unhappy (+6) manager (+2) from XYZ (+2) results in a *service_quality* variable of at least 10, and possibly more, depending on the agent's SmartSense rating. This situation triggers an email to the manager of your customer support department.

Whenever the rules engine begins processing a new or updated incident, the value of the *service_quality* variable is initialized at 0 again.

Applying SLAs and crediting incidents to SLAs

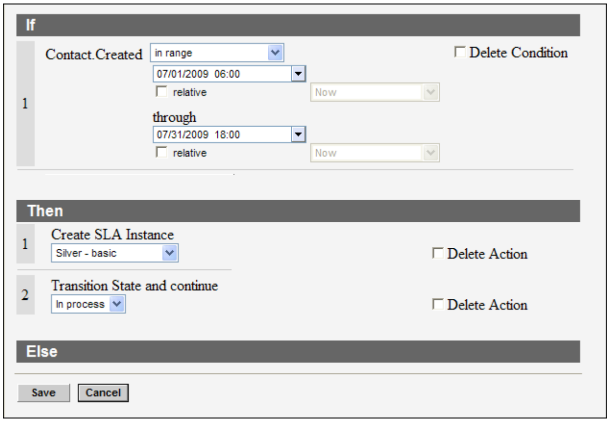
Business rules let you apply SLAs (service level agreements) automatically to your customer records. You can apply SLAs using contact, organization, or incident rules.

When you apply an SLA to a customer (either automatically through business rules or manually through the Service Console), you define a certain level of customer support the customer is entitled to. Then, when the customer submits an incident, the incident can be credited against the SLA, effectively reducing the number of remaining incidents by one. In addition to using business rules to apply SLAs to the customer record, you can also use them to credit an incident to an SLA.

Note Remember that SLAs can be applied only to contacts that are not associated with organizations. If a contact belongs to an organization, the SLA must be applied to the organization. Then, any incidents submitted by contacts belonging to the organization will be credited to the organization's SLA.

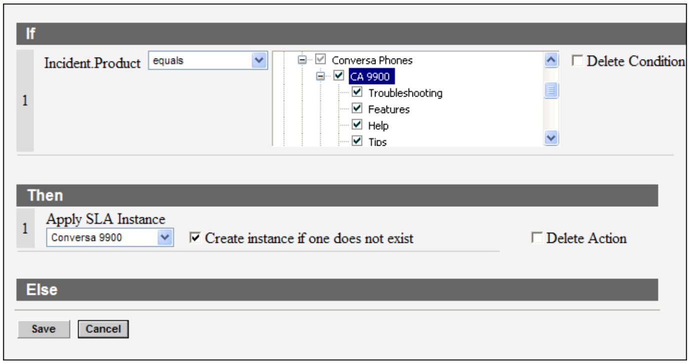
Before you add rules to apply an SLA, you first need to create the SLA. Refer to Creating SLAs.

Assume you want to apply an SLA to all customers whose contact records are created during the month of July. When you click the Add Action–Then button, first select Modify Service Level Agreements and then select Create SLA Instance. Your rule might resemble the following figure.



Instead of using contact or organization rules to apply an SLA, there may be times you want to apply an SLA based on the conditions of an incident. For example, assume your organization has just released a new product that is causing customers some confusion. When customers submit a question to your support team through the Ask a Question page regarding that product, you want to automatically assign them an SLA that allows them to submit a certain number of additional incidents regarding that product for a specified time period.

Unlike contact and organization rules, incident rules do not have a Modify Service Level Agreements > Create SLA Instance action. In incident rules, the action that credits the instance to an SLA also lets you create an instance of the SLA for the customer if one does not already exist. (If the SLA had already been applied to the contact, it is not necessary to select the check box for Create Instance If One Does Not Exist.) The rule you create will resemble the following figure.



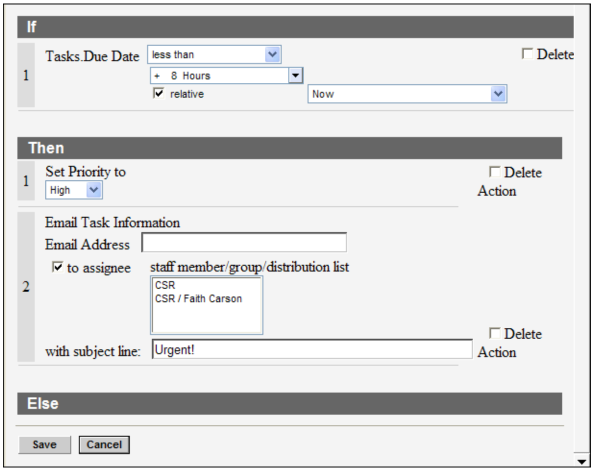
Relative time conditions

Several rule conditions let you select a date and time. For example, you might want to add a rule with the condition "If the task due date is within the range from April 1 to April 8." The following conditions allow date/time selection.

- Banner Updated for answers, contacts, incidents, opportunities, and organizations
- Acquired and Created for contact rules
- Created, Updated, Initial Contact, Forecast Close, Date Closed, Lost Date, and Recall for opportunity rules
- Acquired for organization rules
- Purchased Products Date Purchased for target rules
- Completed Date, Created, Updated, Due Date, Planned Completion Date, and Start Date for task rules

The ability to set a condition based on a specific date and time (whether that date/time value is before, after, equal to, or within a range you specify) is a useful tool. However, there may be times when you want to set a relative date/time value. For example, you may want a condition "If the task due date is less than 8 hours from now." In that case, you can select a relative time for the rule's condition. Relative time calculates the number of minutes or hours from the current time or from a specific event, such as time created or time updated.

The following figure shows a rule that can be used to notify a staff member who has been assigned a task that is due within the next eight hours.


If
1
Tasks.Due Date
less than
+ 8 Hours
relative
Now
Delete
Then
1
Set Priority to
High
Delete Action
2
Email Task Information
Email Address
to assignee
staff member/group/distribution list
CSR
CSR / Faith Carson
with subject line:
Urgent!
Delete Action
Else
Save
Cancel

9

Custom Fields

When you first implement Oracle Service Cloud, you might find that additional fields are needed to collect the information you require. For example, a company that sells shoes might need to store the customer's shoe size. By adding custom fields to your **knowledge base**, you can be sure you are collecting the information required to best meet your organization's needs. Once you've added custom fields, you can add them to **workspaces** and **scripts**, use them as search filters in reports, and use them as audience filters in Oracle RightNow Outreach Cloud Service (Outreach) and Oracle RightNow Feedback Cloud Service (Feedback).

Adding and editing custom fields

When adding a custom field, you can specify whether it is visible and editable on the **Service Console** and, for some custom fields, visible and available to gather details on the **customer portal**. You can also specify a **data type** for the field, choose whether the field is required or not, and set a default value. **Text field** data types allow you to create an input mask to require that information entered in the field matches a defined format.

Note A combined maximum of 500 custom fields and **system attributes** can be created for each **standard object**. That is, if you have 100 incident custom fields, you could create 400 system attributes for the incident object. In addition, a combined maximum of 9 custom fields and system attributes can be indexed for each standard object. Refer to Creating system attributes.

The following table describes the types of custom fields.

Table 51: Custom Field Types

Custom Field Type	Description
Common	You can add the following types of Common custom fields: Staff Account, Contact, Organization, Sales Products, and Task.
Staff Account	Add this type of custom field to store additional information about your staff members in their staff account (for example, their hiring date). Staff account custom fields appear on the Custom Fields page of the Staff Accounts editor. **Tip:** You can organize custom fields in the Staff Accounts editor by creating folders in the Custom Fields editor.
Contact	Add this type of custom field to gather additional information about your contacts (for example, their age). Contact custom fields can be displayed when adding or editing a contact record, while engaged in a chat session, and on the customer portal.
Organization	Add this type of custom field to gather additional information about your organizations (for example, the number of employees in the organization). Organization custom fields can be displayed when adding or editing an organization.
Sales Products	Add this type of custom field to specify additional information about sales products in your product catalog (for example, international product availability). Sales products custom fields appear on the Custom Fields page of the Product Custom Fields editor.
Task	Add this type of custom field to store additional information about tasks for your staff members when adding or completing a task.
Service	You can add the following types of Service custom fields: Incident and Answer.
Incident	Add this type of custom field to gather additional information about customers' questions (for example, model and serial numbers). Incident custom fields can be displayed when adding or editing an incident and on the Ask a Question and Support History pages.

Table 51: Custom Field Types (Continued)

Custom Field Type	Description
Answer	Add this type of custom field to store and provide additional information about answers in your knowledge base (for example, version numbers the answer applies to). Answer custom fields can be displayed when adding or editing an answer and on the Answers and answer detail pages.
Opportunity Tracking	You can add the following types of Opportunity Tracking custom fields: Opportunity and Quote.
Opportunity	Add this type of custom field to gather additional information about opportunities (for example, the contact's previous service or product). Opportunity custom fields can be displayed when adding or editing an opportunity.
Quote	Add this type of custom field to store additional information about the sales quotes sent to customers (for example, the date the quote was requested). Quote custom fields can be displayed when adding or editing an opportunity.

You can create folders to group and organize your custom fields in the Custom Fields tree. By dragging and dropping custom fields in the tree, you can reorder them or move them into folders. Refer to Adding folders.

Adding custom fields is similar for each of the custom field types. Although this section contains the procedure for adding a contact custom field, use the same procedure to add all other types of custom fields.

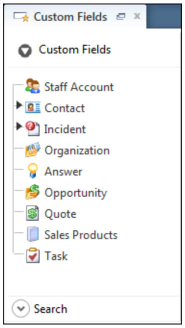
Important When you add or edit custom fields, those modifications may be completed in real time or scheduled and performed in the background. Staff members and customers can continue to use your site while the background operation is in progress.

Once a custom field operation is scheduled, it cannot be modified or aborted.

To add or edit a custom field

1 Click the Configuration button on the **navigation pane**.

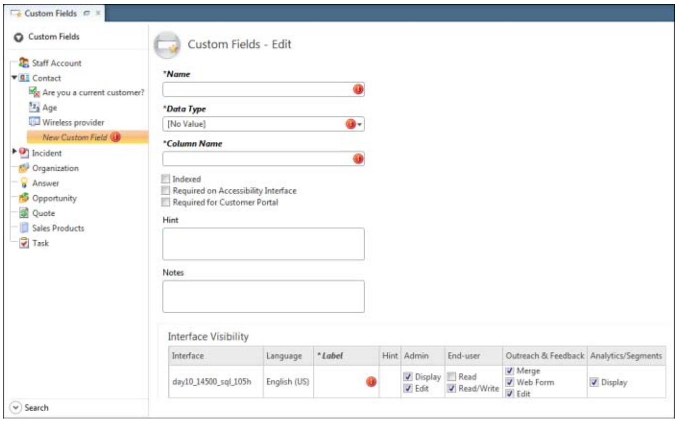
2 Double-click Custom Fields under Database. The **content pane** displays the Custom Fields tree.



3 To add a contact custom field, click Contact in the Custom Fields tree and click the New button on the **ribbon**. The editor opens.

Or

To edit a contact custom field, click it in the tree.



4 Type the name of the custom field in the Name field.

Tip You can assign a shortcut key to the custom field after you have added it on the workspace designer. See step 9 in To add a field to a workspace or script.

5 Click the Data Type drop-down menu and select the data type for this field. The following table contains a description of each data type. You cannot change the data type when editing an existing custom field.

Table 52: Custom Fields Data Types

Data Type	Description
Date Field	Select this option to add a custom field for entering a date. For staff members, the date is entered using a calendar. For customers on the customer portal, the date is entered using separate drop-down menus for month, day, and year.
Date/Time	Select this option to add a custom field for entering a date and time. For staff members, the date is entered using a calendar and the time is entered through a separate field. For customers on the customer portal, the date is entered using separate drop-down menus for month, day, year, hour, and minute.
Integer	Select this option to add a custom field for entering numeric values (for example, product or registration numbers). Integer fields can contain up to 10 digits.
Menu	Select this option to add a field with a drop-down menu from which customers and staff members can select an item. **Note:** Menu type custom fields are the only custom fields that display in answer reports through Oracle RightNow Wireless. Refer to Oracle RightNow Wireless.
Text Area	Select this option to add a text box (1-4000 characters).
Text Field	Select this option to add a text field (1-255 characters). **Note:** Masks can be used only with Text Field data types. Refer to Input masks.
Yes/No	Select this option to add a field with a Yes and No radio button.
Opt-in	Select this option to add a custom field that lets customers opt in or out of Outreach mailings and Feedback surveys. **Note:** This option is available only when adding a contact custom field.

6 Enter the following field information. The available fields vary depending on the selected data type.

Table 53: Custom Fields Editor Description

Field	Descriptions
Field Attributes	Select from the following field attributes. The data type you selected determines which field attributes are available.
*Column Name	Type the name of the field as you want it to appear in the database. You cannot use spaces or punctuation, and the value cannot start with a number. The column name in the database will be appended with the prefix c$. For example, if you add a custom field with the column name calling_plan, it will appear in the database as c$calling_plan.
Indexed	Select this check box to add a database index. This is useful if you want to use this field as a fixed or run-time filter in reports. **Indexing**, although not necessary, can make searching more efficient when the field is frequently searched on. **Note:** Indexing is not available for the text area and Yes/No data types. Also, only nine custom fields can be indexed per database table.
Required	Select this check box to make the custom field required when you **initially** add the field to a workspace. This setting can be overridden by the field's behavior properties in the workspace. Refer to Setting hidden, required, and read-only properties. **Note:** This option is available only for staff account and sales product custom fields.
Required on Accessibility Interface	Select this check box to make the custom field required on the **accessibility interface**. Selecting this check box will also make the custom field required when you **initially** add the field to a workspace. However, this setting can be overridden by the field's behavior properties in the workspace. Refer to Setting hidden, required, and read-only properties. **Note:** This option is available only for answer, contact, incident, and organization custom fields.
Required for Customer Portal	Select this check box to make the custom field required on the customer portal. **Note:** This option is available only for contact and incident custom fields.

Table 53: Custom Fields Editor Description (Continued)

Field	Descriptions
Hint	Type additional prompt information to display on the administration interface and the customer portal. The hint appears to customers to the right of the custom field in a smaller font than the name. It appears to staff members when they hover over the field on the administration interface. The hint field can contain up to 4000 characters.
Notes	Type any notes about the custom field in this text box.
Data Details	Select from the following data details. The data type you selected determines which fields are displayed in this section.
Mask	Type an input mask to restrict what can be typed in the field when you select Text Field as the data type and the Plain Text or Phone as the usage. For instructions on using masks, refer to Input masks. **Note:** This option is available only with text field data types.
Default Value	Select or type a default value for this field. Default options depend on the type of field. For example, a Yes/No field has three options from which you can choose a default (Yes, No, None). Other field types require you to type in a value.
Menu Items	Click the Add button at the top of the Data Details section to add a menu item. The added items appear at the bottom of the list. To delete an item in the menu, select the row containing the item and click the Delete button at the top of the Data Details section. Use the up and down arrows to change the order of menu items. **Note:** This option is available only with menu data types. If you have selected this data type, you must enter at least one menu item.
Sort by Sequence in Reports by Default	Select this check box to make the custom field order the default sorting option for menu custom fields in reports. If you do not select this check box, the default option will be alphanumeric sorting.
Name	Type the name of the item in the Name column of the menu items grid.
Default	Select the Default check box to make a menu item the default selection in the drop-down menu.

Table 53: Custom Fields Editor Description (Continued)

Field	Descriptions
Label	Type the label of the menu item for each interface. **Note:** Each language can have a different label. In interfaces that have the same language as the primary interface, the Label field will always match the menu item Name field.
Size of field	Type the maximum number of characters for this field. This option is available for text fields. Text fields can contain up to 255 characters. **Note:** This field is required if you have selected the text field data type. This field will be automatically completed if the field has a mask. Refer to Input masks.
Minimum	Type the minimum value for this field. This option is available for integers. Integers can contain up to 10 characters. **Note:** This field is required if you have selected the integer data type. The smallest value allowed for this field is -2147483645.
Maximum	Type the maximum value for this field. This option is available for integers. Integers can contain up to 10 characters. **Note:** This field is required if you have selected the integer data type. The largest value allowed for this field is 2147483647.
Usage	Click this drop-down menu to select how the custom field is displayed when editing a record containing the custom field. • Plain Text—The value of the custom field is displayed as a plain text field. • URL—The value of the custom field is a URL and staff members can click a button to open the URL in a web browser. • Email Address—The value of the custom field is an email address and staff members can click a button to send an email. • Phone Number—The value of the custom field is displayed as a phone number. **Note:** This option is available only with the text field data type.

Table 53: Custom Fields Editor Description (Continued)

Field	Descriptions
Interface Visibility	Select the interface visibility options and create labels and hints for this field on each interface. For a description of visibility options, see Setting custom field visibility.
Label	Type the text prompt for the custom field. This is the prompt that staff and customers will see on the interface. **Note:** Each language can have a different label. In interfaces that have the same language as the primary interface, the Label field will always match the Name field.
Hint	Type the hint that will appear when staff and customers hover over the field label. **Note:** Each language can have a different hint. In interfaces that have the same language as the primary interface, the Hint field in the Interface Visibility grid will always match the primary Hint field.

7 Click the Save and Close button to save the custom field and display it in the tree.

8 Click Yes to confirm that you want to add or edit your custom field.

Note If your site has 100,000 or more rows in its database table, a flag appears next to the custom field in the Custom Fields tree along with the label “Scheduled” or “In Progress.” Once the operation is complete, the Custom Fields tree is refreshed and the flag and label no longer appear.

Setting custom field visibility

When adding custom fields, you have several visibility options. The visibility options define where and how custom fields are presented on the **administration interface** and the **customer portal**. For example, you can make a contact custom field visible to staff members when adding an incident, but restrict their ability to edit it.

Custom fields with end-user visibility are displayed on the customer portal. If you display a custom field that is not editable by customers, it does not appear on the Ask a Question page. There are other ways to determine visibility on the customer portal, such as **widgets** and page code. Refer to Custom fields input and output.

Important Answer, incident, contact, opportunity, organization, quotes, and tasks custom fields must also be added to the appropriate record's **workspace**. Refer to Adding fields to workspaces and scripts.

The Admin Edit visibility setting must be selected in order for a custom field to be available to add to workspaces and **scripts**. Once a custom field is added to a workspace or script, its visibility, read-only, and required attributes are determined by the properties set in the workspace or script. Refer to Adding and editing custom fields.

The following visibility settings are available for custom fields.

Table 54: Custom Field Visibility Descriptions

Field	Description
Staff Account	The following visibility options are available for staff account custom fields.
Admin Edit	Select this check box to allow staff members to set the value of this field when adding or editing a staff account. If cleared, the field will not be visible on the Custom Fields page of the Staff Accounts editor.
Analytics/Segments Display	Select this check box to allow the custom field to be used as a filter or output column in custom reports. Selecting this check box also allows the use of this field for filtering and grouping in segments.
Contact	The following visibility options are available for contact custom fields.
Admin Display	Select this check box to allow the custom field to be added to contact workspaces and to display the custom field when adding and editing contact records.
Admin Edit	Select this check box to allow staff members to enter or change the value of the custom field when adding or editing a contact record. **Note:** You cannot select this check box if the Admin Display check box is cleared.

Table 54: Custom Field Visibility Descriptions (Continued)

Field	Description
End-User Read	Select this radio button to allow customers to view this custom field when updating their profile through the Your Account page. The custom field appears to the customer, but cannot be edited. **Note:** You cannot select this radio button if the End-User Edit check box is cleared.
End-User Read/Write	Select this radio button to allow customers to set the value of the custom field when updating their profile through the Your Account page. **Note:** You cannot select this radio button if the End-User Edit check box is cleared.
Outreach and Feedback Merge	Select this check box to allow the custom field to appear when adding a **merge field** in Outreach or Feedback. If cleared, the custom field will not be available in the menu of fields on the Merge Field window.
Outreach and Feedback Web Form	Select this check box to allow the custom field to appear on the Web Form Field window when adding or editing a document or survey with a web form. If cleared, the custom field will not be available in the menu of fields on the Web Form Field window.
Outreach and Feedback Edit	Select this check box to allow the custom field to appear when setting a field through a campaign or survey flow. If cleared, the custom field will not be available in the menu of fields on the Set Field window.
Analytics/Segments Display	Select this check box to allow the custom field to be used as a filter or output column in custom reports. Selecting this check box also allows the use of this field for filtering and grouping in segments.
Incident	The following visibility options are available for incident custom fields.
Admin Display	Select this check box to allow the custom field to be added to incident workspaces and to display the custom field when adding and editing an incident.
Admin Edit	Select this check box to allow staff members to enter or change the value of the custom field when adding or editing an incident. **Note:** You cannot select this check box if the Admin Display check box is cleared.

Table 54: Custom Field Visibility Descriptions (Continued)

Field	Description
End-user Display	Select this check box to display the custom field on the Support History page when customers view a previously submitted incident.
End-user Edit	Select this check box to allow customers to set the value of this field when submitting an incident through the Ask a Question page.
Chat Display	Select this check box to allow this field to be added to chat workspaces and to allow customers to set the value of this field when requesting a chat session from the Live Help page. **Note:** To be able to add an incident custom field to a chat workspace, you must also select the Admin Display check box.
Answers Migrate on Propose	Select this check box to migrate the value of the custom field when an incident becomes an answer. The value of the custom field is placed in the Notes field of the **proposed answer**.
Outreach and Feedback Merge	Select this check box to make the custom field available when adding a merge field in Outreach or Feedback. If cleared, the custom field will not be available in the menu of fields on the Merge Field window.
Analytics/Segments Display	Select this check box to allow the custom field to be used as a filter or output column in custom reports. Selecting this check box also allows the use of this field for filtering and grouping in segments.
Organization	The following visibility options are available for organization custom fields.
Admin Display	Select this check box to allow the custom field to be added to organization workspaces and to display the custom field when adding and editing organization records.
Admin Edit	Select this check box to allow staff members to enter or change the value of the custom field when adding or editing an organization record. **Note:** You cannot select this check box if the Admin Display check box is cleared.

Table 54: Custom Field Visibility Descriptions (Continued)

Field	Description
Analytics/Segments Display	Select this check box to allow the custom field to be used as a filter or output column in custom reports. Selecting this check box also allows the use of this field for filtering and grouping in segments.
Answer	The following visibility options are available for answer custom fields.
Admin Edit	Select this check box to allow staff members to enter or change the value of the custom field when adding and editing answers.
End-user Display	Select this check box to display the custom field to customers on the answer details page.
Analytics Display	Select this check box to allow the custom field to be used as a filter or output column in custom reports.
Opportunity	The following visibility options are available for opportunity custom fields.
Admin Display	Select this check box to allow the custom field to be added to opportunity workspaces and to display the custom field when adding and editing opportunities.
Admin Edit	Select this check box to allow staff members to enter or change the value of the custom field when adding or editing an opportunity. **Note:** You cannot select this check box if the Admin Display check box is cleared.
Outreach and Feedback Merge	Select this check box to make the custom field available when adding a merge field in Outreach or Feedback. If cleared, the custom field will not be available in the menu of fields on the Merge Field window.
Analytics/Segments Display	Select this check box to allow the custom field to be used as a filter or output column in custom reports. Selecting this check box also allows the use of this field for filtering and grouping in segments.
Quotes	The following visibility options are available for sales quotes custom fields.
Admin Display	Select this check box to allow the custom field to be added to quote workspaces and to display the custom field when adding and editing quotes.

Table 54: Custom Field Visibility Descriptions (Continued)

Field	Description
Admin Edit	Select this check box to allow staff members to enter or change the value of the custom field when adding or editing a quote through an opportunity. **Note:** You cannot select this check box if the Admin Display check box is cleared.
Analytics Display	Select this check box to allow the custom field to be used as a filter or output column in custom reports.
Sales Products	The following visibility options are available for sales products custom fields.
Admin Edit	Select this check box to allow staff members to set the value of this field when adding or editing a sales product. If cleared, the field will not be visible on the Custom Fields page of the Product Custom Fields editor.
Quotes Display	Select this check box to display the custom field when adding or editing a product in an opportunity's quote. The custom field appears on the Quote Product Edit window. **Note:** You cannot select this check box if the Admin Edit check box is cleared.
Quotes Edit	Select this check box to allow staff members to enter or change the value of the custom field when adding or editing a product in an opportunity's quote. The custom field appears on the Quote Product Edit window. **Note:** You cannot select this check box if the Admin Edit check box is cleared.
Purchased Products Display	Select this check box to add the custom field to the *purchased_products* database table. The field is not visible to staff members or customers. **Note:** You cannot select this check box if the Admin Edit check box is cleared.
Purchased Products Edit	Select this check box to add the custom field to the *purchased_products* database table. The field is not visible to staff members or customers. **Note:** You cannot select this check box if the Admin Edit or Purchased Products Display check box is cleared.

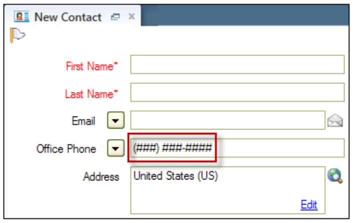
Table 54: Custom Field Visibility Descriptions (Continued)

Field	Description
Analytics/Segments Display	Select this check box to allow the custom field to be used as a filter or output column in custom reports. Selecting this check box also allows the use of this field for filtering and grouping in segments.
Task	The following visibility options are available for task custom fields.
Admin Display	Select this check box to allow the custom field to be added to task workspaces and to display the custom field when adding and editing tasks.
Admin Edit	Select this check box to allow staff members to enter or change the value of the custom field when adding or editing a task. **Note:** You cannot select this check box if the Admin Display check box is cleared.
Analytics Display	Select this check box to allow the custom field to be used as a filter or output column in custom reports.

❖ Custom fields input and output
❖ Adding fields to workspaces and scripts
❖ Setting hidden, required, and read-only properties

Input masks

Input masks are defined patterns that determine the format of information that can be typed in a **text field**. Input masks are useful for preventing data entry errors when a text field has a specific input format that must be followed (for example, a phone number that must include parentheses and a hyphen).



To define a mask pattern, two characters are required to represent one character or digit in a masked text field. The first character does not display in the masked text field, but acts as a rule to define the acceptable input format. The second character displays in the masked text field and acts as an input hint for staff members and customers.

The following table describes the first and second characters that define mask patterns. For specific examples, refer to Input mask examples.

Table 55: Input Mask Characters

Mask character	Description
First character	
F	Formatting character (space, hyphen, parentheses)
U	Uppercase letter
L	Lowercase letter
M	Ignore case (lowercase, uppercase, and numbers are acceptable)
Second character	
#	Numeric (number only)
A	Alphanumeric (either letter or number)

Table 55: Input Mask Characters (Continued)

Mask character	Description
L	Alpha (letter only)
C	Alphanumeric or formatting character

Input mask examples

The following table describes input mask types, their associated patterns, and how they display to staff members and customers in text fields.

Tip In a masked text field, the # symbol signifies a numeric character and the @ symbol signifies an alphabetic or non-numeric character. Formatting characters, such as spaces, hyphens, and parentheses, are static so staff members and customers cannot replace them with other characters.

Table 56: Input Mask Examples

Mask Type	Mask Pattern	Masked Text Field
Social Security Number 123-45-6789	M#M#M#F-M#M#F-M#M#M#M#	###-##-####
Phone number (123) 456-7890	F(M#M#M#F)F M#M#M#F-M#M#M#M#	(###) ###-####
U.S. zip code 12345-6789	M#M#M#M#M#F-M#M#M#M#	#####-####
Canada postal code A1B 2C3	ULM#ULF M#ULM#	@#@ #@#

10

Custom Objects

Custom objects allow **administrators** and developers to rapidly build and extend applications that support unique business processes. By creating custom objects, you can seamlessly integrate organization-specific data with Oracle Service Cloud, allowing you to manage and report on the data in the same way you manage and report on **incidents**, **contacts**, and other **standard objects**. Because custom object data is stored in the database, you can add custom objects to **workspaces**, **workflows**, **custom reports**, and **navigation sets**.

Note Building a complete custom object solution often requires creating different types of custom objects, including packages, objects, menu-only objects, and system attributes. For the sake of simplified discussion, these items are all referred to as custom objects in this documentation unless stated otherwise.

You can take your time when initially creating custom objects to ensure they are correct since they are not written to the database until you deploy them. In addition, since you can export custom objects and import them into other Oracle Service Cloud sites, you can create, deploy, and test custom objects on a non-production site, export them, and then import them into your production site. Refer to Deploying custom objects.

After deploying objects that have the appropriate option selected, workflow and workspace types are automatically created for them and additional profile permissions are made available. This allows your staff members to work with custom objects exactly as they work with standard objects. For example, if you create and deploy an object to store product registration information, a new workspace type will be created that you can use to create new product registration workspaces. You can then add the workspace to your navigation set and edit your **profile** to grant permissions to manage product registration information. **Standard reports** are also automatically created for objects that have associated workflows and workspaces so you can quickly locate specific custom object records and view the relationships between objects. Refer to Using custom objects.

Accessing the object designer

In order to access the object designer, you must have the Object Designer permission on the Administration tab of your profile's Permissions page. You can then create custom objects, import objects that were created on other sites, and deploy custom objects to your database. Refer to Administration permissions. You may also need to add the Object Designer component to your navigation set. Refer to Creating a navigation set for the administrator.

Due to the high degree of change that can be made to your application and database using custom objects, we recommend that few staff members are granted permission to use the object designer.

After performing these steps, you will be able to access the object designer, where you can create objects, import objects that were created on other sites, and deploy custom objects to your database.

- Creating custom objects
- Exporting and importing custom objects
- Deploying custom objects
- Using custom objects

Creating custom objects

Several types of items are available to use in your custom objects solutions, and all are created using the Objects Designer. While some solutions may require one or two of these items, other, more complex, solutions might require all of these items.

- **Package**—Packages are containers that store objects, menu-only objects, and system attributes. Refer to Organizing custom objects.
- **Object**—Objects contain fields, indices, and relationships that you define. You can create fields with different **data types** and other options, and some predefined fields are available for notes, transactions, and other items. When you create and deploy an object, a new table containing the fields you specify is added to the database. Refer to Creating objects.
- **Menu-Only Object**—Menu-only objects contain only menu options that you define. These are created to populate options in menu fields you want to add to multiple objects. Unlike objects, menu-only objects do not have options for fields, indices, and relationships (relationships to menu-only objects are created automatically when you

use menu-only objects in an object). When you create and deploy a menu-only object, a new table containing the menu options is added to the database. Refer to Creating menu-only custom objects.

- **System Attribute**—System attributes are fields that can be added to **standard objects**, such as incidents and contacts. You can select data types, indices, and define relationships for these fields. System attributes can be used in workspaces and reports, just like custom fields can. However, unlike custom fields, system attributes can be used in relationships in custom objects but cannot be used on **customer portal** pages. When you create and deploy a system attribute, a new field is added to the table for the appropriate standard object (such as the *incidents* table). Refer to Creating system attributes.

Note You can add a maximum of 200 objects, and each package can contain up to 25 objects. Menu-only objects do not count toward these limits.

The relationships you define between objects and system attributes help define what you can do with your custom object solution. For items to interact with one another, relationships must be created between them. You can define relationships between objects, system attributes, and standard objects. For example, if you created a product registration custom object, you could create a relationship between it and the *contacts* table. You could also create an object to store information about locations where the product could be purchased, and then create a relationship between the objects. Using this scenario, you could track who registered the product and where they purchased it, managing information in a single **workspace** and displaying it in **custom reports**. Refer to Defining relationships.

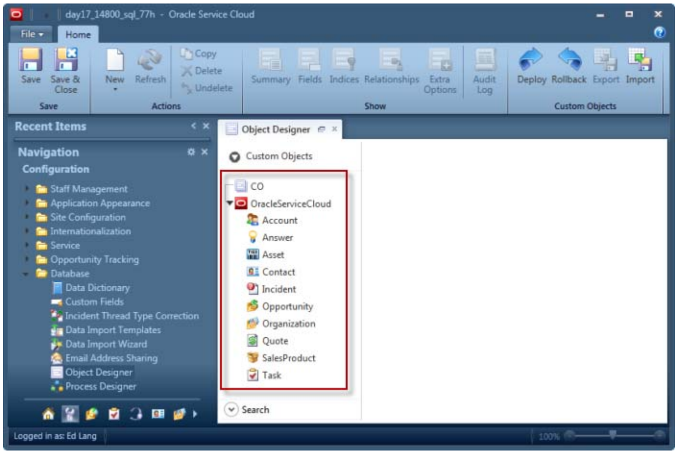
Before you create any custom objects on your production site, we recommend that you create and deploy them on a test site to ensure they function as expected. However, you can edit or delete custom objects if necessary, whether they have been deployed or not. Refer to Editing and deleting custom objects.

Important Only one staff member can edit or create objects in the object designer at a time. An option to override the lock on the object designer is displayed if you attempt to edit or create an object when another staff member is already doing so.

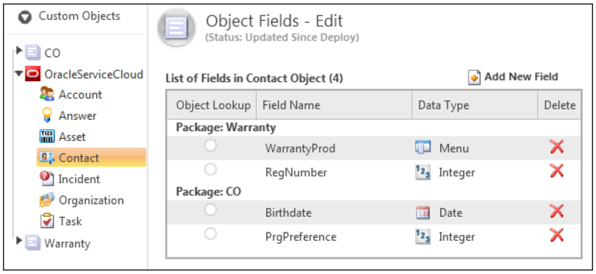
Organizing custom objects

Objects, menu-only objects, and system attributes are all stored in packages that you create. You can place objects in any package you want, but storing related objects in the same package helps you manage them. The object designer includes one default package, named CO, to give you a head start when creating custom objects. You can add objects, menu-only objects, and system attributes to this package, just like you can with any of the packages you create.

The object designer's tree also includes a list of standard objects under the OracleServiceCloud entry to help you manage system attributes, as shown here.



System attributes are stored in packages just like objects are, but it can be challenging to manage numerous system attributes that are stored in several packages. The entries in the OracleServiceCloud list display all the system attributes created for different standard objects. For example, if you click the Contact entry in the OracleServiceCloud list, you will see all the system attributes that have been created for the contacts **standard object**, grouped by the package they are in. An example showing four contact system attributes in two packages is shown here.



Creating objects

When you create an object, you are creating a new table in the database. You can specify fields, indices, and database relationships for each object you create.

To create an object

1 Click the Configuration button on the navigation pane.

2 Double-click Object Designer under Database. The object designer opens on the content pane.

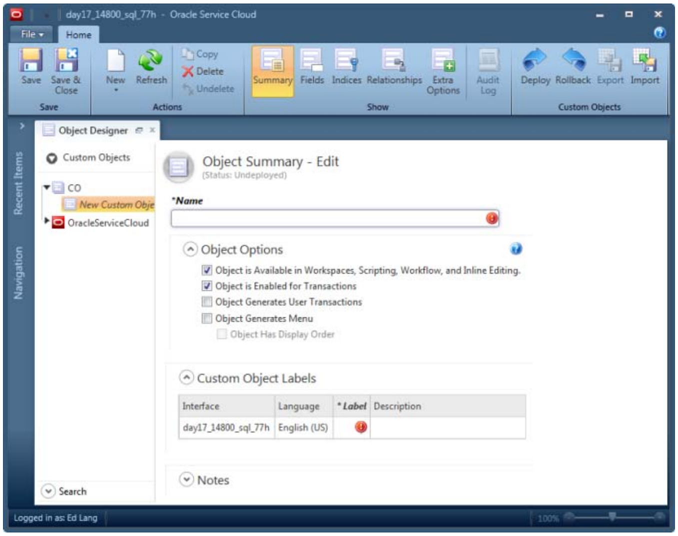
3 Select a package you want to add the custom object to.

Or

To create a new package for the object, click the New button on the ribbon and select Package. Type the name you want for the package. Package names must be between two and eleven characters in length.

Note You can also add custom objects to the default CO package. Package names are used in the names of tables created in the database for custom objects. For example, if you create a Warranty object in the CO package, the resulting table name will be *CO$Warranty*.

4 Click the New button on the ribbon and select Object. The Summary page displays.



5 Type a name for the object in the Name field. The name you define identifies the object in the database. Staff members generally see the custom object's label, defined in step 7, when working with the object.

Note Object names must start with a letter, cannot contain special characters other than the underscore character (only single underscores are allowed), and cannot contain more than twenty characters. In addition, certain words cannot be used as object or field names since they are reserved for use by other processes. If you attempt to save an object that uses a reserved word, a validation message informs you that the name must be changed.

6 Enter the following field information.

Table 57: Summary Page Description

Field	Description
Object Options	Select options in this section to specify where the object is available and other options.

Table 57: Summary Page Description (Continued)

Field	Description
Object is Available in Workspaces, Scripting, and Workflow	Select this check box to make the fields available for use in scripts, workspaces, and workflows. Standard reports and workflow types are created automatically for objects that have this option enabled. Objects do not require this option to be used in custom reports. Refer to [Agent desktop](). **Note:** This option is enabled by default.
Object is Enabled for Transactions	Select this check box to enable tracking of all create and update actions taken on the object's unique records. The transaction data is stored in the Custom Object Transactions (*co_trans*) table and can be viewed using the Audit Log workspace relationship item. **Note:** This option is enabled by default.
Object Generates User Transactions	Select this check box to enable tracking of create, update, and cancel actions taken on the object's unique records by staff members. The transaction data is stored in the Custom Object Transactions (*co_trans*) table and can be viewed using custom reports.
Object Generates Menu	Select this check box to have the object generate a menu used to populate values in menus added to other custom objects. The options in the menu are populated by the values in the **lookup field** specified for the object that generates the menu. For example, if custom object A generates a menu, you can select the menu to populate a menu field you add to custom object B. If object A's lookup field is set to Labels, and the object has three records created for it with labels of "One," "Two," and "Three," the menu in custom object B that is populated by object A will display values of "One," "Two," and "Three." **Note:** Since a menu item is added for each record created for objects that generate a menu, you will want to enable this option only for objects that will have few records created for it.
Object Has Display Order	Select this check box to make the options in the menu generated by the object sortable by sequence numbers that you specify when creating records for the object. Selecting this check box automatically adds a DisplayOrder field to the object's table that can then be added to the object's workspace. **Note:** This option is available only when the Generates Menu check box is selected.

7 To specify a label for the custom object that is different from the name entered in step 5, type the label you want in the Label field under Custom Object Labels. Labels are language specific, so you can use different labels for interfaces with different languages.

Note When an object is initially named, the object's label is automatically populated with the object's name. If the object's name is later edited, the label is not automatically updated.

8 To add a description for the custom object, type the description you want in the Description field under Custom Object Labels. Descriptions are language specific, so you can enter different descriptions for interfaces with different languages.

9 To add notes about the custom object that you or other staff members can read, such as why the object was created, click the arrow next to Notes.

  a Type the note you want in the text field.
  b Click the Add button next to the text field.
  c To add additional notes, repeat steps a and b.
  d To delete notes that have previously been added, click the Delete button next to the note you want to remove.
  e To save changes to the notes, click the Save button on the ribbon.

Note You can add or delete notes in custom objects even after they are deployed.

10 Click the Fields button on the ribbon to add predefined or customized fields to the object. Refer to Adding fields to custom objects.

11 Click the Indices button on the ribbon. The ID field is **indexed** by default, as are fields configured to be object lookups. Fields that have the Is In Single-Field Index option enabled also appear on this page.

Note Indexing a field that is frequently queried can help speed up queries, and you can define up to thirty indices per custom object. However, indexing a large number of fields can result in decreased performance.

12 To add an index to a field, click the Add New Index button.

13 Click the Add Field to Index drop-down menu and select the field you want to index. The selected field displays in the List of Indices in Object area. All field types, except Yes/No and Long Text fields, can be indexed.

Important Each object can have up to eighteen indices for each object. However, this limit also includes indices that are added automatically for each child field used in relationships you create for the object. Refer to Defining relationships.

14 To add a multiple-field index, select the index you want to edit, click the Add Field to Index drop-down menu, and select the field you want to add to the index. The fields in the index display in the List of Fields in Index area.

Note Up to four fields can be used in multiple-field indices.

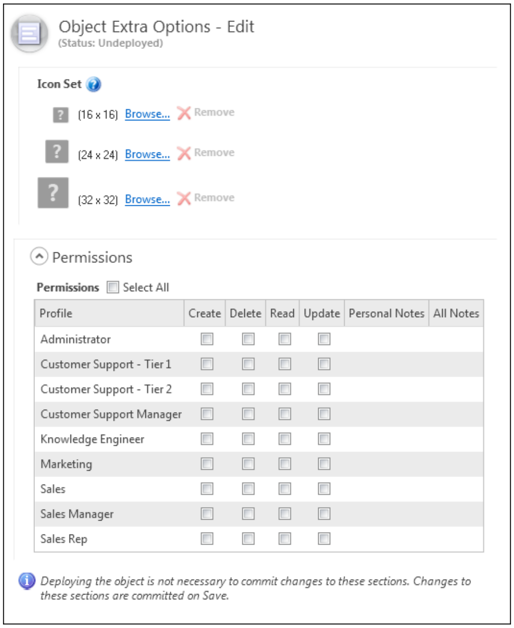
15 To remove a field from an index, select the index you want to edit and click the Delete button next to the field in the List of Fields in Index area.

Note When a field that is used in a multiple-field index is deleted from a custom object, the entire index is automatically removed.

16 Click the Relationships button on the ribbon to define and view table relationships for the object. Refer to Defining relationships.

17 Click the Extra Options button on the ribbon.

Important Changes made on the Object Extra Options page take place when you save the object. Deployment is not necessary.



18 To associate icons with the object to display in the interface, click Browse next to the following image sizes and select the image you want to use.

- **16x16**—Icons of this size are used in record tabs on workspaces, the New Workspace window, and the Workspaces and Scripts explorers.
- **24x24**—Icons of this size are used on navigation buttons.
- **32x32**—Icons of this size are used on the Insert Fields tab of the workspace designer and in flow elements on the workflow designer.

19 Select the check boxes for the permissions you want to grant to staff members associated with each profile. The following permissions are available for each profile. These permissions can also be defined on the Profiles editor.

Table 58: Edit Objects Permissions

Field	Description
Select All	Select this check box to select all permission check boxes for all profiles.

Table 58: Edit Objects Permissions (Continued)

Field	Description
Create	Select check boxes in these columns to allow staff members to create, delete, read, or update records for the custom object.
Delete	
Read	
Update	
Personal Notes	Select check boxes in this column to allow staff members to create, edit, and delete notes in custom object records. **Note:** This check box displays only for custom objects that have the Notes check box selected on the Summary page. Refer to step 6.
All Notes	Select check boxes in this column to allow staff members with this profile to edit and delete any notes added to custom object records, regardless of which staff member added the notes. **Note:** This check box displays only for custom objects that have the Notes check box selected on the Summary page. Refer to step 6.

20 Click the Save and Close button on the ribbon to save the changes to the custom object. A validation is performed when either the Save or Save and Close button is clicked. Any validation errors, such as a missing field name, display in a message and must be corrected before the object can be saved.

21 Deploy the custom objects when you are ready. Refer to Deploying custom objects.

Adding fields to custom objects

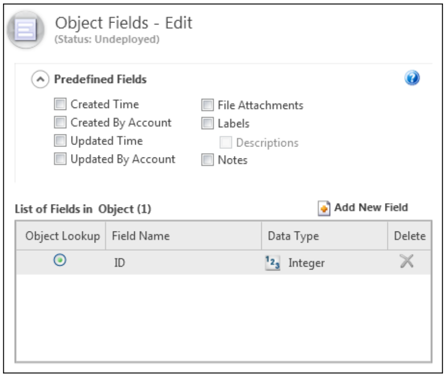
You add fields to objects and system attributes from the object designer's Fields page. When creating fields, you select the field type and specify options for the field that change depending on the type of field you create. While the options on the Fields page are similar when editing objects and system attributes, there are some differences, which are noted in the procedure.

To add a field to a custom object

1 Click the Configuration button on the navigation pane.

2 Double-click Object Designer under Database. Select the object or system attribute you want to add a field to (refer to To create an object and Creating system attributes).

3 Click the Fields button on the ribbon. The Fields page when editing an object is shown as follows. This page does not include the Predefined Fields section when editing system attributes.



Every custom object includes an Integer ID field. This field contains a unique value for each custom object record that is created.

Note Each object can contain a maximum of 500 fields, but the actual number of fields you can add is restricted by the amount of space each field uses in the database. For example, while an object could have 500 fields with a Yes/No data type, far fewer fields with a Text data type would be allowed since text fields use much more space in the database than Yes/No fields.

4 To add predefined fields to the object, select the fields you want in the Predefined Fields area of the page. Predefined fields are not available for system attributes. The following fields are available.

Table 59: Predefined Fields Description

Field	Description
Created Time	Select this check box to add the CreatedTime field to the object's table. This field tracks when custom object records are created and is updated automatically.

Table 59: Predefined Fields Description (Continued)

Field	Description
Created by Account	Select this check box to add the CreatedByAccount field to the object's table. This field tracks which staff members create custom object records and is updated automatically. **Note:** When you add this field to a custom object, a relationship to the *accounts* table is automatically created. Refer to Defining relationships.
Updated Time	Select this check box to add the UpdatedTime field to the object's table. This field tracks when custom object records are edited and is updated automatically.
Updated by Account	Select this check box to add the UpdatedByAccount field to the object's table. This field tracks which staff members update custom object records and is updated automatically. **Note:** When you add this field to a custom object, a relationship to the *accounts* table is automatically created. Refer to Defining relationships.
File Attachments	Select this check box to add the FileAttachments field to the object's table. Add this field to allow file attachments to be added to custom object records. **Note:** When you add a file attachment to a custom object record, you can change the file name, but the Description and Display Name properties that can be specified for attachments added to standard object records, such as incidents, are not available.
Labels	Select this check box to add the Labels field to the object's table. This field should be added if individual records in the custom object require their own visible labels. (For example, each incident status on your site has a distinct label and each status is a unique record in the *incident statuses* table.) **Note:** A separate Label field is created for each language used on your Oracle Service Cloud site. This allows you to enter a different label for each language.
Descriptions	Select this check box to add the Descriptions field to the object's table. This field is used to store text descriptions of records you add to the object.
Notes	Select this check box to add a Notes field to the object's table where notes about individual records can be stored.

5 To add a customized field to the custom object, click the Add New Field button and select the type of data the field will store. The following data types are available.

Table 60: Data Types Description

Data Type	Description
Yes/No	Select this option to add a field to store Yes or No values (stored as 1 and 0, respectively, in the database). Staff members use drop-down menus to enter values in Yes/No fields.
Date	Select this option to add a field to store a date. Staff members can type values in date fields or select dates using a calendar.
Date/Time	Select this option to add a field to store a date and time. Staff members can type values in date/time fields or use a calendar to select dates.
Integer	Select this option to add a field to store numeric values (for example, product or registration numbers). Integer fields can store numbers from -2147483648 to 2147483647.
Text	Select this option to add a text field. Text fields can be configured to store text, email addresses, or URLs.
Menu	Select this option to add a field with a drop-down menu from which staff members can select items. **Note:** Only one value can be selected at a time in custom object menu fields.

6 Enter the following information for the field. Some options are disabled when using certain field types.

Table 61: Field Information Description

Field	Description
Name	Type the name you want for the field. The name you specify is used in the database. To specify a different display name for the field, type a label name in the Interface Label area, which is also described in this table. **Note:** The name cannot exceed 30 characters.

Table 61: Field Information Description (Continued)

Field	Description
Field Options	Select options for customized fields in this area. Some options are disabled for certain field types.
Is Auto Update	Select this check box to automatically update the field's value when the record is updated. **Note:** This option is available only for fields with Date, Date/ Time, or Integer data types. Auto-update fields are read-only.
Is Nullable	Select this check box to allow null values in the field. Entering values in fields that allow null values is optional when editing a record. **Note:** Fields in deployed objects that have this option selected cannot be later edited to remove the option. However, fields in deployed objects can be edited to add this option. This option is always enabled for system attribute fields. Refer to Creating system attributes.
Is Read Only	Select this check box to give the field read-only access. When this option is selected, values stored in the field cannot be edited but can be used to display information. A default value must be specified for fields that have this option selected. **Note:** This option is available only for fields with Date, Date/ Time, or Integer data types.
Is In Single-Field Index	Select this option to add an **index** entry for the field in cases where the field is the only field in the index. To add a multiple-field index, click the Indices button on the ribbon. Refer to step 14 in the procedure to create a custom object. **Note:** This option is available only for fields with Date, Date/ Time, Integer, or Text data types.
Yes/No Field Settings	Click the Constant Default drop-down menu and select a default value for the field. The available options are None, Yes, and No.
Date and Date/Time Field Settings	Select options for Date and Date/Time fields in this area.

Table 61: Field Information Description (Continued)

Field	Description
Dynamic Default	Click this drop-down menu to select a value used to dynamically populate the field. The dynamic values available for Date and Date/Time fields are the current date or the current time, respectively. This field is set to None by default. **Note:** Dynamic default values are written to a record when the record is saved to the database. When editing an existing record, the dynamic default value is incremented only when another field is edited and the record is saved.
Constant Default	Type a value in this area to use as a default for the field or click the calendar to select a date from a calendar. When you select a date from the calendar for a Date/Time field, the time is automatically set to 12:00 A.M. If you want a different time, you can type it in the field.
Minimum Value*	Type a value in this area or click the calendar to select the minimum date allowed in the field. You can enter dates between January 1, 1902 and January 16, 2038. **Note:** This option is available only for Date fields.
Maximum Value*	Type a value in this area or click the calendar to select the maximum date allowed in the field. You can enter dates between January 2, 1901 and January 17, 2038. **Note:** This option is available only for Date fields.
Integer Field Settings	Select options for integer fields in this area.
Dynamic Default	Click this drop-down menu to select a value used to dynamically populate the field. The dynamic values available for integer fields are the current staff member's account ID or an incremental value. This field is set to None by default. **Note:** Incremental values apply to individual records. All records with dynamic default integer fields initially have a value of 1 in the field. In addition, dynamic default values are written to a field when the record is saved to the database. When editing an existing record, the dynamic default value is incremented only when another field is edited and the record is saved.
Constant Default	Type a value in this area to use as a default for the field. This option is disabled when an option other than None is selected in the Dynamic Default field.

Table 61: Field Information Description (Continued)

Field	Description
Minimum/Maximum	Type the minimum and maximum values allowed for the field in these fields.
Text Field Settings	Select options for text fields in this area.
Field Usage	Click this drop-down menu to select the type of text field you want to create. The following field types are available. • **Plain Text**—Select this option to configure the text field to store from 1 to 255 characters. The maximum number of characters is typed in the Length of Field field. • **Long Text**—Select this option to configure the text field to store one megabyte of characters. • **Email**—Select this option to configure the text field to store email addresses, up to 80 characters in length. Validation is automatically performed on the text entered in this type of field to ensure it corresponds to email patterns defined in the DE_VALID_EMAIL_PATTERN configuration setting. • **URL**—Select this option to configure the text field to store URLs, up to 255 characters in length. Validation is automatically performed on text entered in the field to ensure it corresponds to URL patterns. **Note:** All text field types, except Long Text, can be indexed.
Length of Field	Type the maximum number of characters that plain text fields can store in this area. Values from 1 to 255 can be entered. **Note:** This option is available only for plain text fields.
Pattern	Type a regular expression string pattern to define a format that will be used to verify the contents entered in the field. The carat (^) character is automatically added to the start of the pattern and the dollar sign ($) character is automatically added to the end. This ensures that strings entered in the custom object's field match the entire regular expression. For example, if you want to create a field to store phone numbers in a format of `123-456-7890`, enter a pattern of `[0-9]{3}-[0-9]{3}-[0-9]{4}`. Refer to Regular Expressions. **Note:** This option is available only for plain text and long text fields.

Table 61: Field Information Description (Continued)

Field	Description
Case Sensitive Sorting	Select this check box to recognize case when sorting, with lowercase characters ordered before uppercase characters in ascending order. For example, if the field's contents include values of `CAT, Cat, cat,` and `CAt`, and case-sensitive sorting is enabled, the contents will be sorted as `cat, Cat, CAt,` and `CAT`.
Defacto Unique for Analytics	Select this check box to group the field's contents by the custom object's unique key or ID number rather than the field's values. For example, the First Name field in the *contacts* table is configured to use this option in reports. When running a report that groups incidents by contacts' first names, the report automatically groups by the contact ID number (*contacts.c_id*), which is the primary key in the *contacts* table. This prevents the incidents submitted by all people with the same first name from being grouped together.
Menu Field Settings	Select options for menu fields in this area.
Menu	Click this drop-down menu to select an existing menu field, menu-only custom object, or a custom object with the Object Generates Menu option selected to populate the field's menu options. A read-only relationship to the custom object associated with the selected menu is automatically created. Refer to Creating menu-only custom objects.
Dynamic Default	Click this drop-down menu to select a default value for the menu field that changes dynamically depending on which staff member uses the field and which interface the staff member is logged into. Dynamic default values can be selected for the Accounts By Group, Accounts By Manager, Interfaces, and Languages menu fields.
Constant Default	Click this drop-down menu to select a static default value for the menu field. The available options are populated by the options in the menu field.

Table 61: Field Information Description (Continued)

Field	Description
Use Current User/ Interface/Language as Default	Select this check box to set the default value of the menu field to the value that pertains to the logged-in staff member who is working with the custom object's records. This option displays only when one of the following is selected in the menu field settings drop-down menu. • **Accounts by Manager**—When this field is used, selecting the check box uses the name of the logged-in staff member as the field's default value. • **Accounts by Group**—When this field is used, selecting the check box uses the name of the logged-in staff member as the field's default value. • **Interfaces**—When this field is used, selecting the check box uses the name of the interface the staff member is currently logged in to. • **Languages**—When this field is used, selecting the check box uses the language of the interface the staff member is currently logged in to.
Interface Label	Specify field names in this section. Different labels and descriptions can be used for interfaces with different languages.
Label	Type the label you want for the field name in this text box. By default, the name specified in the Name field is used as the label. Staff members generally see the field's label name when working with the field. **Note:** When a field is initially named, the field's label is automatically populated with the field's name. If the field's name is later edited, the label is not automatically updated.
Description	Type an optional description for the field in this text box. The description displays as a tooltip when viewing the field in workspaces or the report design center.

7 To make a text or integer field a lookup field for an object, click the radio button next to the name of the field in the Object Lookup column. This option is not available for system attribute fields.

The field defined as the object lookup is automatically added as a single-field **index** to the object. If you do not specify a lookup field, the ID field is automatically selected as a lookup field. If you select the Labels check box on the Fields page, the Labels field that is added to the object is automatically selected as the object's lookup field.

Note Lookup fields help identify records when you're working with them. Values in lookup fields are displayed on the editor's tab when you're editing records and in the Recent Items list on the navigation pane. For example, when editing an incident, the incident's reference number displays on the editor's tab since Incidents.Reference # (*incidents.ref_no*) is configured as a lookup field in the database.

In addition, lookup field values are displayed in reports for fields in other tables that join to the lookup field. For example, if you create an object with a *Name* field designated as the lookup field, then define a relationship to another object with a *NameID* field and use this field to join the objects, and then run a report with *NameID* as an output column, the values in the *Name* field will be displayed in the column.

8 To delete a field that you added, click the red X next to the name of the field. The Delete button on the ribbon is used only to delete entire objects or packages with no objects in them. Refer to Editing and deleting custom objects.

9 To edit an existing field, select the field in the list of fields and make the changes you want. Most fields in deployed custom objects can still be edited, though some options may be disabled for certain field types. Refer to Editing and deleting custom objects.

10 Click the Save button on the ribbon to save the object's fields. If you are ready to deploy your custom objects, refer to Deploying custom objects.

Defining relationships

The relationships that you define for your objects determine if the data in the objects can interact with data in other custom objects or **standard objects**. Objects must be related to use fields from one object on another object's **workspace**. For example, if you want fields from the *incidents* table to be available for use on a custom object's workspace, the *incidents* table must have a relationship with the custom object. Refer to Agent desktop.

When relationships are defined, objects are either parents or children of the object you are editing. Most custom objects and standard objects can be either parents or children of other custom objects. Relationships can be made to ten standard objects:

- Accounts
- Answers
- Assets
- Contacts
- Incidents
- Opportunities
- Organizations
- Quotes (cannot be a parent in relationships)
- Sales products (cannot be a parent in relationships)
- Tasks

Note Relationships between the *quotes* and *opportunities* standard objects are not supported.

Whether you are defining parent or child relationships, two types of relationships are available.

- **Aggregation**—This creates a close relationship between records in the objects. Use this type if you want records in the child table to be automatically deleted when their parent record is deleted from the parent table. For example, **incidents** belonging to a **contact** are deleted when the contact is deleted. If several tables are joined with aggregation relationships, deleting a record in the parent table automatically deletes all related records in the other tables.
- **Association**—This creates a loose relationship between records in the objects. Use this type if records in the child table should not be automatically deleted when their associated records in the parent table are deleted. For example, deleting a staff account does not delete incidents created by the account.

When you define relationships between objects, they are joined by integer fields that contain unique values (the field contains a unique value for each record in the object). Each custom object can have one such field. For example, incidents are linked to contacts using the Incidents.Incident ID (*incidents.i_id*) and Contacts.Contact ID (*contacts.c_id*) fields. These are both integer fields that contain unique values. Refer to To create an object.

Note Relationships to menu-only objects are automatically created when the menu-only object is used to populate menu fields in custom objects. These relationships cannot be manually deleted, but are deleted when the menu-only object is no longer used to populate menu fields or when the menu-only object is deleted. Refer to Creating menu-only custom objects.

Relationship restrictions

Before you create relationships, it is important to be aware of constraints in the relationships you can add to an object.

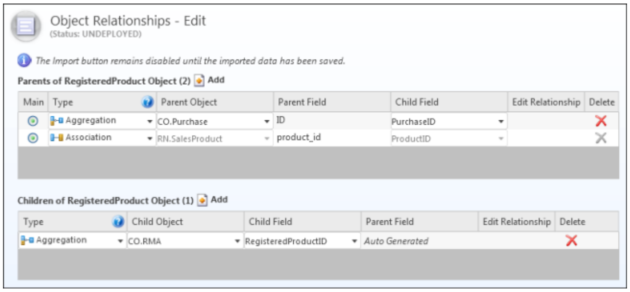
- A maximum of eighteen indices can exist for each custom object. This limit includes indices you create (refer to step 11 of the To create an object procedure) as well as indices that are created automatically. An index is added automatically for each child field used in a relationship.
- Aggregation relationships have limits that do not apply to association relationships.
  - ▷ A maximum of five aggregation relationships can be created for each object.
  - ▷ A maximum of four objects can be joined using consecutive aggregation relationships where each object is a parent of another, with object A being the parent of object B, which is the parent of object C, and so on. This limit does not apply to read-only relationships that are automatically created when certain standard menus are used to populate menu fields in the custom object.
  - ▷ Self-referencing relationships cannot be configured for Aggregation relationships. Refer to Self-referencing relationships.

To define relationships

1 Click the Configuration button on the navigation pane.

2 Double-click Object Designer under Database. Select the object or system attribute you want to edit relationships for or create a new object (refer to To create an object and Creating system attributes).

3 Click the Relationships button on the ribbon to open the Relationships page. The following screen shows an example of an object with relationships to two parent objects and one child object.



4 To add a parent relationship to the object, click the Add button next to Parents of Object.

Or

To add a child relationship to the object, click the Add button next to Children of Object.

a Click the Type drop-down menu and select the type of relationship.

Aggregation—Use this relationship type if you want records in the child table to be automatically deleted when their parent record is deleted from the parent table. For example, **incidents** belonging to a **contact** are deleted when the contact is deleted.

Association—Use this relationship type if records in the child table should not be automatically deleted when their associated records in the parent table are deleted. For example, deleting a staff account does not delete incidents created by the account.

b Click the Parent Object or Child Object drop-down menu and select the object you want to link to.

c If creating a parent relationship, click the Child Field drop-down menu and select the field in the object you are editing that you want to use as the link to the parent object.

Or

If the object does not have a field that you can use as the link, or if you don't want to use one of the existing fields, you can select Auto Generate New to have an integer field created automatically. The new field will then be added to the object you are editing, and will be used as the link to the parent table. You can view the new field on the object's Fields page.

d If creating a child relationship, click the Child Field drop-down menu and select the field in the child object that you want to use as the link to the object you are editing.

Important If the child is a **standard object**, you will need to select an integer or menu system attribute that has been created for the standard object. If a system attribute does not exist, or if you want to use a different system attribute, select Auto Generate New. A new system attribute with an integer data type will automatically be created for the standard object.

5 If you create more than one relationship to the same object, select the radio button in the Main column next to the relationship you want to use as the main relationship between the object and the custom object.

6 To delete a relationship, click the Delete button next to the relationship.

7 To edit an existing relationship, click Edit in the Edit Relationship field.

8 Click the Save button on the ribbon to save the object's relationships configuration. This also saves any system attributes that have been automatically created for standard objects in step 4. If you are ready to deploy your custom objects, refer to Deploying custom objects.

Self-referencing relationships

Self-referencing relationships can be defined for custom or standard objects that are joined by association relationships. Self-referencing relationships are configured to make an object a parent or child of itself. Workspaces for objects with self-referencing relationships can include relationship items for the object. For example, an incident workspace that includes the Incidents View relationship item can be used to associate one incident with another.

This type of configuration gives you a wide range of customization options. For example, if you have a relationship in which the *incidents* object is a parent of itself, you can configure incident workspaces to allow you to create sub-incidents or related incidents to help you track incidents related to the same issue. Or, if *contacts* is made a parent of itself, you can create contact workspaces that allow links to other contacts, such as customers living in the same residence.

❖ Agent desktop

❖ Relationship items

❖ Creating custom workspaces

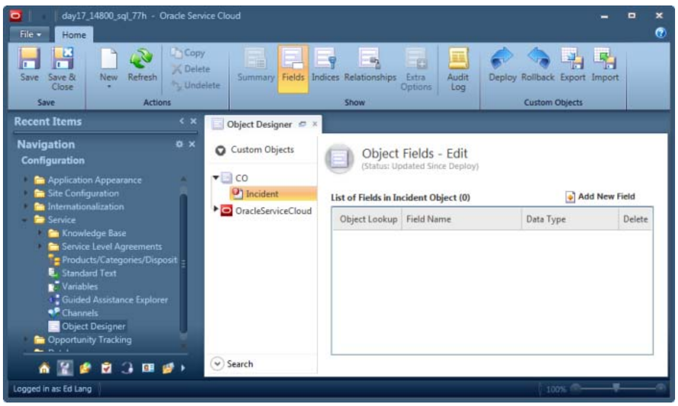
Creating system attributes

System attributes are created and managed from the object designer. You can create system attributes for accounts, answers, assets, contacts, incidents, opportunities, organizations, quotes, sales products, and tasks.

Important A combined maximum of 500 system attributes an ated for each standard object. That is, if you have 100 incident custom fields, you could create 400 system attributes for the incident object. In addition, each standard object can have a maximum of 18 system attributes and custom fields that are **indexed**.

To create a system attribute

1. Click the Configuration button on the navigation pane.
2. Double-click Object Designer under Database. The object designer opens on the content pane.
3. Select the package where you want to place the system attribute.
4. Click the New button, select System Attribute, and then select the standard object you want to create the field for. The Fields page opens.



The procedure to create system attribute fields is identical to that used to create fields for objects. Refer to Adding fields to custom objects.

5 To specify a different package for the system attribute than the one you selected in step 3, click the Package drop-down menu and select the package where the system attribute will be stored.

Or

Select Add Package to create a new package. You will need to edit the package to specify a name for it before you can click the Save button on the ribbon.

6 To define relationships for the system attribute, click the Relationships button and follow the procedure described in Defining relationships. This step is optional for system attributes. If you need to define a relationship to a custom object, you can do so when editing the object.

Note Relationships between the *quotes* and *opportunities* standard objects are not supported.

7 To define indices for the system attribute, click the Indices button and perform the steps described in steps 11 through 15 in the To create an object procedure. Adding indices to system attributes is optional.

8 Click the Save button on the ribbon to save the new field.

9 Click the Deploy button on the ribbon to deploy the new system attribute. Refer to Deploying custom objects.

After you deploy the system attribute, it can be used in reports, workspaces, and custom objects, and you can manage and edit the system attribute from the object designer.

- ❖ Creating objects
- ❖ Defining relationships
- ❖ Deploying custom objects
- ❖ Using custom objects

Creating menu-only custom objects

Menu-only custom objects store menu options for populating menu fields in other custom objects. This allows you to use the same menu lists to populate menu fields in multiple custom objects. In addition, since management of items in menu-only objects is handled from the Customizable Menus tree, it is simple to add, edit, or delete items in the menus whenever you need to.

For example, if you were creating a product registration solution, you could create a menu-only object that lists locations where customers can purchase your products. You could then create another custom object that stores when the product was purchased, who purchased it, and where they purchased it. You could use the menu-only object to populate the menu field that tracks where the product was purchased.

Configuring menu-only custom objects is straightforward since all configuration is performed on the object designer's Summary page. **Ribbon** buttons to access the Fields, Indices, Relationships, and Extra Options pages are disabled. You don't need to configure relationships to menu-only objects since they are created automatically when you use the menu-only objects to populate menu fields in other custom objects. Refer to Defining relationships.

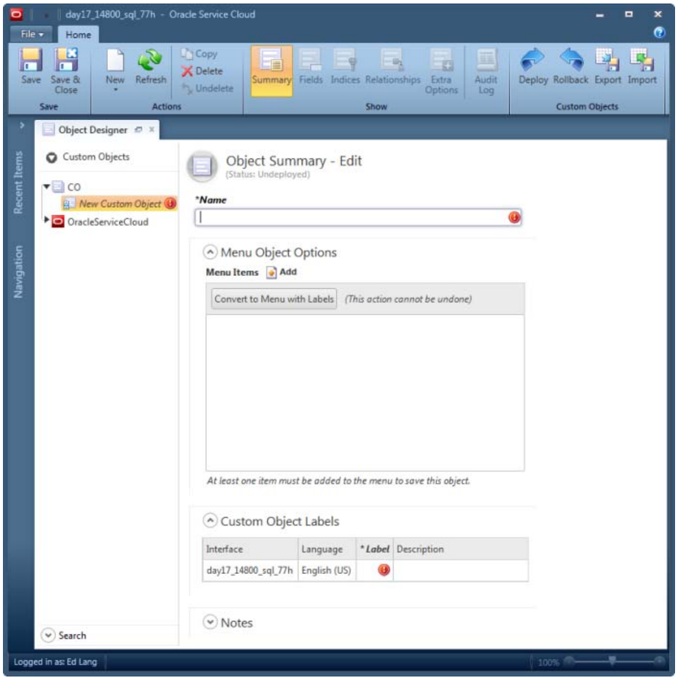
Important Changes to menu items in a deployed menu-only object are performed using the Customizable Menus configuration item. After a menu-only object is deployed, it is treated the same way as other menu objects, such as **industry types** or **incident queues**. Refer to Customizable Menus.

To create a menu-only object

1. Click the Configuration button on the navigation pane.
2. Double-click Object Designer under Database. The object designer opens on the content pane.
3. To create a package for the object, click the New button on the ribbon and select Package. Type the name you want for the package. Package names must be eleven characters or less.

Note You can also add custom objects to the default CO package. Package names are used in the names of tables created in the database for custom objects. For example, if you create a WarrantyMenu object in the CO package, the resulting table name will be *CO$WarrantyMenu*.

4. Select the package you want to add the custom object to.
5. Click the New button on the ribbon and select Menu Only Object. The Summary page displays.



6 Type a name for the object in the Name field. The name you define identifies the object in the database. Staff members generally see the custom object's label, defined in step 12, when working with the object.

Note Object names must start with a letter, cannot contain special characters other than the underscore character (only single underscores are allowed), and cannot contain more than twenty characters. In addition, certain words cannot be used as object or field names since they are reserved for use by other processes. If you attempt to save an object that uses a reserved word, a validation message informs you that the name must be changed.

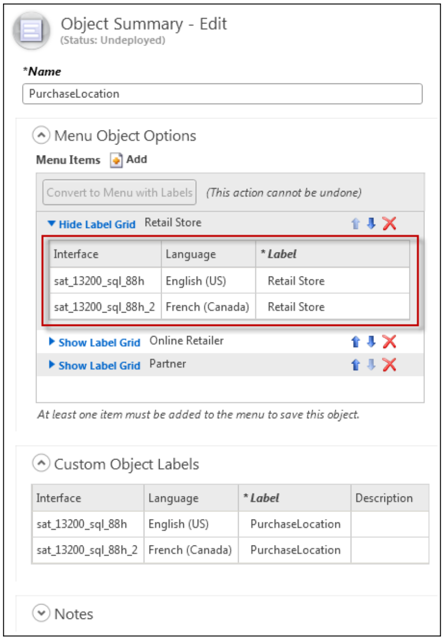
7 Click the Add button to add a menu item. A row is added to the list of menu items.

8 Click the new row and then type a name for the menu item.

9 Repeat steps 7 and 8 to add other menu items.

10 To add language-specific labels to the menu items, click the Convert to Menu with Labels button. This action cannot be undone and it cannot be selected after the object is deployed. Use this option if your site has interfaces with different languages.

a Click the Show Label Grid drop-down menu next to each menu item to display the label grid, which is shown as follows.



b Type the text you want to display for the menu item for each interface in the grid's Label field.

c To hide the grid, click Hide Label Grid.

Note After menu-only objects with labels are deployed, you can modify the text for the labels by editing the objects from Customizable Menus. Refer to Customizable Menus.

11 To change the ordering of the menu items in the list, click the up or down arrow next to the name of the item that you want to move. The item moves up or down in the menu list.

12 To specify a label for the custom object that is different from the name entered in step 6, type the label you want in the Label field under Custom Object Labels. Labels are language specific, so you can use different labels for interfaces with different languages.

Note When an object is initially named, the object's label is automatically populated with the object's name. If the object's name is later edited, the label is not automatically updated.

13 To add a description for the object, type the description you want in the Description field under Custom Object Labels. Descriptions are language specific, so you can use different descriptions for interfaces with different languages.

14 To add notes about the custom object that you or other staff members can read, such as why the object was created, click the arrow next to Notes.

a Type the note you want in the text field.

b Click the Add button next to the text field. The note you added appears below the Notes text field.

c To add additional notes, repeat steps a and b.

d To delete notes that have previously been added, click the Delete button next to the note you want to remove.

e To save changes to the notes, click the Save button on the ribbon.

Note You can add or delete notes in custom objects even after they are deployed.

15 Click the Save and Close button on the ribbon to save the menu-only object.

To use a menu-only object in a custom object

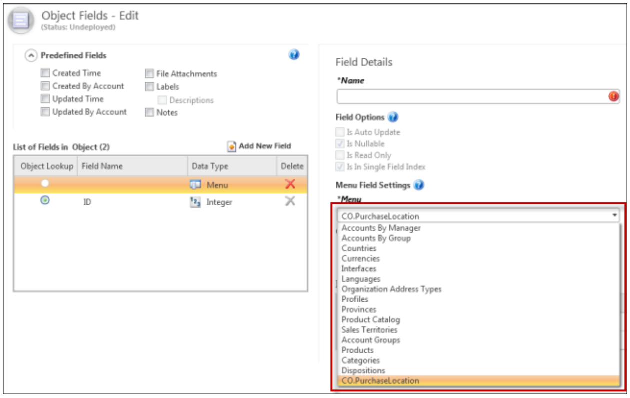
1 Edit the custom object that will use the menu field.

Tip In addition to populating menu fields in objects, you can use menu-only objects to populate the options for system attributes with menu data types.

2 Click the Fields button on the ribbon.

3 Edit or add a menu field to the custom object.

4 Under Menu Field Settings, click the Menu drop-down menu and select the menu-only object you created. The standard menu lists in your site are also available. Options to populate a sample menu field in an object are shown as follows.



5 Click the Save button on the ribbon to save your changes.

6 Deploy the custom objects when you are ready. Refer to Deploying custom objects.

Editing and deleting custom objects

Before custom objects are deployed, you can change any part of their configuration or delete them without impacting the database since they have not been written to the database. If you make numerous changes to custom objects that you later choose not to deploy, you can roll back the changes and the custom objects will revert to the state they were in at the time of the previous deployment (if the custom objects have never been deployed, all custom objects are removed).

After deploying custom objects, you can still update or delete them if necessary, although you must then redeploy them to implement the changes to the database. We recommend redeploying custom objects only if necessary since the database will be altered. Refer to Deploying custom objects.

There are some important considerations to keep in mind before you delete custom objects or fields in custom objects.

- Deleting custom objects that have relationships to other objects results in the relationships also being deleted.
- Deleting fields in custom objects that are used in relationships will also delete the relationships.

- Deleting fields from custom objects that are used in indices will also delete the indices, whether they are single-field or multi-field indices.
- When you delete menu-only custom objects that are used in menu fields in other custom objects, those menu fields are also deleted.

To edit or delete a custom object

1 Click the Configuration button on the navigation pane.

2 Double-click Object Designer under Database. The object designer opens on the content pane.

3 To edit a custom object, select it in the Custom Objects list and make your changes. Refer to Creating objects, Creating system attributes, or Creating menu-only custom objects.

Important To edit items in a menu-only custom object that has been deployed, use the Customizable Menus configuration item (located under Configuration > Application Appearance). After a menu-only object is deployed, it is treated the same way as other menu objects, such as industry types or incident queues. Refer to Customizable Menus.

4 To delete a custom object, select it in the Custom Objects list, click the Delete button on the ribbon, and then click the Yes button on the Delete Action window.

   a To restore the deleted custom object, click the Undelete button on the ribbon. This button is disabled if the custom object was not previously deployed.

5 Click the Save button on the ribbon to save the changes.

6 To write the changes to the database, you need to deploy the custom objects. Refer to Deploying custom objects.

7 Click X on the top right of the console to close the object designer.

Note If you attempt to close the object designer without saving your changes, a Data Modified message displays asking if you want to save the changes. If you select No, all changes to your objects will be lost.

To roll back changes to custom objects

1 Click the Configuration button on the navigation pane.

2 Double-click Object Designer under Database. The object designer opens on the content pane.

3 Click the Rollback button on the ribbon. A message displays to confirm the rollback.

Important After confirming the rollback in the next step, the undeployed edits made to your custom objects are immediately removed. Clicking the Save or Save and Close button on the ribbon has no impact after confirming the rollback.

4 Click the OK button on the Rollback confirmation message.

Deploying custom objects

After you create custom objects, you must deploy them to apply the changes to the database. When you deploy custom objects, the database is updated to add new fields, tables, relationships, and indices for the custom objects, so it is important that they are correct before you deploy them.

Important When a deployment occurs, the object designer is unavailable until the deployment completes. An email is sent to a specified address upon completion or if the deployment fails to complete.

When you deploy custom objects, all custom objects in all packages are deployed. Custom objects that have previously been deployed will be examined for changes. If no changes have been made to those objects since the previous deployment, the objects are ignored during deployment.

During deployment, several tasks are performed that can take some time. The custom objects are first written to a file, and then the database is updated to add the tables, fields, indices, and keys for your custom objects. Given how intensive this process is, deploying on your production site should be performed after business hours or when work on the site is at a minimum. You can schedule deployments to occur when you want and you can specify the maximum amount of time that can be granted to the deployment, so scheduling a deployment for off-peak times is easy.

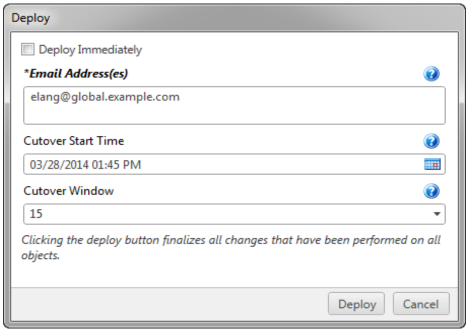
To deploy a custom object

1 Click the Configuration button on the navigation pane.

2 Double-click Object Designer under Database. The object designer opens on the content pane.

Note Before you deploy the custom objects, we recommend that you first review them to ensure that no additional changes are needed.

3 Click the Deploy button on the ribbon to open the Deploy window.



4 Type the email addresses you want to send notifications to in the Email Address field. Multiple addresses must be separated by commas. The logged-in staff account's email address is automatically added to the field. Addresses entered in this field receive emails when deployment completes or when an issue preventing deployment is encountered.

5 Specify when you want the deployment process to begin.

The amount of time required for deployments varies significantly depending on a number of factors, including the number of custom objects being deployed, the fields they contain, and the relationships that must be created. In general, deploying new custom objects takes less time than re-deploying existing custom objects to modify or add fields, since the tables for existing custom objects may contain large numbers of records that will need to be updated.

a To immediately deploy all custom objects, select the Deploy Immediately check box.

Important This option should be used with caution on production sites. If you use this option on a production site and the deployment takes a long time, your site may be negatively impacted until the deployment completes.

b To specify a time when you want the deployment process to start, enter the date and time you want the deployment to begin in the Cutover Start Time field. You can either type the date and time you want or you can click the calendar next to the field and select the date for the deployment. The default time is the current time, adjusted for the time zone defined in your staff account. The start time can be no more than forty-eight hours past the current time.

c Click the Cutover Window drop-down menu and select the amount of time after the cutover start time that the deployment process can start.

The window defines the period during which the cutover process can begin. The process may not start immediately at the specified cutover start time due to issues that may prevent the cutover from starting such as the database being unavailable or a utility being unable to run. If the cutover cannot start during this window, the deployment process is halted and an email is sent to the address specified in step 4.

Important If the deployment process fails to begin during the cutover window, you will need to open the object designer and select the deployment options again. No other options are available on the object designer until deployment completes.

6 Click the Deploy button to schedule the deployment of the custom objects. A Deploy message displays.

7 Click the Yes button to confirm the deployment. The object designer will be unavailable until the deployment completes.

After custom objects are deployed, new workspace types are made available for objects that have the Object is Available in Workspaces, Scripting, and Workflow option enabled so you can work with them in the same way you work with incidents or contacts. In addition, standard reports are automatically created for deployed objects that have this option enabled. Refer to Using custom objects.

Exporting and importing custom objects

Before you deploy custom objects on your production site, we recommend that you first test them on a test site that is similar to your production site. This helps ensure that the custom objects function as expected and interacts with other data in your site the way you want. After verifying that the custom objects are configured correctly on the test site, you can export the objects from the test site and then import them into your production site. The imported objects will include all the fields, indices, and other attributes originally configured for them. The objects' relationship configuration is also included as long as all the related custom objects are exported and imported.

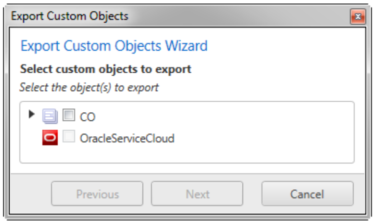
Important Only custom objects that have been deployed can be exported. In addition, only system attributes, menu-only objects, and objects that have the Object is Available in Workspaces, Scripting, and Workflow option selected can be exported. Since a maximum of twenty-five custom objects can be imported at a time (not including menu-only objects), we recommend exporting no more than twenty-five custom objects at a time. Multiple export files can be created and then imported.

To export custom objects

1 Click the Configuration button on the navigation pane.

2 Double-click Object Designer under Database. The object designer opens on the content pane.

3 Click the Export button on the ribbon. The Export Custom Objects Wizard opens.



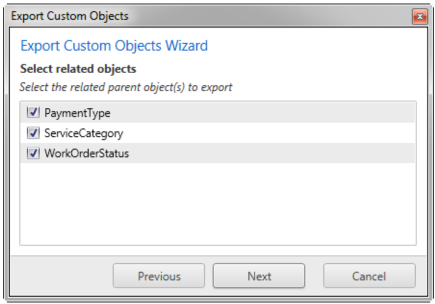
Packages that do not contain deployed objects are disabled and cannot be selected for export. In the wizard example above, the CO package includes deployed custom objects that can be exported. The OracleServiceCloud package, which contains system attributes, is disabled since no system attributes have been created in this example.

4 Click the arrow next to a package to display the objects in the package and then select the check boxes next to the objects you want to export.

a To select all the objects in the package, select the check box next to the package name.

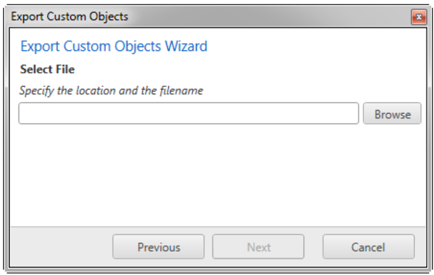
5 Click the Next button.

6 If the objects selected for export have aggregate child relationships to other custom objects that are not selected for export, the next page of the wizard gives you the option to also include the parent custom objects in the export. Refer to Defining relationships.



  a Clear the check boxes next to the objects you do not want to export. By default, custom objects that are aggregate parents of objects selected for export will also be exported.

7 Click the Next button.



8 Click the Browse button to open the Save As window to select the location where you want to save the export file and type a name for the file. The export file will be saved with a *.zip* extension. Click the Save button on the Save As window.

Or

If you know the path where you want to save the file and the file name you want to use, type it in the text box instead of clicking the Browse button.

9 Click the Finish button. A message informs you that the export was successful. Click the OK button to close the message and the Export Custom Objects Wizard.

10 To export additional objects, which you may need to do if exporting more than twenty-five objects, repeat steps 3 through 9.

11 Click X on the top right of the console to close the object designer.

To import custom objects

1 Click the Configuration button on the navigation pane.

2 Double-click Object Designer under Database. The object designer opens on the content pane.

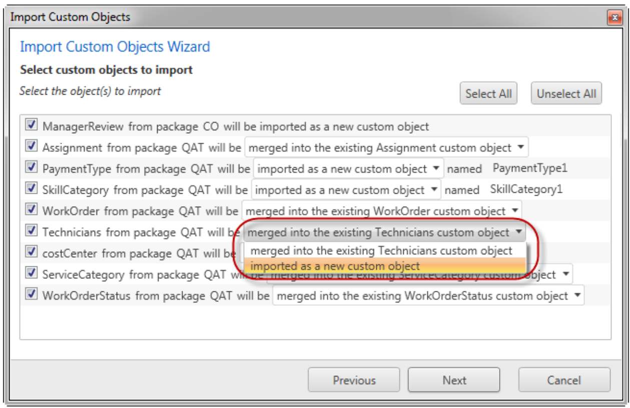
3 Click the Import button on the ribbon. The Import Custom Objects Wizard opens where you select the file to import.

4 Click the Browse button to select the *.zip* file that contains the custom objects you want to import and then click the Open button.

Or

If you know the path and file name of the import file, type it in the text box instead of clicking the Browse button.

5 Click the Next button. The next page of the wizard opens, showing you the custom objects that will be imported. Objects are displayed in the Select the Object(s) to Import area of the page, and system attributes are displayed in the Select the Field(s) to Import area, as seen here.



If you import objects with the same package and object names as existing objects on the site, you can either merge the imported objects with the existing ones or create new objects with different names. If you choose to merge the objects instead, the existing object is updated to include additional fields that are in the imported object. No changes are made to fields in the existing object that are not in the imported object.

Note Menu-only objects and system attributes cannot be merged. When these are imported into a site that has matching items with the same names, the imported custom objects will automatically be given new names.

6 Select options for the imported objects.

a To create a new custom object instead of merging a custom object, click the arrow next to the text that reads "merged into the existing custom object" and select "imported as a new custom object," as seen in the preceding screen. A default name for the new object displays next to the drop-down menu. Click the default name and type a new name in the text box to define a different name.

b To prevent a custom object from being imported, clear the check box next to it. To clear the check boxes next to all custom objects, click the Unselect All button.

Note If you clear the check boxes next to objects with a parent-child relationship and then add the child object back to the import, the check boxes next to the parent objects are selected automatically. This ensures that all objects required for a relationship are included in the import. You can then clear the check boxes next to the parent objects if you do not want to import them.

7 Click the Finish button to complete the import. A message informs you that the import was successful. Click the OK button to close the message and the Import Custom Objects Wizard.

8 To import additional objects, which you may need to do if importing more than twenty-five objects, repeat steps 3 through 7.

9 To deploy the imported objects on your site, click the Deploy button on the ribbon. Refer to Deploying custom objects.

10 Click X on the top right of the console to close the object designer.

Using custom objects

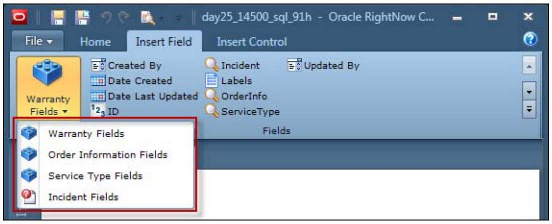
After deploying custom objects, they are treated in the same way as **standard objects** and **custom fields**. However, before you can work with custom object records or report on them, you need to perform some additional steps.

- Create **workspaces** your staff members will use to work with custom object records. Refer to Agent desktop.
- Add reports to your staff members' **navigation sets** so they can create and access custom object records. Refer to Navigation sets.
- Edit **profiles** to specify permissions for staff members to use the custom object workspaces and work with the objects' records. Refer to Profiles.
- Create some **custom reports** to track information about your custom object data, such as when records are created, the number of records created, and which staff members worked with them. Refer to Analytics.
- If you create custom objects to import existing information stored in an external database into Oracle Service Cloud, use the **Data Import Wizard** to copy the information into your site. Refer to Data Import.

Agent desktop

Deployed custom objects can be added to your agent desktop components, including **workspaces**, **workspace rules**, **workflows**, and **agent scripts**. Using objects and system attributes in these areas is no different than using **standard objects** and **custom fields**. However, where default workspaces are automatically created for standard objects, workspaces are not automatically created for custom objects so you need to create them so your staff members can add and edit records for your custom objects.

When creating workspaces for custom objects, the Insert Field tab on the workspace designer's **ribbon** gives you access to the custom object's fields as well as fields of objects that are parents of the custom object. The Insert Field tab on the workspaces editor is shown in the following figure.



In this example, the workspace is being created for the WorkOrder custom object. Since **incidents** and the Service Category custom object are both parents of the WorkOrder custom object, the fields from the parent objects can also be added to this workspace.

If an object is the child of another object in a relationship, and if both objects can have workspaces created for them, you can edit the parent object's workspace to add a relationship item for the child object. The names of the relationship items for child objects are derived from the object's label followed by "View" (for example, a relationship item for an object named Warranty will be named Warranty View). This relationship item lets you access the child object's records while working with a record for the parent object. For example, you can add the Incident View relationship item to a **contact** workspace to let you access incidents when viewing a contact record.

Important If the same object is added as a child in multiple relationships to the same parent (for example, if the contacts object is specified as the child of the incidents object in two relationships), the workspace designer's ribbon will still contain only one view item for the object. However, when you add the view item to a workspace, you can specify which report to use for the view item. This lets you define which of the child relationships the view item will use.

If you have created a self-referencing relationship between objects, such as making incidents a child of itself, you can add a view item for the object to the object's workspace. This configuration lets you create parent/child associations between different records for the same object. For example, adding the Incidents View item to an incidents workspace lets you create or edit a child incident when editing the parent incident.

Tip Browser **controls** added to workspaces can include variables in the URLs to pass information about custom object records to a web page. The variable has a format of `$package_name$object_name.field name`. For example, to pass information about a field named PaymentType in an object named WorkOrder in the CO package, append `$CO$WorkOrder.PaymentType` to the browser control's URL. Refer to Working with browser controls and the Oracle RightNow Connect Desktop Integration (**Javascript API**) documentation available at our support site.

- Defining relationships
- Creating custom workspaces
- Creating workflows
- Creating guides
- Workspace and Script Elements

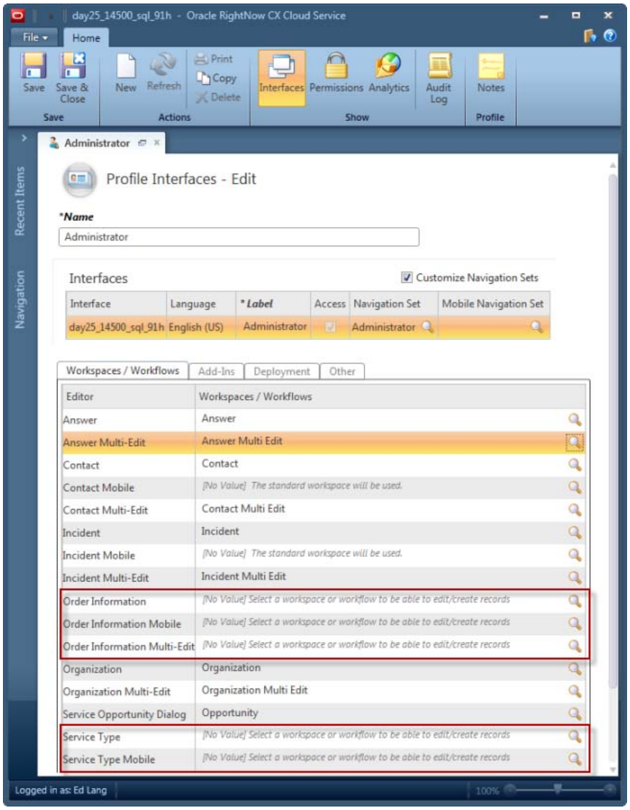
Navigation sets

Staff members who require access to custom object records must be able to open the records from their **navigation set**. **Custom reports** that are configured to let you open custom object records can be added to navigation sets, and options to create new custom object records can be added to the **file menu** using the Navigation Sets editor. Refer to Creating navigation sets and Configuring the file menu.

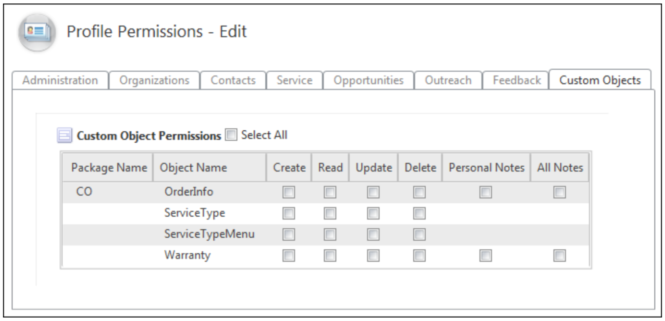
In addition, you can add standard search reports to navigation sets to help you quickly locate specific custom object records. These reports are automatically created for all deployed custom objects and are located in the Reports explorer's Public Reports > Common > Views–Common > Search Reports–Custom Objects folder. Refer to Searching for records with Quick Search.

Profiles

The **workspaces** or **workflows** you want to use to create and edit custom object records are specified in your profile. You specify workspaces or workflows for custom objects in the same way that you associate customized workspaces to edit **incidents** or other **standard objects** (refer to Customizing profiles). The following figure shows a profile that needs to have workspaces assigned for custom objects.



In addition to associating workspaces or workflows with custom objects, you need to specify permissions for your staff members to read, delete, and perform other actions on custom object records. Each deployed custom object is listed on the Custom Objects tab of the Profiles editor.



The custom objects are organized by the package they are in. Similar permissions can be granted for each object, though the Notes permissions are available only for objects with fields that have notes.

- Customizing profiles
- Custom object permissions

Analytics

Deployed objects that have the Object is Available in Workspaces, Scripting, and Workflow option enabled automatically have standard reports created for them. You can find the reports in the Reports explorer's Public Reports > Common > Views–Common > Search Reports–Custom Objects and Editor Reports–Custom Objects folders. These reports are primarily intended to be used as Quick Search reports and in workspaces to provide access to the custom object records.

All deployed custom objects are available for use in **custom reports**, so you can create the custom reports you need to track your data. Using custom object data is no different than using data in standard tables, with the exception that data in menu-only custom objects is not available for **inline editing**. Refer to Creating menu-only custom objects and Enabling inline editing.

When creating reports in the report design center, you can find your custom objects in the **data dictionary**. The fields created for system attributes and the tables created for objects each have unique naming conventions (these conventions are also followed when viewing custom objects in the Data Dictionary located at Configuration > Database > Data Dictionary).

- **System attribute fields**—Fields created for system attributes are listed in the table they are associated with, just as custom fields are. However, where the database names for custom fields are prepended with *c$*, the database names for system attributes are prepended with the name of the package they are in followed by the dollar sign. For example, after creating an incidents system attribute named ManagerReviewed in the CO package, a field named “Manager Reviewed (*CO$ManagerReviewed*)” will display in the *incidents* table.

- **Object tables**—Tables that store object data are listed by the objects’ label names. The tables’ database names are derived from the name of the object, prepended with the name of the package and the dollar sign ($). For example, an object in the CO package that is named ProdReg with a label of Product Registration displays in the data dictionary as “Product Registration (*CO$ProdReg*).”

Tip To use custom object transactional data in a custom report, you need to use fields from the Custom Object Transactions (*co_trans*) table instead of the Transactions (*trans*) table (refer to Transaction Descriptions).

Refer to Custom Reports.

Data Import

After deploying custom objects and configuring **workspaces**, **navigation sets**, and other components, you can enter data in the custom objects’ records just like you enter information for individual **incidents**, **contacts**, or **tasks**. However, you can also use the Data Import Wizard to import a large number of records into your custom objects from an external file. Data can be imported into objects as well as system attributes. Since custom objects are used to integrate your organization’s unique data into Oracle Service Cloud, you will likely want to consider using this option to copy data from an external database into your site. Refer to Importing data.

11

Custom Processes

Custom processes are predefined object event handlers (PHP scripts) that run as the result of an event occurring on **standard** or **custom objects**. Object event handlers can help your organization automate tasks based on the events that trigger them. For instance, when an incident is updated, an object event handler can be triggered to update a record in an external system. Event handlers can also be used in **rules**, **surveys**, and **campaigns**.

Overview

Object event handlers are added and managed on the process designer in a virtual container called the process model. Once you add your object event handlers, you'll need to deploy the process model in order to use the object event handlers in Oracle Service Cloud. Since the process model is not written to the Oracle database until it is deployed, you can take your time when adding object event handlers. When you are ready to test the process model, you can export it and import it into a non-production site. When you are finished testing the process model, you can export it from your non-production site, import it into your production site, and deploy it.

Important The process designer interacts with the Connect Common Object Model (CCOM), which is publicly accessible and backward compatible. The CCOM can also be accessed using Oracle RightNow Connect Web Services for SOAP and the Oracle RightNow Connect PHP API Cloud Service.

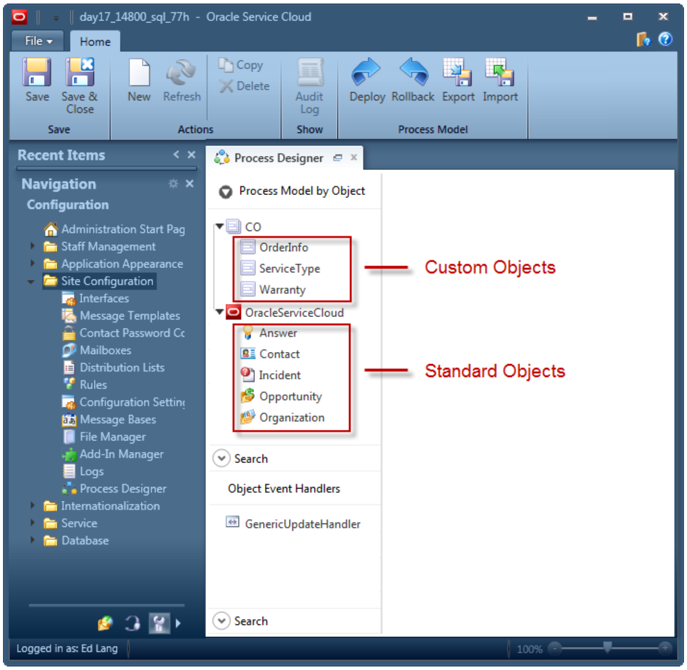
- ❖ Exporting and importing the process model
- ❖ Deploying and rolling back the process model

Accessing the process designer

To access the process designer, your profile must have the Process Designer permission on the Administration tab enabled. You can then add object event handlers and deploy the process model to the Oracle database. Refer to Administration permissions. In addition, you may need to add the Process Designer component to your navigation set to view it. Refer to Creating a navigation set for the administrator.

Note Due to the high degree of workflow change that can be made to your application when using custom processes, we recommend that few staff members are granted access to the process designer.

When you open the process designer, you will notice that the tree includes a list of **standard objects** under the OracleServiceCloud entry and **custom objects** under the CO package or other packages you create in the object designer. Only deployed custom objects are available on the process designer (refer to Creating objects and Organizing custom objects.)



The objects shown in the tree can be associated with the event handlers you add using the process designer. If you intend to use event handlers in rules, surveys, or campaigns, you do not need to associate them with objects. Refer to Triggering object event handlers.

Adding object event handlers

Object event handlers are available for both custom objects and standard objects. Custom object event handlers act on custom objects, whereas standard object event handlers act on standard objects in the Connect Common Object Model, including Answer, Contact, Incident, Opportunity, and Organization.

Important When creating an object event handler, required test harness code must be implemented in the PHP script to ensure compatibility with Oracle Service Cloud. Refer to Example object event handler script with test harness.

You can also add event handlers to use in **rules**, **surveys**, and **campaigns**. These event handlers do not need to be associated with the objects listed on the process designer. Refer to Triggering object event handlers.

Before you add an object event handler, we recommend reviewing our best practices to ensure you are aware of potential issues.

Best practices and rules for testing object event handler scripts

The following best practices can be helpful when creating and testing object event handler scripts.

- Have a complete test in mind. Consider all the expected conditions and effects of the object event handler script and test for them in the test harness.
- Handle expected and possible errors with try/catch statements.
- Consider selecting the Can Suppress check box on the process designer or including SuppressExternalEvents in a ->save in your script. If neither of these steps are performed, the script might re-enter itself in an infinite loop.
- Consider the test harness when integrating with external systems. For instance, the $run_mode parameter and the apply() method of your object event handler script can be tested to determine whether it is being run as part of a test or not. You must decide how to test against external integrations or systems.
- Objects passed after an edit contain only the data that was modified during the edit. For instance, if an incident thread is modified during an edit, only that thread is passed. Other data associated with the object (such as other incident threads) needs to be passed using a new instance of the object.
- Object event handler script headers include `Package:` and `Objects:` tags. The package tag defines the package where you place the script rather than the package where the objects are located. The objects tag defines which objects the event handler impacts. You must list the objects using their PHP names. For instance, if you have a custom object named Warranty located in the CO package, the object's name in the tag will be CO\Warranty.
- Custom processes do not affect the behavior of PHP global variables. Refer to Variable Scope in the standard PHP documentation.

Keep the following points in mind when testing an object event handler script *before* deployment.

- Any regular or error output displays in a dialog when the test is complete.
- Any errors encountered prevent the State field from being marked Tested.
- Any errors encountered within the test harness are not logged and are not counted against the runtime errors of a deployed script.

Keep the following points in mind when testing an object event handler script *after* deployment.

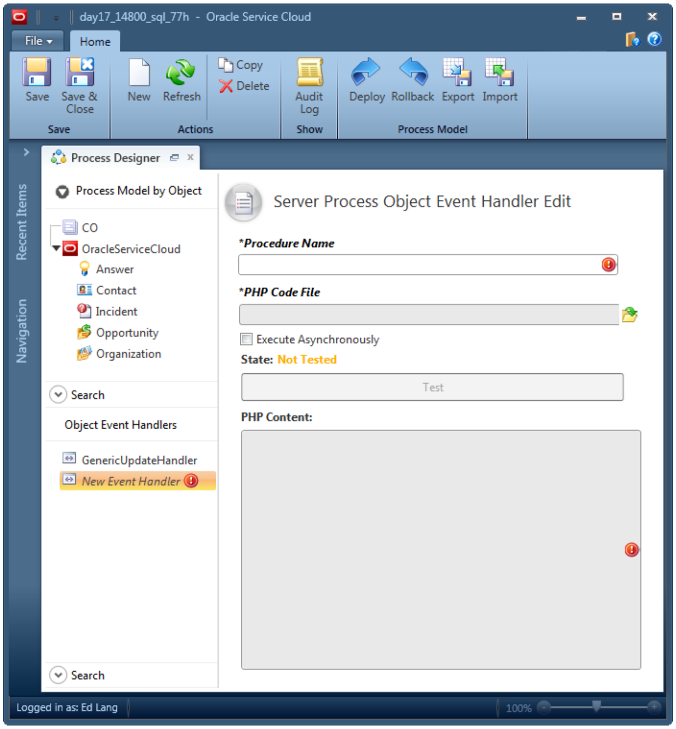
- Any deployed object event handler script that encounters five errors (without any intervening success) will be disabled and the status of the State field changes to Errored. Otherwise, the script will become disabled on or

To add an object event handler

1 Click the Configuration button on the **navigation pane**.

2 Double-click Process Designer under Site Configuration. The process designer opens on the **content pane**.

3 Click the New button on the ribbon. The Server Process Object Event Handler editor opens.

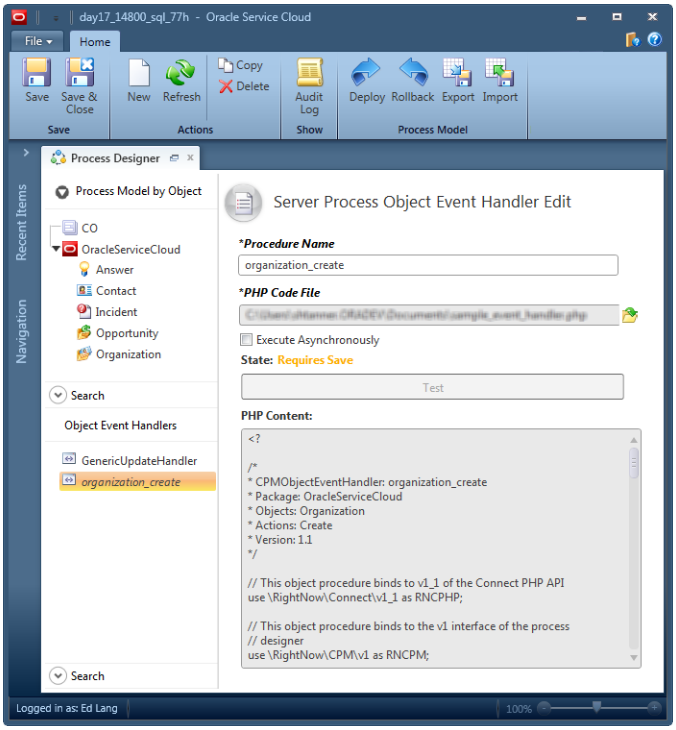


4 Type a name for the object event handler in the Procedure Name field.

Note Object event handler names must start with a letter, end with a letter or number, and contain only letters, numbers, and underscores.

5 Click the folder button next to the PHP Code File field and select a file to load. The Procedure Name field is then updated with the name of the file in the PHP Code File field, the State field displays Requires Save, and all PHP code displays as read-only in the PHP Content field.

Note We recommend that you name your PHP code file according to its event function or manually update the Procedure Name field after loading the file.



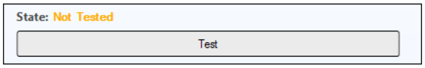
6 To execute the event handler asynchronously, select the Execute Asynchronously check box. (This option is selected automatically if the PHP script includes the async keyword.)

This option schedules the event handler to execute using a queuing system. If the first attempt fails for some reason, such as a server being unavailable, the event handler execution will be retried automatically up to four times. The first retry occurs 90 seconds later, the second occurs 450 seconds later, the third occurs 3,150 seconds later, and the fourth occurs 34,650 seconds later.

You can use this option with an event handler that does not need to execute immediately and that is not required by the operation that triggered the event. For instance, if you have an integration that updates contact information in an external database when a contact is created in Oracle Service Cloud, you can use an async event handler since the data can be sent any time.

Important Do not select this option if you are adding an event handler for use in surveys or campaigns.

7 Click the Save button on the ribbon. The status of the State field changes to Not Tested and the Test button below the field is activated.



8 Click the Test button below the State field to test the PHP code file for errors and to verify the test harness. If no errors are encountered and your test harness validates, a message displays and asks if the object event handler test result was correct.

9 Click the Yes button to acknowledge that the test ran as you expected. The message closes, the status of the State field changes from Not Tested to Tested, and the Test button is disabled.

10 Click the Save button on the ribbon to save the process model.

11 Associate the event handler with an object and event type that will trigger it. This step is not needed when creating event handlers to use in rules, surveys, or campaigns. Refer to Triggering object event handlers.

Before you can use the object event handler, the process model must be tested and deployed. Refer to Deploying and rolling back the process model.

Example object event handler script with test harness

The following example object event handler script adds a note to an **organization** when it is created in the Oracle database. The types of objects and actions the script can function with are indicated at the beginning of the script. The required test harness code is located about halfway through the script.

Note An additional sample script that uses client for URLs (cURL) to perform an action in an external database is provided in the [Oracle RightNow Connect PHP API Cloud Service]() guide.

Example

```
<?

/*
 * CPMObjectEventHandler: organization_create
 * Package: OracleServiceCloud
 * Objects: Organization
 * Actions: Create
 * Version: 1.1
 */

// This object procedure binds to v1_1 of the Connect PHP API
use \RightNow\Connect\v1_1 as RNCPHP;

// This object procedure binds to the v1 interface of the process
// designer
use \RightNow\CPM\v1 as RNCPM;

/**
 * An Object Event Handler must provide two classes:
 *    - One with the same name as the CPMObjectEventHandler tag
 *      above that implements the ObjectEventHandler interface.
 *    - And one of the same name with a "_TestHarness" suffix
 *      that implements the ObjectEventHandler_TestHarness interface.
 *
 * Each method must have an implementation.
 */

class organization_create
```

```
        implements RNCPM\ObjectEventHandler
{
    public static function
    apply( $run_mode, $action, $obj, $n_cycles )
    {
        $note = new RNCPHP\Note;
        $note->Text = "\n".date(DATE_RSS)."\n"
            ."\nA note added by " . __CLASS__
            . '::' . __FUNCTION__ . "\n";
        if (is_null($obj->Notes))
        {
            $obj->Notes = new RNCPHP\NoteArray;
        }
        $obj->Notes[] = $note;

        $obj->Name = preg_replace( '/^[aA]n* /', 'The ', $obj->Name );

        // Do not suppress because we want
        // the update flow to run.
        $obj->save();

        return;
    } // apply()

} // class organization_create


/*
    The Test Harness
*/


class organization_create_TestHarness
        implements RNCPM\ObjectEventHandler_TestHarness
{
    static $org_invented = NULL;

    public static function setup()
    {
        // For this test, create a new
```

```
            // organization as expected.
            $org = new RNCPHP\Organization;
            $org->Name = "An organization name";
            $org->Login = "a login";

            static::$org_invented = $org;
            return;
        }

        public static function
        fetchObject( $action, $object_type )
        {
            // Return the object that we
            // want to test with.
            // You could also return an array of objects
            // to test more than one variation of an object.
            return(static::$org_invented);
        }

        public static function
        validate( $action, $object )
        {
            // Add one note.
            return(count($object->Notes) === 1);
        }

        public static function cleanup()
        {
            // Destroy every object invented
            // by this test.
            // Not necessary since in test
            // mode and nothing is committed,
            // but good practice if only to
            // document the side effects of
            // this test.
            static::$org_invented->destroy().
            static::$org_invented = NULL;
            return;
        }
    }
```

Triggering object event handlers

After adding an event handler to the process designer, you need to specify how the event handler will be triggered. Using the process designer, you can associate an event handler with a standard or custom object and a create, update, or destroy action. Only event handlers specifically written for the object type and action can be selected when making these associations.

Object event handlers can also be triggered by rules, surveys, and campaigns when the conditions you specify are met. For information about using event handlers in rules, refer to Actions for rule bases. For information about using event handlers in surveys, click here. For information about using event handlers in campaigns, click here.

Note Only object event handlers written for contacts can be used in surveys and campaigns.

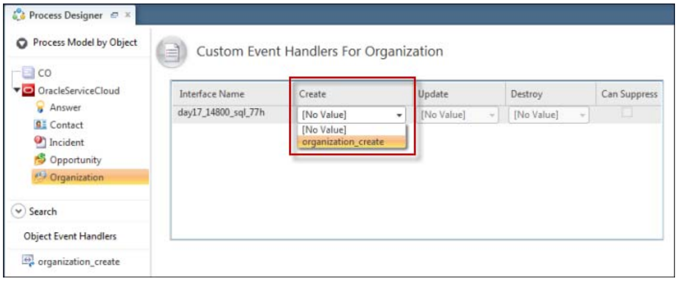
You can also associate event handlers with create, update, or delete actions performed on standard and custom objects. When the action occurs on the associated object, the event handler is triggered automatically. The event handler must be written to work with the associated object and action. For instance, the sample event handler script provided at Example object event handler script with test harness is written to be triggered when organizations are created. You associate object actions with event handlers using the process designer.

To associate event handlers with objects

1 Click the Configuration button on the **navigation pane**.

2 Double-click Process Designer under Site Configuration. The process designer opens on the **content pane**.

3 In the tree, select the custom or standard object that you want to associate with the object event handler. The Custom Event Handlers page opens and the drop-down menu under the column that is associated with the PHP code file is activated.



4 Click the drop-down menu under the applicable column (Create, Update, or Destroy) and select the object event handler that you want to associate the object with.

5 To allow the object event handler to be suppressed from the SuppressExternalEvents processing option that is part of Oracle RightNow Connect Web Services for SOAP and the Oracle RightNow Connect PHP API Cloud Service, select the check box under the Can Suppress column.

6 Click the Save button on the ribbon to save the process model.

Before you can use the object event handler, the process model must be tested and deployed. Refer to Deploying and rolling back the process model.

Exporting and importing the process model

Before you deploy a process model on your production site, we recommend that you first test it on a test site that is similar to your production site. This helps ensure that the object event handlers function as expected and interact with the Oracle Service Cloud data in the way you want. After verifying that the process model is configured correctly on the test site, you can export it from the test site and then import it into your production site.

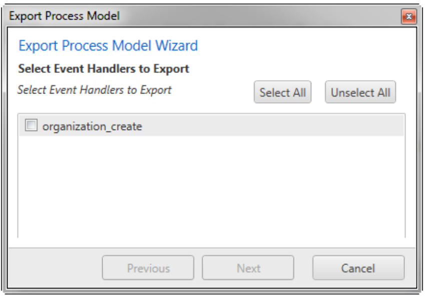
Note When exporting and importing the process model, you choose which object event handlers to include and exclude. Since you cannot save more than fifty object event handlers (with unsaved content) at one time, the maximum number of object event handlers that may be imported at one time is fifty.

To export the process model

1 Click the Configuration button on the navigation pane.

2 Double-click Process Designer under Site Configuration. The process designer opens on the content pane.

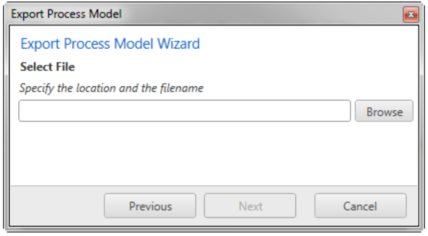
3 Click the Export button on the ribbon. The Export Process Model Wizard opens.



4 Select the check boxes next to the object event handlers that you want to export.

5 To export object event handler mappings, select the Export Event Handler Mappings check box.

6 Click the Next button to advance the wizard.



7 Click the Browse button to open the Save As window to select the location where you want to save the export file and type a name for the file. The export file will be saved with a *.zip* extension. Click the Save button on the Save As window.

Or

If you know the path where you want to save the file and the file name you want to use, type it in the text box instead of clicking the Browse button.

8 Click the Next button to complete the export. A message informs you that the export was successful. Click the OK button to close the message and the Export Process Model Wizard.

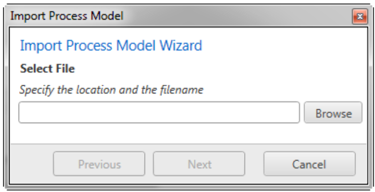
9 Click X on the top right of the console to close the process designer.

To import the process model

1 Click the Configuration button on the navigation pane.

2 Double-click Process Designer under Site Configuration. The process designer opens on the content pane.

3 Click the Import button on the ribbon. The Import Process Model Wizard opens.

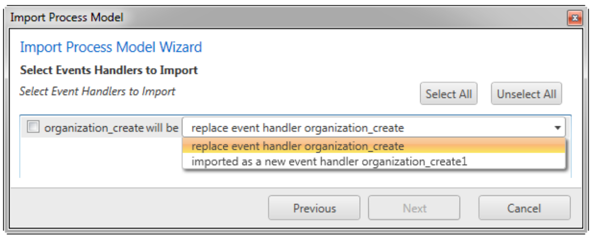


4 Click the Browse button to select the *.zip* file that contains the process model you want to import.

Or

If you know the path and file name of the import file, type it in the text box instead of clicking the Browse button.

5 Click the Next button. The next page of the wizard shows you the object event handlers that can be imported.



If you import an object event handler with the same name as an existing event handler, you can either replace (overwrite) the imported event handler or import it as a new event handler with the number “1” appended to its name.

6 Select the check boxes next to the object event handlers that you want to import.

7 Select options for the imported object event handlers.
   a To create a new object event handler, click the arrow next to the text that reads "replace event handler" and select "imported as a new event handler."
   b To prevent an object event handler from being imported, clear the check box next to it.

8 To import object event handler mappings, select the Import Event Handler Mappings check box.

9 Click the Next button to complete the import. A message informs you that the import was successful. Click the OK button to close the message and the Import Process Model Wizard.

10 To deploy the imported process model on your site, click the Deploy button on the ribbon. Refer to Deploying and rolling back the process model.

11 Click X on the top right of the console to close the process designer.

Deploying and rolling back the process model

After you create and test the process model, it must be deployed. When the process model is deployed, all object event handlers are mapped to custom and standard objects in the database and are ready for execution when an event occurs in Oracle Service Cloud. Ultimately, deployed object event handlers automate additional tasks for you based on the events that trigger them.

Because of the changes at the database level, it is important that you test the process model before deploying it. To assist you with this, export and import functionality is available so you can test the process model on a test site before deploying it to a production site. Refer to Exporting and importing the process model.

Important Be aware that if the process model changes and you choose not to deploy it, you can roll it back to revert to the state it was in at the time of the previous deployment. If the process model has never been deployed, rolling it back removes all object event handlers.

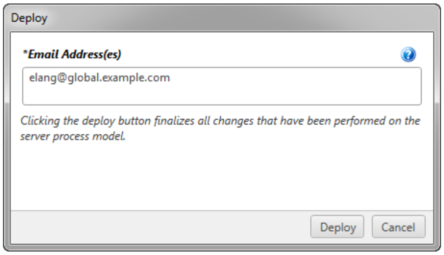
To deploy a process model

1 Click the Configuration button on the navigation pane.

2 Double-click Process Designer under Site Configuration. The process designer opens on the content pane.

Note Before you deploy the process model, we recommend that you first review the object event handlers to ensure that no additional changes are needed.

3 Click the Deploy button on the ribbon to open the Deploy window.



4 Type the email addresses you want to send notifications to in the Email Address field. Addresses entered in this field receive emails when deployment completes or when an issue preventing deployment is encountered. The logged-in staff account's email address is automatically added. Multiple addresses must be separated by commas.

5 Click the Deploy button. A message informs you that you are about to deploy the server process model, which disables the process designer until the deployment is complete.

6 Click the Yes button to close the message and start the deployment. A message notifies you when the deployment is finished and that the process designer will be refreshed.

7 Click the OK button to close the message and return to the process designer.

8 Click the Save and Close button on the ribbon.

To roll back a process model

1 Click the Configuration button on the navigation pane.

2 Double-click Process Designer under Site Configuration. The process designer opens on the content pane.

3 Click the Rollback button on the ribbon to open the Rollback window. A message informs you that all saved changes made on the process designer since the last deployment will be removed and that once a rollback has been performed, it cannot be undone.

4 Click the OK button to close the Rollback window and start the rollback process.

5 Click the Save and Close button on the ribbon.

12

Site Configuration

You can customize configuration settings, either individually or across multiple interfaces, to enable, disable, and configure Oracle Service Cloud functions. You can also change some of the text used in Oracle Service Cloud by customizing message bases, which are text strings that appear on the **administration interface** and the **customer portal**.

The Configuration Settings and Message Bases editors display as their own respective reports with category folders and run-time selectable filters that make searching easy. You can control how your output displays using either **cross tab** (default) or **rollup** views and edit values for configuration settings and message bases text inline. You can also see any changes that have been made to your configuration settings and message bases, including the old and new values, from the audit log.

Other site configuration options include the File Manager, which you can use to change wordlist and dictionary files, and the Log Viewer, which can help you troubleshoot issues your site may have.

For information about configuring customer portal pages and working with the customer portal, see Configuring Oracle Service Cloud for the Customer Portal.

Searching configuration settings

Run-time selectable filters let you define which configuration settings display on the content pane. You can search by site or interface, configuration setting type, category folder, configuration setting name, and value.

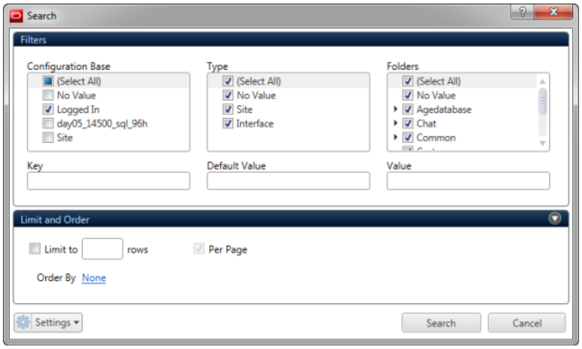
The first time you open the Configuration Settings editor, you must perform a search. Because settings are categorized as either site or interface specific, the configuration settings Search window lets you specify what type of setting you want to see.

Note Depending on your site's configuration, some settings may be hidden. If you cannot find a certain configuration setting, contact your Oracle account manager.

To search for a configuration setting

1 Click the Configuration button on the navigation pane.

2 Double-click Configuration Settings under Site Configuration. The Search window opens. (The Configuration Settings editor also opens but is inactive at this point.)



You have several options on the Search window. You can:

- Use the search fields to filter the configuration settings that are returned on the editor.
- Accept all default filters by simply clicking the Search button to return every interface-specific configuration setting on the site you are logged in to.
- Click the Cancel button to bypass the window and search using the buttons on the ribbon or the search fields on the top of the editor.
- Customize the filters and save them as your defaults by selecting Save as Default Values from the Settings drop-down menu before clicking the Search button. The next time you access configuration settings from your configuration list, the Search window does not open because the system remembers your defaults. Instead, the Configuration Settings editor opens with your previously filtered search results.
- Design the layout of your Search window by selecting Enter Search Design Mode from the Settings drop-down menu.

As you configure your application, you will likely use a combination of these options depending on the configuration settings you want to access. However, for the purpose of this procedure, we show you how to customize your search results using the filters on the Search window.

3 Select the filters, sort options, and record limit to be displayed on the editor.

Tip If you use the search default settings, every interface-specific configuration setting on the site you are logged in to will be returned. If you have a large site, you may want to consider narrowing your search to return only the settings you need to see. One way to do this is to filter the settings by category folder. If you know the main folder in which the settings you want to see are located, select only that folder from the Folders field.

The options available on the Search window are described in the following table.

Table 62: Search Window Description

Field	Description
Filters	This section displays the run-time selectable filters. If a filter displays a menu list, you can select all options in the list by selecting the Select All check box, or you can clear all options in the list by clearing the Select All check box.
Configuration Base	Select the check boxes next to the interfaces for which you want to display configuration settings. • Select All—Displays all site- and interface-specific settings. • Logged In—Displays only interface-specific settings for the interface you are logged in to. (Default) • Site—Displays only site-specific settings that are shared across all interfaces on this site. • <interface name>—Displays only interface-specific settings that apply to the selected interface.
Type	Select the check boxes next to the type of configuration setting you want to display. • Select All—Displays all site- and interface-specific settings. (Default) • Site—Displays only site-specific settings that are shared across all interfaces on this site. • Interface—Displays only those settings that are specific to the interface you are logged in to.
Folders	Select the folders that contain the configuration settings you want to display.

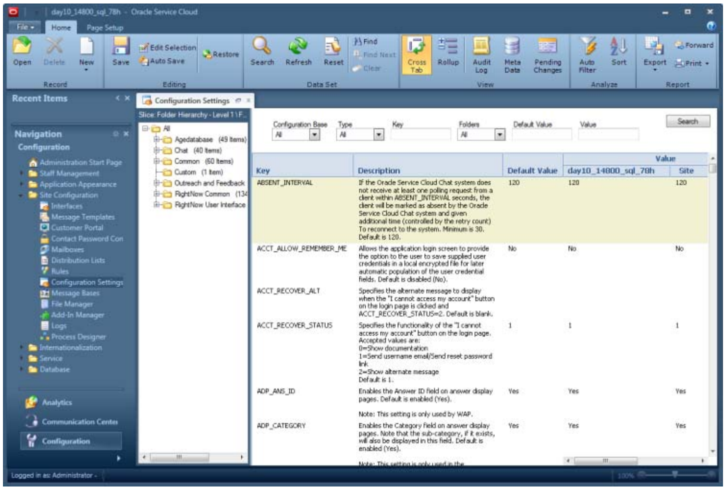
Table 62: Search Window Description (Continued)

Field	Description
Key	Type the name of a specific configuration setting in this field. This field is not case sensitive. **Note:** You can also enter just the first few letters and append either the percentage sign (%) or an asterisk (*) to serve as a wild-card. All settings that begin with the letters you type will be returned.
Default Value	Type a default value to return settings that match the value you type.
Value	Type a value to return settings that match the value you type.
Limit and Order	Use options in this section to limit the number of rows returned and how the output should be sorted.
Limit To	Select this check box to limit the number of rows returned on each page. Limiting the records returned prevents more records being returned than can be easily viewed or printed.
Rows	Type the number of rows to be returned.
Per Page	Select this check box to change the number entered in the Rows text box from a hard limit on the total number of rows returned to a limit on the number of rows returned on each page. This is automatically selected when you select Limit To.
Order By	Click the current sort order next to the Order By field to select different sort options. The default sort order is displayed with the primary sort field listed first, followed by any subsequent sort fields. The direction each sort field is ordered in is also indicated (Asc for ascending order and Desc for descending order). See Changing sort options.
Settings	This drop-down menu gives you options to design and then save your Search window layout. It also lets you set, restore, and reset your default filter values.
Enter Search Design Mode	Select this option to design the layout of your Search window. See Customizing the Search window.
Set as Default Layout	Select this option to save your search layout as the default.
Restore Default Layout	Select this option to reset your search layout to the system default.

Table 62: Search Window Description (Continued)

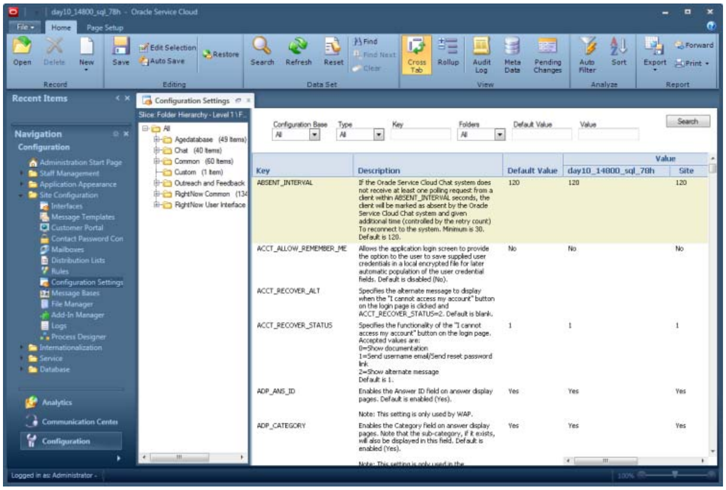
Field	Description
Save as Default Values	Select this option to save the filter values you select to the local settings on your workstation. These saved values are used as the defaults the next time you search and are logged in with the same staff account. Saving your search filters bypasses the Search window and automatically opens the Configuration Settings editor to display your previously filtered search results. **Note:** The default values are overwritten if you select different values and click this button again. If the search criteria is later edited to change filters, the default filter values stored in your local settings are ignored.
Restore Default Values	Select this option to restore the search values to the default search values. This deletes saved search values from your local settings. **Note:** This button is disabled if the current search parameters were not populated from your local settings. See Changing your personal settings.
Reset Values	Select this option to reset the search parameters' values to the default values that were populated when the editor opened. Clicking this button also resets the Search window to the default size if it has been resized.

4 Click the Search button. Your search criteria displays on the content pane.



Working with the Configuration Settings editor

After performing a search, the Configuration Settings editor displays your search results on the content pane. See [Searching configuration settings](). Reports drive the data that displays, and you can choose either cross tab or rollup mode for the layout view. In rollup view, if you have more than one interface, you can edit a configuration setting for multiple interfaces at one time. (Cross tab is the default.)

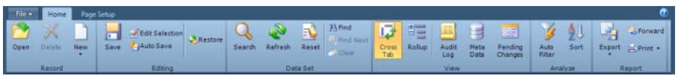


Ribbon functionality

Most of the buttons on the Configuration Settings editor ribbon reflect common Oracle Service Cloud functionality and work the same way as they do in reports. For information about working with reports in Oracle Service Cloud, see Report Management.

Home tab

From the Home tab, you can create and edit configuration settings, search and filter the data, define how you want the data to display, and export the data in a variety of formats. You can also edit values inline under the value columns.



The groups and buttons on the Home tab are described in the following table.

Table 63: Home Tab Description

Group/Button	Description
Record	The buttons in this group let you open existing configuration settings and create and delete custom settings.

Table 63: Home Tab Description (Continued)

Group/Button	Description
Open	Click this button to open the selected configuration setting.
Delete	Click this button to delete a custom configuration setting. **Note:** Standard configuration settings cannot be deleted. Therefore, this button is available only for custom settings.
New	Click this drop-down menu to create a custom configuration setting. Data type options include Text, Integer, Menu, Yes/No, and Date/Time. **Note:** You cannot change the data type after you have selected it.
Editing	The buttons in this group let you edit configuration setting values.
Save	Click this button to save your changes.
Edit Selection	Click this button to open either the Site or <interface name> window and enter the value of the selected configuration setting. **Note:** In the default cross-tab view, you can edit only one row at a time. Therefore, if more than one row is selected, this button is disabled.
Auto Save	Click this button to automatically save your inline edits. **Note:** Auto Save works only for inline edits. The Save button is disabled when Auto Save is selected. See Editing data inline.
Restore	Click this button to return the selected configuration setting to its default value.
Data Set	The buttons in this group let you search for configuration settings, refresh the display, and reset the search criteria to the defaults.
Search	Click this button to open the Search window and select criteria for run-time selectable filters. See Searching configuration settings.
Refresh	Click this button to reload the data shown using the current search criteria. **Important:** This button works differently when you edit a configuration setting. If you change a value before saving, clicking the Refresh button reverts to the previously saved value.
Reset	Click this button to reload the data shown using the default search criteria.

Table 63: Home Tab Description (Continued)

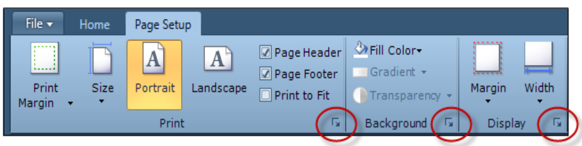
Group/Button	Description
Find	Click this button to locate text, numeric values, or special characters on the current page. Cells that contain the search value are highlighted. See Finding content in reports. **Note:** The Find button works only on the currently displayed page.
Find Next	Click this button to highlight the next instance of the search value entered on the Find window.
Clear	Click this button to clear the search value entered on the Find window.
View	The buttons in this group let you define display options, view changes that have been made, and manage failed deployments.
Cross Tab	Click this button to display configuration settings in a table format. This is the default view.
Rollup	Click this button to display configuration settings in rollup levels. The data rolls up by configuration setting name. If you have more than one interface, this view lets you edit multiple rows at once for the same configuration setting. See Displaying rollup levels and To edit the same configuration settings across multiple interfaces.
Audit Log	Click this button to view changes that have been made to the configuration settings, including when the change was made, who made the change, the affected configuration base, configuration setting name, and old and new values. You can also use run-time selectable filters to search for specific configuration settings.
Meta Data	Click this button to select criteria to display the attributes associated with configuration settings. See Exporting configuration settings.
Pending Changes	Click this button to open the Pending Changes window and view changes that failed to deploy during the save process. You can deploy all changes from this window. **Note:** Nothing displays unless there is a failed deployment.

Table 63: Home Tab Description (Continued)

Group/Button	Description
Analyze	The buttons in this group let you sort the displayed data and apply auto filtering, rollups, and slicing to the data.
Auto Filter	Click this button to enable auto-filtering. Auto-filtering provides column filtering after the report has been generated. See Using Auto Filter.
Sort	Click this button to open the Sort window and select which output columns to sort by and the sort method. See Changing sort options.
Report	The buttons in this group let you export the data, forward the data in an email, and save and restore default values. **Note:** Permission to export, print, and forward reports must be enabled in your profile for this button to display. See Analytics permissions.
Export	Click this button to export the data from a file for use with third-party applications. You can export data in the following formats: HTML, PDF, Excel, XML, Image, and Delimited. You can also copy data to the clipboard. See Exporting report output.
Forward	Click this button to send the data to individuals or **distribution lists** in an email. See Forwarding reports.
Print	Click the arrow on this button to access printing options.

Page Setup tab

The Page Setup tab lets you configure printing options. You can also change the background, margins, and width of reports.



Each tab has one or more groups containing buttons you can use to modify printing or display options. Some groups have an arrow to the right of their name that you can click to open a window. For example, you can click the arrow on the Background group to open the Display Options window.

Windows give you access to the same features you can access from the ribbon, although the windows group the options differently, and sometimes contain options not available from the ribbon.

The groups and buttons on the Page Setup tab are described in the following table.

Table 64: Page Setup Tab Description

Group/Button	Description
Print	The buttons in this group let you configure printing options and add the Page Header and Page Footer sections. Click the arrow on the Print group to open the Page Setup window. See Printing reports. **Note:** This button group displays only if your profile includes the Print/Export/Forward Reports permission. See Analytics permissions.
Print Margin	Click this button to select the size of the margins used when printing. The available options are Normal, Narrow, Medium, and Wide.
Size	Click this button to select the paper size. The available options are Letter, Legal, Executive, A3, A4, and A5.
Portrait/Landscape	Click these buttons to print in portrait or landscape mode.
Page Header/Page Footer	Select these check boxes to include a page header and page footer when printing the report.
Print to Fit	Select this check box to scale your output to your printer's default page width and send it to the printer.
Background	The buttons in this group let you add a background color. You can add a gradient color to blend into the primary color and choose how intense the colors should be with the Transparency setting. Click the arrow on the Background group to open the Display window.
Fill Color	Click this drop-down menu to select a background color.

Table 64: Page Setup Tab Description (Continued)

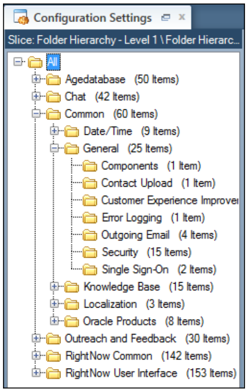
Group/Button	Description
Gradient	Click this drop-down menu to apply a gradient to the background. **Note:** This option is available only after you have selected a fill color.
Transparency	Click this drop-down menu to apply a transparency to the background. **Note:** This option is available only after you have selected a fill color.
Display	The buttons in this group let you add margins and set the width. Click the arrow on the Display group to open the Display window.
Margin	Click this button to define the amount of whitespace around the printed output. The available options are None, Narrow, Medium, Wide, and Custom. Selecting Custom lets you specify the number of pixels for the top, bottom, left, and right margins.
Width	Click this button to select the width of the entire printed output. The available options are Best Fit and Fit to Window.

Folder structure

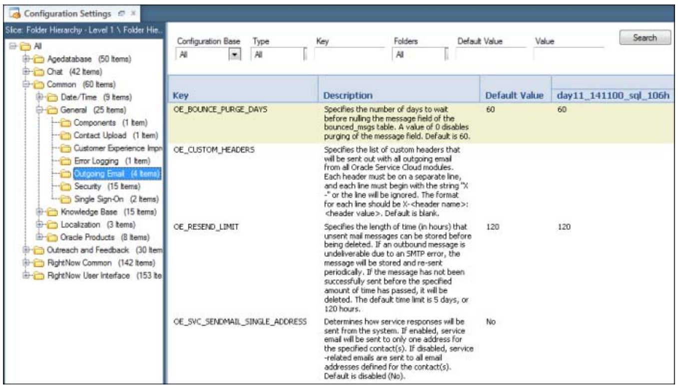
Configuration settings are organized in a hierarchical folder structure. The number of settings in each category folder display next to the folder name. Keep in mind that this number varies depending on how you have defined the filters in your search. For instance, suppose you leave the default selections, Logged In in the Configuration Base field and Select All in the Type field of your search. In this case, all settings, including settings inside each subfolder, will display on the content pane. On the other hand, if you were to select Site in the Type field, only the site-level configuration settings would display.

If you have a large site, you may want to consider narrowing your search to return only the settings you need to see. One way to do this is to filter the settings by category folder. If you know the main folder in which the settings you want to see are located, select only that folder from the Folders field.

Expand the folder contents to drill down to only the configuration settings you want to see. For example, you could navigate to the General folder under Common > General to display all settings in the General folder, including its subfolders. You could then expand the settings by each subfolder.



The following figure shows the folders expanded by the Outgoing Email folder under Common > General > Outgoing Email. In this case, the four configuration settings in the Outgoing Email folder are the only settings that display on the content pane.



Tip To display configuration settings in alphabetical order, click in the Key column header.

The following table describes the Configuration Settings editor folders and subfolder categories.

Table 65: Configuration Editor Folder Description

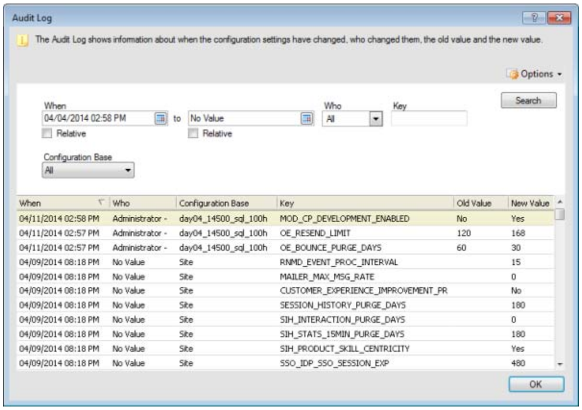
Folder	Description
Agedatabase	Expand this folder to view and edit the batch processing configuration settings that affect **Agedatabase** and database maintenance functions.
Chat	Expand this folder to view and edit configuration settings used to configure Oracle RightNow Chat Cloud Service (Chat). The subfolders include General and User Interface.
Common	Expand this folder to view and edit configuration settings that apply to the basic functionality of all Oracle Service Cloud products. The subfolders include Date/Time, General, Knowledge Base, Localization, and Oracle Products.
Outreach and Feedback	Expand this folder to view and edit configuration settings used to configure Oracle RightNow Outreach Cloud Service (Outreach) and Oracle RightNow Feedback Cloud Service (Feedback).
RightNow Common	Expand this folder to view and edit configuration settings that are common to one or more areas of Oracle Service Cloud or are used to enable functionality. The subfolders include Intent Guide, 3rd-Party Applications, Answer Review, ATG Integration, External Integration, Fusion Integration, General Analytics Options, Message Templates, Mobility, OSN Integration, Screen Pop, Service Modules, Siebel Integration, SIH, Single Sign-On, Social, Social Monitor, and Thin Client.
RightNow User Interface	Expand this folder to view and edit configuration settings used to customize the Service Console and customer portal. The subfolders include Answer Display Page, Contact Services, Customer Portal, End-User Interface, General, Login/Session Window, Misc. Customization, Miscellaneous, Open Login, Sales, Service Level Agreements, Support, and Tool Bar. **Note:** Many of the configuration settings under Answer Display Page, Contact Services, and End-User Interface apply to the customer portal. See Configuring Oracle Service Cloud for the Customer Portal.

Audit log

The audit log makes it easy for you to see changes that have been made to the configuration settings. Depending on where you are on the Configuration Settings editor, different information displays. For instance, clicking the Audit Log button on the ribbon from the main Configuration Settings editor displays the following information about the changes made.

- Date and time of change
- Who made the change
- Affected interface—Site or interface name
- Configuration setting name
- Old value
- New value

You can also search for a specific configuration setting you want to see changes for from the audit log. The following figure shows the search window for the audit log.



The search options available are described in the following table.

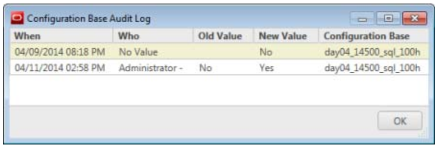
Table 66: Audit Log Search Description

Field	Description
When	Enter the start and end dates or click the calendars to select the dates for the time period of the changes you want to see. The current day is the default start date.

Table 66: Audit Log Search Description (Continued)

Field	Description
Relative	Select this check box and then click the calendar to enter relative start and end dates.
Who	Click this drop-down menu to display changes made by a particular staff member. All is the default.
Key	Type the name of a specific configuration setting in this field. **Note:** You can also enter just the first few letters and append either the percentage sign (%) or an asterisk (*) to serve as a wild-card. All settings that begin with the letters you type will be returned.
Configuration Base	Click this drop-down menu and select the interface for which you want to display changes to configuration settings. • All—Displays all site- and interface-specific settings. • Logged In—Displays only interface-specific settings for the interface you are logged in to. • Site—Displays only site-specific settings that are shared across all interfaces on this site. • <interface name>—Displays only interface-specific settings that apply to the selected interface.

Clicking the Audit Log button with a specific configuration setting open displays changes to that setting only.

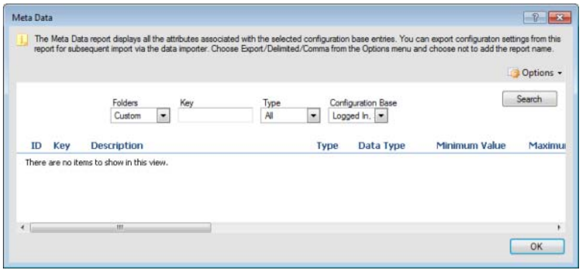


Exporting configuration settings

Exporting and importing metadata can save time, especially when you have large numbers of custom settings. You can export configuration setting metadata and then import that data into another site using the Data Import Wizard. All attributes associated with configuration settings are available for the interfaces you choose to display. Configuration setting attributes include ID, key (name), description, type (site or interface specific), data type, minimum and maximum value, maximum text length, pattern constraint, predefined menu, folder and folder ID, default value, configuration base (site or particular interface), and values.

To export metadata

1 From the Configuration Settings editor, click the Meta Data button on the ribbon. The Meta Data window opens.



2 Enter the following field information.

Table 67: Meta Data Window Description

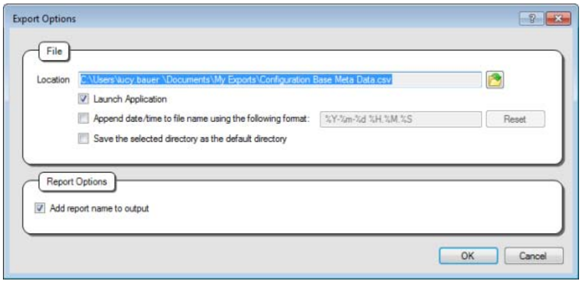
Field	Description
Folders	Select the folders that contain the configuration settings you want to display. The Custom folder is selected by default.
Key	Type the name of a specific configuration setting in this field. This field is not case sensitive. **Note:** You can also enter just the first few letters and append either the percentage sign (%) or an asterisk (*) to serve as a wild-card. All settings that begin with the letters you type will be returned.
Type	Select the check boxes next to the type of configuration setting you want to display. • Select All—Displays all site- and interface-specific settings. (Default) • Site—Displays only site-specific settings that are shared across all interfaces on this site. • Interface—Displays only those settings that are specific to the interface you are logged in to.

Table 67: Meta Data Window Description (Continued)

Field	Description
Configuration Base	Select the check boxes next to the interfaces for which you want to display configuration settings. • Select All—Displays all site- and interface-specific settings. • Logged In—Displays only interface-specific settings for the interface you are logged in to. (Default) • <interface name>—Displays only interface-specific settings that apply to the selected interface. • Site—Displays only site-specific settings that are shared across all interfaces on this site. (Default)

3 Click the Search button. Your search results display on the content pane.

4 Click the Options drop-down menu and select Export > Delimited > Comma. The Export Options window opens.



5 Enter the following field information.

Table 68: Export Options Window Description

Field	Description
Location	Lists the default location where your CSV file will be saved.
Save As	Click this button to open the Save As window where you can specify a location (other than the default) to save your file.
Launch Application	Clear this check box if you do not want the file to open after you export it.

Table 68: Export Options Window Description (Continued)

Field	Description
Append date/time to file name using the following format	Select this check box to add the date and time to your file name. **Note:** To change the format in which the date and time is added to your file, type your preferred format in the field next to the check box and then click the Reset button.
Save the selected directory as the default directory	Select this check box to make the directory specified in the Location field your default directory.
Add report name to output	Clear this check box to remove the report name from the CSV file. **Important:** You must clear this check box to import the file from the Data Import Wizard because it uses the value specified in the Header Location field to import the data.

6 Click the OK button.

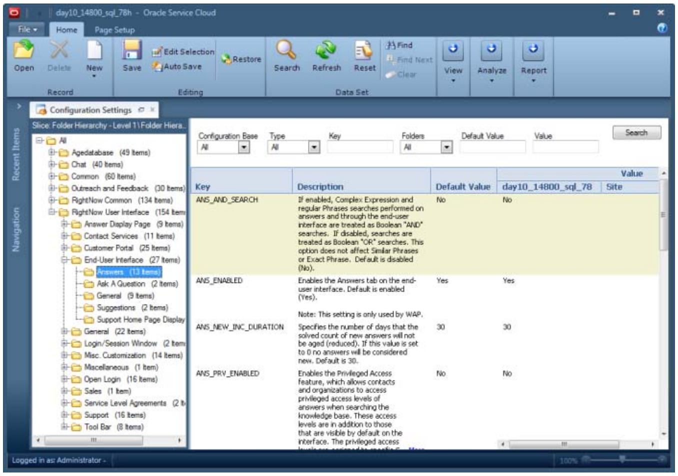
Now you can import your CSV file from the Data Import Wizard. See Importing data.

Customizing configuration settings

Configuration settings are used to enable, disable, and configure products and components and many functions and features. You can customize these settings through the Configuration Settings editor. Reports drive the data that displays on the content pane, and you can format the output returned using **cross tab** (default) and **rollup** views. In rollup view, you can edit a single configuration setting for multiple interfaces at one time.

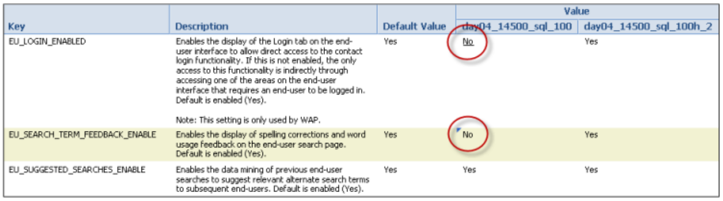
Configuration settings are organized in a hierarchical folder structure and are categorized as either shared across all interfaces (site specific) or interface specific. Also, when you create a new custom configuration setting, you define if the setting will be a site- or interface-level setting. This classification is what lets you view and edit settings across multiple interfaces at the same time. You can also edit configuration setting values inline on the content pane.

To find configuration settings, use the Search feature on the Configuration Settings editor. See To search for a configuration setting.



Editing configuration settings

While standard settings cannot be deleted and their field parameters cannot be edited, the value of a standard configuration setting can be edited, either inline or by clicking the Edit Selection button on the ribbon. You can also edit a single configuration setting across multiple interfaces at the same time using rollup mode. You can easily see when a value has been changed from the default value because an underscore displays on the changed value. If you change the value back to the default, the underscore no longer displays. When a change is pending, the edited field displays a tick mark. When you hover over the tick mark, a tooltip tells you how to save or discard your change.



Key	Description	Default Value	Value	
			day04_14500_sql_100	day04_14500_sql_100h_2
EU_LOGIN_ENABLED	Enables the display of the Login tab on the end-user interface to allow direct access to the contact login functionality. If this is not enabled, the only access to this functionality is indirectly through accessing one of the areas on the end-user interface that requires an end-user to be logged in. Default is enabled (Yes). Note: This setting is only used by WAP.	Yes	No	Yes
EU_SEARCH_TERM_FEEDBACK_ENABLE	Enables the display of spelling corrections and word usage feedback on the end-user search page. Default is enabled (Yes).	Yes	No	Yes
EU_SUGGESTED_SEARCHES_ENABLE	Enables the data mining of previous end-user searches to suggest relevant alternate search terms to subsequent end-users. Default is enabled (Yes).	Yes	Yes	Yes

To edit a configuration setting

1 Select the row that displays the configuration setting you want to edit.

2 Click the Edit Selection button on the ribbon. Either the Site or <interface name> window opens depending on the configuration setting classification (site or interface specific).

Or

Click in the Value column to edit the setting value inline.

Or

Double-click the setting to open it on the content pane and edit the Value field.

3 Type or select the new value. Editing options are specific to the field's data type. For example, if a setting can be enabled or disabled, a Yes/No drop-down menu displays in the Value field.

4 To revert to the default value, click the Restore button.

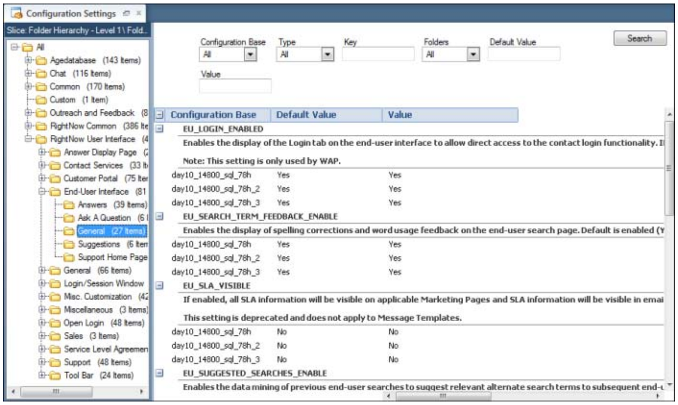
5 Click the Save button on the ribbon. The new value displays with an underscore.

Note You may be required to log out of Oracle Service Cloud and log back in for your changes to take effect.

To edit the same configuration settings across multiple interfaces

Note You cannot edit different configuration settings on the same interface at the same time. However, you can edit a single configuration setting across multiple interfaces at the same time.

1 From the Configuration Settings editor, click the Rollup button on the ribbon.



2 Press **Ctrl** while selecting the rows you want to edit. You can also press **Shift** to select multiple consecutive rows.

Note Selecting multiple rows across different configuration settings will disable the Edit Selection button.

3 Click the Edit Selection button on the ribbon.

4 Type or select the new value.

5 Click the OK button. The values of all the selected rows are updated.

6 Click the Save button on the ribbon. The new values display with an underscore.

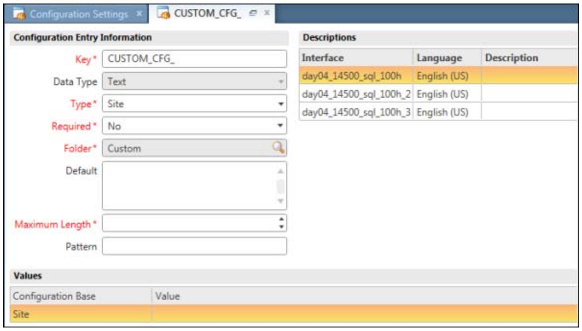
Note You may be required to log out of Oracle Service Cloud and log back in for your changes to take effect.

Creating custom configuration settings

When you create a new configuration setting, it is considered a custom setting. By default, every custom setting name starts with CUSTOM_CFG_ and is automatically assigned to a Custom folder in the folder hierarchy. You define whether your custom setting will be an interface-specific setting or one that is shared across all interfaces (site specific). For site-specific settings, you can view and edit settings across multiple interfaces at the same time. Once you create a custom setting, you can edit only its value and its folder location.

To create a configuration setting

1 Click the New button on the ribbon and select the data type: Text, Integer, Menu, Yes/No, or Date/Time. A new setting opens on the content pane.



2 Enter the following field information.

Table 69: Custom Configuration Setting Description

Field	Description
Configuration Entry Information	Fields in this section define the parameters for the custom configuration setting, including name, field type, interface level, folder location, and field length.
*Key	Type the name of your custom configuration setting after CUSTOM_CFG_, which populates in this field. All custom settings must start with CUSTOM_CFG_.
Data Type	The data type you select on the ribbon is populated in this field. **Note:** This is a read-only field and cannot be edited. If you need to make changes to the Data Type field, you must either close the new setting without saving or delete it if it has been saved.
*Type	Click this drop-down menu to select the setting type, either Site or Interface. • Site—Classifies the custom setting as shared across all interfaces. (Default) • Interface—Classifies the custom setting as interface-specific only.

Table 69: Custom Configuration Setting Description (Continued)

Field	Description
*Required	Click this drop-down menu to define whether the custom setting is required.
*Folder	Click the Search button to define a folder location for your custom setting. By default, all custom settings must be located in the Custom folder or a custom subfolder. **Note:** Ten subfolders can be nested under the Custom folder. Each subfolder can contain three child folders.
Default	Enter the configuration setting default value in this field. The format of this field varies depending on the data type.
*Maximum Length	Enter the maximum length allowed in the Value field of a Text data type field. (1-300,000 characters) **Note:** This field displays only for Text data types.
Pattern	Type a regular expression format that the configuration setting value must conform to in this field. See Regular Expressions. **Note:** This field displays only for Text data types.
*Minimum Value	Enter the minimum value allowed in the Value field of an Integer data type field. (Limited to -999999999) **Note:** This field displays only for Integer data types.
*Maximum Value	Enter the maximum value allowed in the Value field of an Integer data type field. Default is 99999. (Integer fields can contain up to 9 digits.) **Note:** This field displays only for Integer data types.
*Predefined Menu	Click this drop-down to select a predefined menu list in the Value field of a Menu data type field. Options include Currencies and Time Zones. **Note:** This field displays only for Menu data types.
Descriptions	This section displays the interface name, language, and description.
Description	Type a description of the configuration setting in this field.
Values	This section displays the interface type (either site or interface name) and lets you set custom setting values. If you have more than one interface, you can set a value for each interface.

Table 69: Custom Configuration Setting Description (Continued)

Field	Description
Value	Type the value of the custom setting in this field.

3 Click the Save and Close button. The custom configuration setting displays in the tree under the Custom folder you saved it in.

Note You may be required to log out of Oracle Service Cloud and log back in for your changes to take effect.

Configuring the administration interface

Configuration settings let you create an **administration interface** that meets the business needs of your organization. Some of the most common settings are used to specify security settings, manage notifications, define incident functionality, categorize **tracked links**, and configure **forecasting** for opportunities.

Use Oracle Service Cloud security settings to protect your site by configuring how staff members and customers will access your site, as well as which hosts are allowed access to the administration interface and the **customer portal**.

- Learn about the settings related to site protection, passwords, and file attachments in Security-Related Configuration Settings. For a complete list of security-related configuration settings, see Recommendations for Security-Related Configuration Settings.
- For an in-depth discussion about security practices in Oracle Service Cloud and how to protect your data, see Security Practices.

Notifications

Notifications are accessed from the Communications Center navigation list and contain your messages about system errors and record assignments and updates. Notifications can also display reports to show the performance of incident queues. By default, the **Agedatabase** utility purges notification messages that are older than ten days. However, you can change the number of days after which notifications are removed by changing the NOTIF_AGE_DAYS configuration setting. To learn more about the different kinds of notifications, see Notifications.

Incidents

You can specify how long incidents remain open, active, and in the database. The following table describes the configuration settings you can use to customize incident life.

Table 70: Incidents Configuration

To…	Use this setting…
Specify how many hours **waiting** incidents remain open before being closed automatically.	CI_HOURS
Specify which days to use when calculating how long an incident has been open.	CI_WAITING_CALC_DAYS
Specify the number of days after which solved incidents are deleted from the database.	PURGE_DELETE_INCIDENTS
Specify the number of days after which solved incidents go dormant.	DORMANT_INCIDENTS

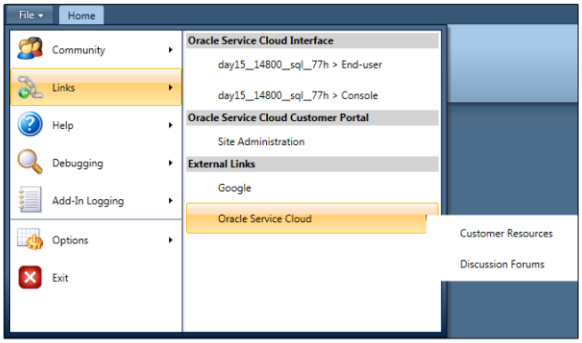
Opportunities

You can let sales representatives send **quotes** as PDF documents, though this option is disabled by default. Access the SEND_SA_QUOTE_AS_PDF configuration setting to enable this option. See Sending quotes.

Customizing the Links menu

The Links menu, accessed by clicking File, provides quick access to commonly visited URLs. By default, the list of links includes the customer portal pages of the current interface and the Service Console.

You can customize the links to meet your organization's needs by adding links to other websites your staff members may need to access. You can also add sub-menus that contain multiple links. This lets you organize your links by grouping related links under a single sub-menu title. The following figure displays a Links menu with a custom link, a separator, and a sub-menu with two links.



Note In order for the Customer Portal option to appear on the Links menu, the development area must be enabled (MOD_CP_DEVELOPMENT_ENABLED at Common > Oracle Products > Modules) and staff members must have customer portal permissions in their profile. See Assigning permissions.

Using the following procedures, you can duplicate the previous figure's custom links by defining the value of TBAR_LINK_LIST (RightNow User Interface > Tool Bar > Links) as:

```
item(1, "Google","http://www.google.com")
item(0,"","")
menu (1, "Oracle Service Cloud",(
item(1, "Customer Resources","http://www.oracle.com/us/products/
applications/rightnow/resources/index.html")
item (1,"Discussion Forums","http://communities.rightnow.com/groups/
bef552360b/summary")
))
```

To add a custom link

1 Click the Configuration button on the navigation pane.

2 Double-click Configuration Settings under Site Configuration. The Search window opens.

3 Type TBAR_LINK_LIST in the Key field and click the Search button. The Configuration Settings editor opens with TBAR_LINK_LIST displayed in table format (cross-tab mode).

4 Double-click TBAR_LINK_LIST. The setting opens in a new tab on the content pane.

Note You can also edit the Value column inline. However, this type of change is easier to make from the setting tab.

5 Type the link in the Value field using the following syntax:

```
item (#, "<link name>", "<action>")
```

The following table describes the link syntax.

Table 71: Custom Link Description

Field	Description
#	Type a link number in this field. The link number can be any positive integer. **Note:** 0 is reserved for adding separators.
“<link name>”	Type the link name as you want it to appear in the Links drop-down menu.
“<action>”	Type the URL of the website you want to open when the link is clicked.

6 To create another custom link, press **Enter** to begin a separate line, and type the link definition as defined in step 5. Type each link definition on a separate line.

7 To place a separator line between links, enter the following on a separate line between the links where you want the separator to appear:

```
item(0,"","")
```

8 Click the Save and Close button.

Note The new custom links appear under an External Links option on the Links menu after you log out and then log back in.

To add a sub-menu with links

1 Click the Configuration button on the navigation pane.

2 Double-click Configuration Settings under Site Configuration. The Search window opens.

3 Type TBAR_LINK_LIST in the Key field and click the Search button. The Configuration Settings editor opens with TBAR_LINK_LIST displayed in table format (cross-tab mode).

4 Double-click TBAR_LINK_LIST. The setting opens in a new tab on the content pane.

Note You can also edit the Value column inline on the content pane. However, this type of change is easier to make from the setting tab.

5 Type the sub-menu name and associated links in the Value field using the following syntax:

```
menu (#, "<menu name>",(
item (#,"<link name>","<action>")
item (#,"<link name>","<action>")
))
```

The following table describes the link syntax.

Table 72: Custom Link Sub-Menu Description

Field	Description
#	Type a number for the option. This sub-menu or option number can be any positive integer. **Note:** 0 is reserved for adding separators.
“<menu name>”	Type the name of the sub-menu as you want it to appear on the Links option of the file menu.
“<link name>”	Type the link name as you want it to appear in the Links sub-menu.
“<action>”	Type the URL of the website you want to open when the link is clicked.

6 To enter additional links to the sub-menu, type more “item” lines using the syntax in step 5. Type each link definition on a separate line.

7 To place a separator line between links of the sub-menu, enter the following on a separate line between the links where you want the separator to appear:

```
item(0,"","")
```

8 Click the Save and Close button.

Note The new custom sub-menu and links appear under the External Links option on the Links menu after you log out and then log back in.

Searching message bases

Message bases are text strings that appear on the administration interface, the customer portal, and in email messages and notifications. By customizing message bases with the Message Bases editor, you can change the descriptive text within your application. Message bases also provide international language support and let you change the text to accommodate regional dialects.

Run-time selectable filters let you define which message bases display on the content pane. You can search by interface, category folder, message base name, default text and custom text values.

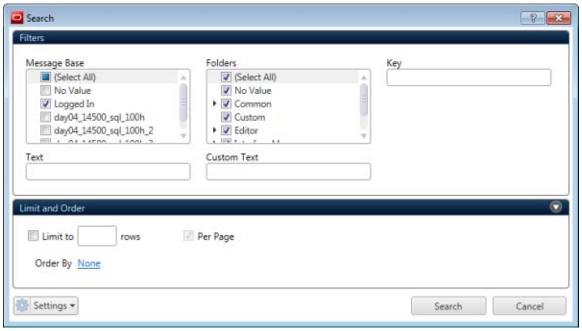
The first time you open the Message Bases editor, you must perform a search. Because settings are categorized as interface specific, the message bases Search window lets you specify what type of message base you want to see.

Once you open the Message Bases editor, you can click a message base link and locate the file in the list that appears in the left column. If you do not know the location of the message base you want to edit, you can run a report of the message bases to find the one you want to edit. The report displays each message base label, organized by location, along with the message associated with each label.

To search for a message base

1 Click the Configuration button on the navigation pane.

2 Double-click Message Bases under Site Configuration. The Search window opens. (The Message Bases editor also opens but is inactive at this point.)



You have several options on the Search window. You can:

- Use the search fields to filter the message bases that are returned on the editor.
- Accept all default filters by simply clicking the Search button to return every message base on the site you are logged in to.
- Click the Cancel button to bypass the window and search using the buttons on the ribbon or the search fields on the top of the editor.
- Customize the filters and save them as your defaults by selecting Save as Default Values from the Settings drop-down menu before clicking the Search button. The next time you access message bases from your configuration list, the Search window does not open because the system remembers your defaults. Instead, the Message Bases editor opens with your previously filtered search results.
- Design the layout of your Search window by selecting Enter Search Design Mode from the Settings drop-down menu.

As you configure your application, you will likely use a combination of these options depending on the message bases you want to access. However, for the purpose of this procedure, we show you how to customize your search results using the filters on the Search window.

3 Select the filters, sort options, and record limit to be displayed on the editor.

Tip If you use the search default settings, every message base on the site you are logged in to will be returned. If you have a large site, you may want to consider narrowing your search to return only the message bases you need to see. One way to do this is to filter the message bases by category folder. If you know the main folder in which the message bases you want to see are located, select only that folder from the Folders field.

The options available on the Search window are described in the following table.

Table 73: Search Window Description

Field	Description
Filters	This section displays the run-time selectable filters. If a filter displays a menu list, you can select all options in the list by selecting the Select All check box, or you can clear all options in the list by clearing the Select All check box.
Message Base	Select the check boxes next to the interfaces for which you want to display message bases. • Select All—Displays all message bases. • Logged In—Displays only message bases for the interface you are logged in to. (Default) • <interface name>—Displays only message bases that apply to the selected interface.
Folders	Select the folders that contain the message bases you want to display.
Key	Type the name of a specific message base in this field. This field is not case sensitive. **Note:** You can also enter just the first few letters and append either the percentage sign (%) or an asterisk (*) to serve as a wildcard. All message bases that begin with the letters you type will be returned.
Text	Type message base default text (or a portion of the default text) to return message bases with a value that matches the text you type. **Note:** This field is not case sensitive and accepts blank spaces.
Custom Text	Type message base customized text (or a portion of the text) to return message bases with a value that matches the text you type. **Note:** This field is not case sensitive and accepts blank spaces.
Limit and Order	This section allows you to limit the number of rows returned and how the output should be sorted.
Limit To	This check box, selected by default, limits the number of rows returned. Limiting the records returned prevents more records being returned than can be easily viewed or printed.

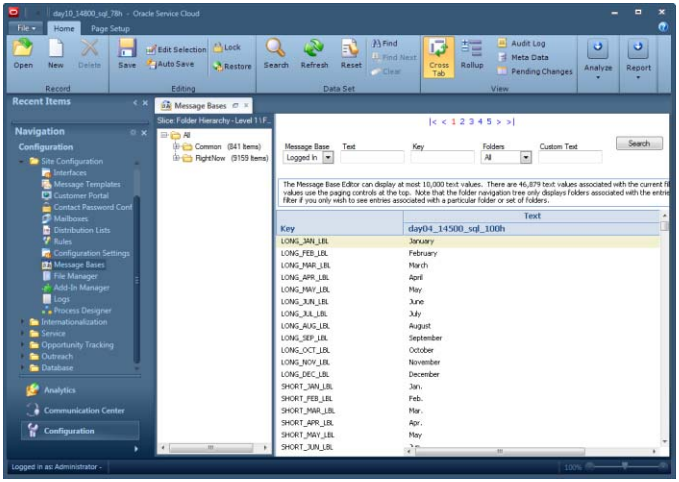
Table 73: Search Window Description (Continued)

Field	Description
Rows	Type the number of rows to be returned. The default value of 10,000 is the maximum number of rows that can be returned per page.
Per Page	Select this check box to change the number entered in the Rows text box from a hard limit on the total number of rows returned to a limit on the number of rows returned on each page. This is automatically selected when you select Limit To.
Order By	Click the current sort order next to the Order By field to select different sort options. The default sort order is displayed with the primary sort field listed first, followed by any subsequent sort fields. The direction each sort field is ordered in is also indicated (Asc for ascending order and Desc for descending order). See Changing sort options.
Settings	This drop-down menu gives you options to design and then save your Search window layout. It also lets you set, restore, and reset your default filter values.
Enter Search Design Mode	Select this option to design the layout of your Search window. See Customizing the Search window.
Set as Default Layout	Select this option to save your search layout as the default.
Restore Default Layout	Select this option to reset your search layout to the system default.
Save as Default Values	Select this option to save the filter values you select to the local settings on your workstation. These saved values are used as the defaults the next time you search and are logged in with the same staff account. Saving your search filters bypasses the Search window and automatically opens the Message Bases editor to display your previously filtered search results. **Note:** The default values are overwritten if you select different values and click this button again. If the search criteria is later edited to change filters, the default filter values stored in your local settings are ignored.

Table 73: Search Window Description (Continued)

Field	Description
Restore Default Values	Select this option to restore the search values to the default search values. This deletes saved search values from your local settings. **Note:** This button is disabled if the current search parameters were not populated from your local settings. See [Changing your personal settings](#).
Reset Values	Select this option to reset the search parameters' values to the default values that were populated when the editor opened. Clicking this button also resets the Search window to the default size if it has been resized.

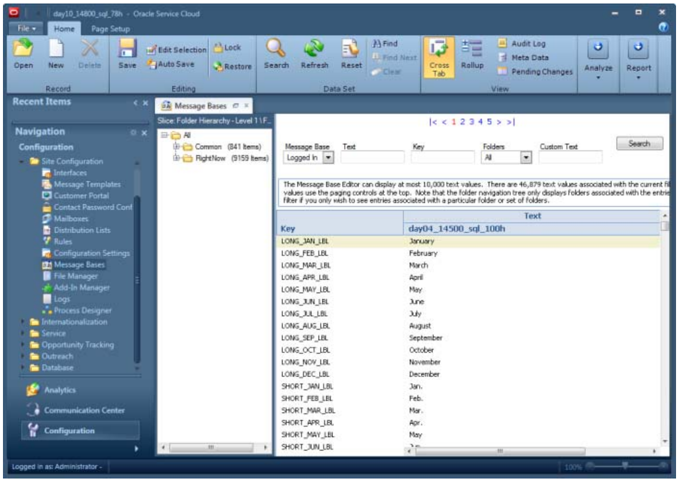
4 Click the Search button. Your search results display on the content pane.



Note Notice that each page is a clickable number across the top of the content pane. The number of folders that displays depends on which page you view and which settings are displayed. By default, the system displays, at most, 10,000 message bases per page with the folders that the text values are contained in displayed on the left.

Working with the Message Bases editor

After performing a search, the Message Bases editor displays your search results on the content pane. See [Searching message bases](). Reports drive the data that displays, and you can choose either cross tab or rollup mode for the layout view. In rollup view, if you have more than one interface, you can edit a message base across multiple interfaces at one time. (Cross tab is the default.)

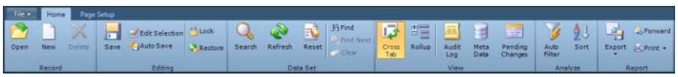


Ribbon functionality

Most of the buttons on the Message Bases editor ribbon reflect common Oracle Service Cloud functionality and work the same way as they do in reports. For information about working with reports in Oracle Service Cloud, see [Report Management]().

Home tab

From the Home tab, you can create and edit message base text, search and filter the data, define how you want the data to display, and export the data in a variety of formats. You can also edit values inline under the text columns.



The groups and buttons on the Home tab are described in the following table.

Table 74: Home Tab Description

Group/Button	Description
Record	The buttons in this group let you open existing message bases and create and delete custom message bases.
Open	Click this button to open the selected message base.
New	Click this drop-down menu to create a custom message base.
Delete	Click this button to delete a custom message base. **Note:** Standard message bases cannot be deleted. Therefore, this button is available only for custom message bases.
Editing	The buttons in this group let you edit message base text.
Save	Click this button to save your changes.
Edit Selection	Click this button to open the <interface name> window and edit the text of the selected message base. **Note:** In the default cross-tab view, you can edit only one row at a time. Therefore, if more than one row is selected, this button is disabled.
Lock	Click this button to ensure that the message base text value displays as you expect on upgrade. See To lock a text value. **Important:** Because the custom text value is always used on upgrade, and since the default value may change with new releases, locking the current value is the only way to ensure that your text stays the same from release to release. If you have entered a value in the Custom Text field, then that value is carried over on upgrade. However, if the Custom Text field is *not* populated, then the default text value is copied into the Custom Text field. In other words, once you click this button, the text value at that time (either custom text, if the Custom Text field is populated, or default text if it is not) is used from that point on, regardless of any default text value changes in a new release.
Auto Save	Click this button to automatically save your inline edits. **Note:** Auto Save works only for inline edits. The Save button is disabled when Auto Save is selected. See Editing data inline.

Table 74: Home Tab Description (Continued)

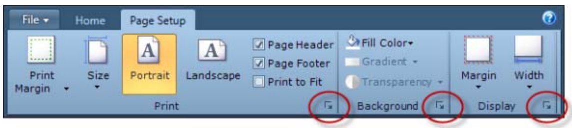
Group/Button	Description
Restore	Click this button to return the selected message base to its default value.
Data Set	The buttons in this group let you search for message bases, refresh the display, and reset the search criteria to the defaults.
Search	Click this button to open the Search window and select criteria for run-time selectable filters. See Searching message bases.
Refresh	Click this button to reload the data shown using the current search criteria. **Important:** This button works differently when you edit a message base. If you change a value before saving, clicking the Refresh button reverts to the previously saved value.
Reset	Click this button to reload the data shown using the default search criteria.
Find	Click this button to locate text, numeric values, or special characters on the current page. Cells that contain the search value are highlighted. See Finding content in reports. **Note:** The Find button works only on the currently displayed page.
Find Next	Click this button to highlight the next instance of the search values entered on the Find window.
Clear	Click this button to clear the search values entered on the Find window.
View	The buttons in this group let you define display options, view changes that have been made, and manage failed deployments.
Cross Tab	Click this button to display message bases in a table format. This is the default view.
Rollup	Click this button to display message bases in rollup levels. The data rolls up by message base name. If you have more than one interface, this view lets you edit multiple rows at once for the same message base. See Displaying rollup levels and To edit the same message base on multiple interfaces.

Table 74: Home Tab Description (Continued)

Group/Button	Description
Audit Log	Click this button to view changes that have been made to the message bases, including when the change was made, who made the change, the affected message base and name, and old and new values. You can also use run-time selectable filters to search for specific message bases.
Meta Data	Click this button to select criteria to display the attributes associated with message bases. See Exporting message bases.
Pending Changes	Click this button to open the Pending Changes window and view changes that failed to deploy during the save process. You can deploy all changes from this window. **Note:** Nothing displays unless there is a failed deployment.
Analyze	The buttons in this group let you sort the displayed data and apply auto filtering, rollups, and slicing to the data.
Auto Filter	Click this button to enable auto-filtering. Auto-filtering provides column filtering after the report has been generated. See Using Auto Filter.
Sort	Click this button to open the Sort window and select which output columns to sort by and the sort method. See Changing sort options.
Report	The buttons in this group let you export the data, forward the data in an email, and save and restore default values. **Note:** Permission to export, print, and forward reports must be assigned in your profile for this button to display. See Analytics permissions.
Export	Click this button to export the data from a file for use with third-party applications. You can export data in the following formats: HTML, PDF, Excel, XML, Image, and Delimited. You can also copy data to the clipboard. See Exporting report output.
Forward	Click this button to send the data to individuals or **distribution lists** in an email. See Forwarding reports.
Print	Click the arrow on this button to access printing options.

Page Setup tab

The Page Setup tab lets you configure printing options. You can also change the background, margins, and width of reports.



Each tab has one or more groups containing buttons you can use to modify printing or display options. Some groups have an arrow to the right of their name that you can click to open a window. For example, you can click the arrow on the Background group to open the Display Options window.

Windows give you access to the same features you can access from the ribbon, although the windows group the options differently, and sometimes contain options not available from the ribbon.

The groups and buttons on the Page Setup tab are described in the following table.

Table 75: Page Setup Tab Description

Group/Button	**Description**
Print	The buttons in this group let you configure printing options and add the Page Header and Page Footer sections. Click the arrow on the Print group to open the Page Setup window. See Printing reports. **Note:** This button group displays only if your profile includes the Print/Export/Forward Reports permission. See Analytics permissions.
Print Margin	Click this button to select the size of the margins used when printing. The available options are Normal, Narrow, Medium, and Wide.
Size	Click this button to select the paper size. The available options are Letter, Legal, Executive, A3, A4, and A5.
Portrait/Landscape	Click these buttons to print in portrait or landscape mode.
Page Header/Page Footer	Select these check boxes to include a page header and page footer when printing the report.

Table 75: Page Setup Tab Description (Continued)

Group/Button	Description
Print to Fit	Select this check box to scale your output to your printer's default page width and send it to the printer.
Background	The buttons in this group let you add a background color. You can add a gradient color to blend into the primary color and choose how intense the colors should be with the Transparency setting. Click the arrow on the Background group to open the Display window.
Fill Color	Click this drop-down menu to select a background color.
Gradient	Click this drop-down menu to apply a gradient to the background. **Note:** This option is available only after you have selected a fill color.
Transparency	Click this drop-down menu to apply a transparency to the background. **Note:** This option is available only after you have selected a fill color.
Display	The buttons in this group let you add margins and set the width. Click the arrow on the Display group to open the Display window.
Margin	Click this button to define the amount of whitespace around the printed output. The available options are None, Narrow, Medium, Wide, and Custom. Selecting Custom lets you specify the number of pixels for the top, bottom, left, and right margins.
Width	Click this button to select the width of the entire printed output. The available options are Best Fit and Fit to Window.

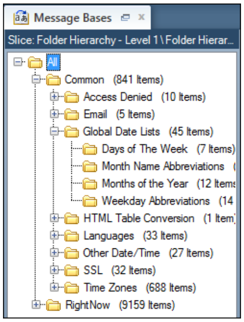
Folder structure

Message bases are organized in a hierarchical folder structure. The number of message bases in each category folder display next to the folder name. Keep in mind that this number varies depending on how you have defined the filters in your search.

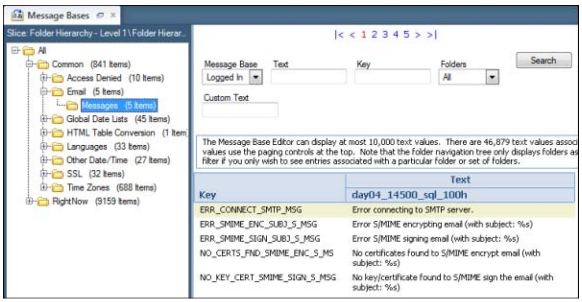
By default, the system displays, at most, 10,000 message bases per page with the folders that the text values are contained in displayed on the left. Each page is a clickable number across the top of the content pane.

If you have a large site, you may want to consider narrowing your search to return only the message bases you need to see. One way to do this is to filter the message bases by category folder. If you know the main folder in which the message bases you want to see are located, select only that folder from the Folders field.

Expand the folder contents to drill down to only the message bases you want to see. For example, you could navigate to the Global Date Lists folder under Common > Global Date Lists to display all message bases in the Global Date Lists folder, including its subfolders. You could then expand the message bases by each subfolder.



The following figure shows the folders expanded by the Messages folder under Common > Email > Messages. In this case, the five message bases in the Messages folder are the only message bases that display on the content pane.



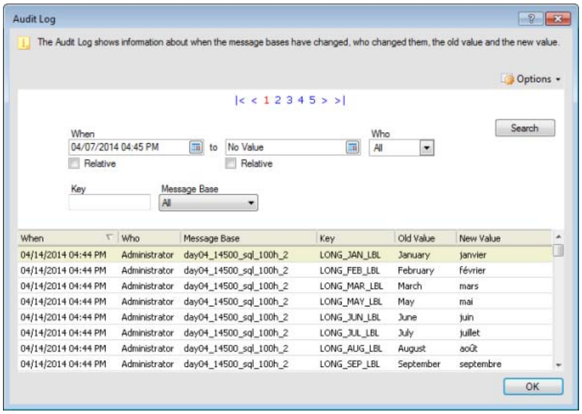
Tip To display message bases in alphabetical order, click in the Key column header.

Audit log

The audit log makes it easy for you to see changes that have been made to the message bases. Depending on where you are on the Message Bases editor, different information displays. For instance, clicking the Audit Log button on the ribbon from the main Message Bases editor displays the following information about the changes made.

- Date and time of change
- Who made the change
- Affected interface
- Message base name
- Old value
- New value

You can also search for a specific message base you want to see changes for from the audit log. The following figure shows the search window for the audit log.



The search options available are described in the following table.

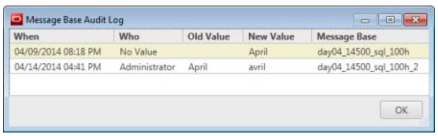
Table 76: Audit Log Search Description

Field	Description
When	Enter the start and end dates or click the calendars to select the dates for the time period of the changes you want to see. The current day is the default start date.

Table 76: Audit Log Search Description (Continued)

Field	Description
Relative	Select this check box and then click the calendar to enter relative start and end dates.
Who	Click this drop-down menu to display changes made by a particular staff member. All is the default.
Key	Type the name of a specific message base in this field. **Note:** You can also enter just the first few letters and append either the percentage sign (%) or an asterisk (*) to serve as a wild-card. All message bases that begin with the letters you type will be returned.
Message Base	Select the check boxes next to the interface for which you want to display changes to message bases. • All—Displays all message bases. (Default) • Logged In—Displays only message bases for the interface you are logged in to. • <interface name>—Displays only message bases that apply to the selected interface.

Clicking the Audit Log button with a specific message base open displays changes to that message base only.

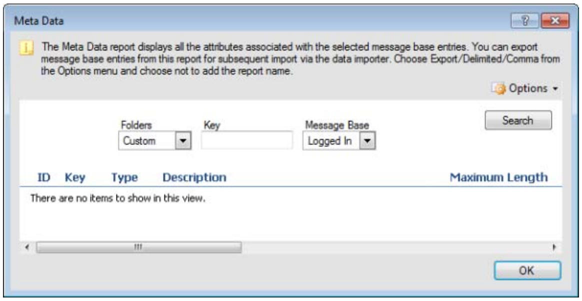


Exporting message bases

Exporting and importing metadata can save time, especially when you have large numbers of message bases. You can export message base metadata and then import that data into another site using the Data Import Wizard. All attributes associated with message bases are available for the interfaces you choose to display. Message base attributes include ID, key (name), type (site or interface specific), description, maximum length, folder and folder ID, and text and custom text values.

To export metadata

1 From the Message Bases editor, click the Meta Data button on the ribbon. The Meta Data window opens.



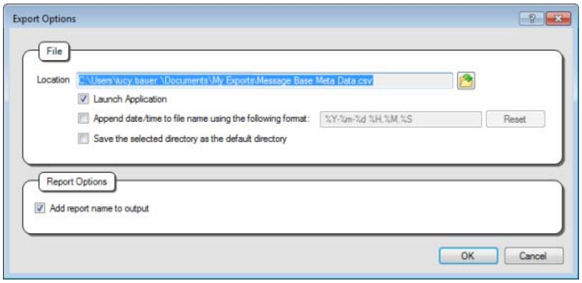
2 Enter the following field information.

Table 77: Meta Data Window Description

Field	Description
Folders	Select the folders that contain the message bases you want to display. The Custom folder is selected by default.
Key	Type the name of a specific message base in this field. This field is not case sensitive. **Note:** You can also enter just the first few letters and append either the percentage sign (%) or an asterisk (*) to serve as a wildcard. All message bases that begin with the letters you type will be returned.
Message Base	Select the check boxes next to the interfaces for which you want to display message bases. • Select All—Displays all site- and interface-specific message bases. • Logged In—Displays only interface-specific message bases for the interface you are logged in to. (Default) • <interface name>—Displays only interface-specific message bases that apply to the selected interface.

3 Click the Search button. Your search results display on the content pane.

4 Click the Options drop-down menu and select Export > Delimited > Comma. The Export Options window opens.



5 Enter the following field information.

Table 78: Export Options Window Description

Field	Description
Location	Lists the default location where your CSV file will be saved.
Save As	Click this button to open the Save As window where you can specify a location (other than the default) to save your file.
Launch Application	Clear this check box if you do not want the file to open after you export it.
Append date/time to file name using the following format	Select this check box to add the date and time to your file name. **Note:** To change the format in which the date and time is added to your file, type your preferred format in the field next to the check box and then click the Reset button.
Save the selected directory as the default directory	Select this check box to make the directory specified in the Location field your default directory.
Add report name to output	Clear this check box to remove the report name from the CSV file. **Important:** You must clear this check box to import the file from the Data Import Wizard because it uses the value specified in the Header Location field to import the data.

6 Click the OK button.

Now you can import your CSV file from the Data Import Wizard. See Importing data.

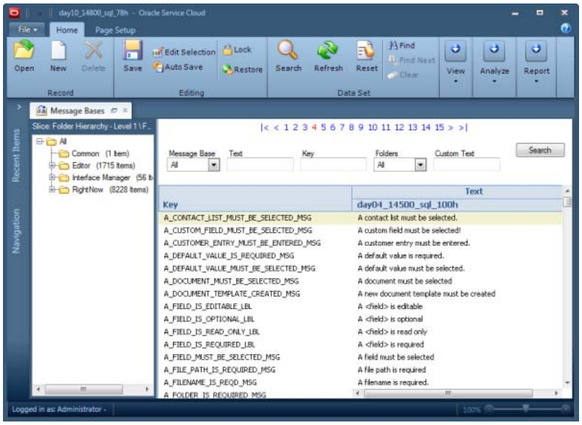
Customizing message bases

Message bases are text strings that appear on the administration interface, the customer portal, and in email messages and notifications. By customizing message bases with the Message Bases editor, you can change the descriptive text within your application. Message bases also provide international language support and let you change the text to accommodate regional dialects.

Reports drive the data that displays on the content pane, and you can format the output returned using **cross tab** (default) and **rollup** views. In rollup view, you can edit a single message base for multiple interfaces at one time. Like configuration settings, message bases are organized in a hierarchical folder structure.

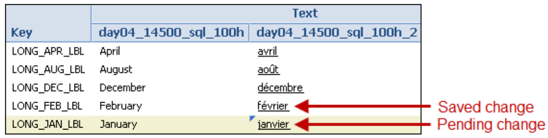
To find message bases, use the Search feature on the Message Bases editor. See [To search for a message base](#).

The following figure shows page 4 of the Message Bases editor. (Each page is a clickable number across the top of the content pane.) By default, the system displays, at most, 10,000 message bases per page with the folders that the text values are contained in displayed on the left. The number of folders that displays depends on which page you view and which settings are displayed.



Editing message bases

While standard message bases cannot be deleted and their field parameters cannot be edited, the text value of a standard message base can be edited, either inline or by clicking the Edit Selection button on the ribbon. You can also edit the same message base on multiple interfaces at the same time using rollup mode. You can easily see when a text value has been changed from the default value because an underscore displays on the changed value. If you change the value back to the default, the underscore no longer displays. When a change is pending, the edited field displays a tick mark. When you hover over the tick mark, a tooltip displays telling you how to save or discard your change.



Another feature you'll want to know about is the ability to lock your message base text values to ensure that the text displays as you expect on upgrade. Because the system always uses the custom text value on upgrade, and since the default value may change with new releases, locking the current value is the only way to ensure that your text stays the same from release to release. See the procedure that follows to lock your text values.

Caution We recommend that you document all changes made to the message bases. As you continue to edit the message bases, your installation becomes less similar to the documentation and the default product. In some cases this can make training and troubleshooting more difficult. Before you begin editing a message, you may want to copy the existing message text from the Default Text field and paste it into the Description field of the open message base. This reduces the chance of errors if you ever need to change your edited message back to the previous value.

To edit message base text

1 Select the row that displays the message base you want to edit.

2 Click the Edit Selection button on the ribbon. The <interface name> window opens.

Or

Click in the Text column to edit the text value inline.

Or

Double-click the message base to open it on the content pane and edit the Description field and/or the Custom Text field.

3 To edit the message base description, type your changes in the Description field.

4 Type or select the new custom text value.

Important Do not add hard returns to message base text. Hard returns may cause a JavaScript error to occur on the page or window where the text appears.

5 To revert to the default text value, click the Restore button.

6 Click the Save button on the ribbon. The new custom text displays with an underscore.

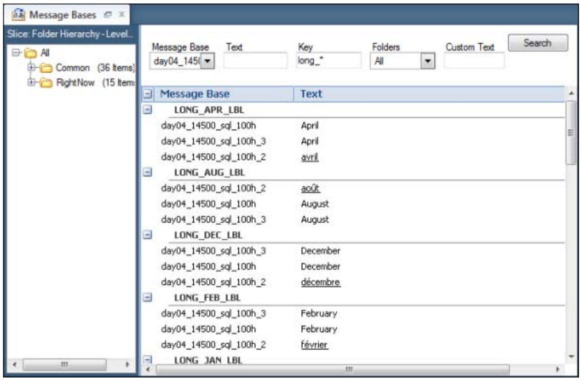
7 Verify the change by checking the page where the edited message base appears.

Note Changes to the message bases do not take effect immediately. You must log out of Oracle Service Cloud and log back in or refresh the customer portal page.

To edit the same message base on multiple interfaces

Note You cannot edit different message bases on the same interface at the same time. However, you can edit the same message base on multiple interfaces.

1 From the Message Bases editor, click the Rollup button on the ribbon.



2 Press **Ctrl** while selecting the rows you want to edit.

3 Click the Edit Selection button on the ribbon.

4 Type the new text value.

5 Click the OK button. The values of all the selected rows are updated.

6 Click the Save button on the ribbon. The new values display with an underscore.

7 Verify the changes by checking the pages where the edited message bases appear.

Note Changes to the message bases do not take effect immediately. You must log out of Oracle Service Cloud and log back in or refresh the customer portal page.

To lock a text value

1 Select a message base from the Message Bases editor.

2 Click the Lock button on the ribbon.

If you have defined a value in the Custom Text field, then that value is locked and will be used on upgrade. If the Custom Text field is *not* defined, then the default text value is copied into the Custom Text field and that value is locked. Either way, the text value will be used from that point on, regardless of any default text value changes in a new release.

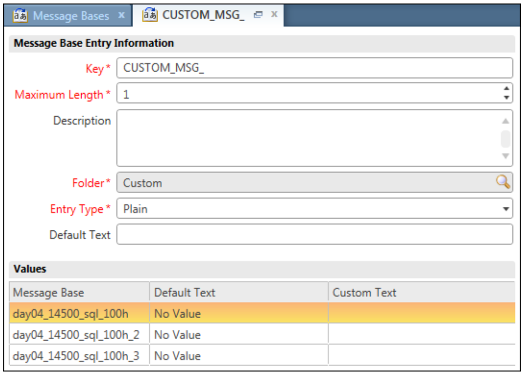
Tip If you have more than one interface, you can lock multiple message bases at the same time by displaying the report in rollup view. See To edit the same message base on multiple interfaces.

Creating custom message bases

When you create a new message base entry, it is considered custom. By default, every custom message base entry name starts with CUSTOM_MSG_ and is automatically assigned to a Custom folder in the folder hierarchy. Once you create a custom message base entry and save it, you can edit its label with custom text. You can also edit the Description field at this point.

To create a message base entry

1 Click the New button on the ribbon. A new message base entry opens on the content pane.



2 Enter the following field information.

Table 79: Custom Message Base Entry Description

Field	Description
Message Base Entry Information	Fields in this section define the parameters for the custom message base, including name, field length, description, folder location, entry type, default text, and custom text.
*Key	Type the name of your custom message base after CUSTOM_MSG_, which populates in this field. All custom message bases must start with CUSTOM_MSG_.
*Maximum Length	Enter the maximum length allowed in the Custom Text field (1-300,000 characters)
Description	Type a description of the message base in this field.
*Folder	Click the Search button to define a folder location for your custom message base. By default, all message bases must be located in the Custom folder or a custom subfolder. **Note:** Ten subfolders can be nested under the Custom folder. Each subfolder can contain three child folders.

Table 79: Custom Message Base Entry Description (Continued)

Field	**Description**
Entry Type	Select from the drop-down menu to add a plain, HTML, or hot key attribute to your message base. Both the Default Text and Custom Text fields accept plain, HTML, and hot key attributes. The HTML option lets you apply HTML to your text. For example, if you want your text to display in bold, you could type <b>Bold text</> in the fields. The Hotkey option lets you add a keyboard shortcut to your text by prepending an ampersand (&) to the text you type in the fields.
Default Text	**Important:** This field is not required. However, if you plan to export and then import your message bases, you must enter a value in this field (or under the Values section). Otherwise, the data import will return an error. Type the default text that you want to display on all interfaces. The text you type in this field populates the Default Text fields for all interfaces under the Values section. **Note:** If you want your interfaces to display different default text, leave this field blank and type your default text values in each interface row under the Values section.
Values	This section displays the interface name and lets you set your default text for each interface.
Default Text	Type the default text you want to display for each interface.
Custom Text	Type the custom text you want to display on each interface. If you define a value in this field, it overwrites the value in the Default Text field. **Note:** This field is disabled until you save your new custom message base. In other words, this field can be edited only on existing message bases.

3 Click the Save button.

Now that you have saved your message base, you can edit the Custom Text field.

4 To define a value for custom text, type it in the Custom Text field. If you define a value for this optional field, it overwrites the value in the Default Text field.

5 Click the Save and Close button. The custom message base displays in the tree under the Custom folder you saved it in.

6 To preserve your text value on upgrade, you must lock the text value. See To lock a text value.

Note Changes to the message bases do not take effect immediately. You must log out of Oracle Service Cloud and log back in or refresh the customer portal page.

Managing files

The File Manager provides direct access to files located on the hosting servers that can be used to customize your organization's application. Using the File Manager, you can view, edit, replace, and back up files that control many aspects of Oracle Service Cloud.

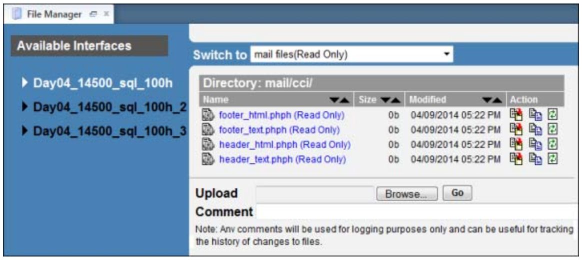
Caution Changes to the files available in the File Manager may immediately affect what customers and staff members see. Because changes to these files can have significant impact, you may want to give only certain staff members access to the File Manager. You can grant or deny access to the File Manager through the Configuration permission on the Administration tab of the staff member's **profile**. See Customizing profiles.

By default, the File Manager provides access to the most commonly modified files. For descriptions of the directories and files that are accessible using the File Manager, see File Manager directories.

To access the File Manager

1 Click the Configuration button on the navigation pane.

2 Double-click File Manager under Site Configuration. The content pane displays the File Manager.



Important By default, the *mail/cci* directory displays when you open the File Manager. However, the mail files are read-only. You can, however, copy any existing file to use in the content of your organization's system-generated notifications and emails. See Message Templates.

The Available Interfaces section contains links to the available interfaces for this installation of Oracle Service Cloud. On the right, you can select a directory from the Switch To drop-down menu to navigate to another directory. This section contains all the files located in the selected directory. Using the Upload function, you can upload a supported file to the current directory by browsing for the file.

The following table contains descriptions of the fields and buttons on the File Manager.

Table 80: File Manager Description

Field/Button	Descriptions
Available Interfaces	Select the interface for viewing or editing files in the File Manager.
Switch to	Click this drop-down menu to select the directory you want to open. For information about directory structure and individual files, see File Manager directories.
Name	This column displays the view/edit button with the file name or the folder icon with the folder name.
	Click this button to open a folder or subfolder.
	Click this button to view or edit *.php* and *.js* files.
	Click this button to view or edit *.css, .moddefs, .tlx,* and *.xml* files.

Table 80: File Manager Description (Continued)

Field/Button	Descriptions
	Click this button to view or edit *.gif, .jpg,* and *.png* files.
	Click this button to view or edit *.html* files.
	Click this button to view or edit *.txt* and *.utf8* files.
Size	This column displays the size (in kilobytes) of the folder or file.
Modified	This column displays the date that the folder or file was last modified.
Action	This column displays the actions you can take for each file, including download, move, copy, restore, and delete.
 Download	Click this button to download the file to your workstation. See Downloading and uploading files.
 Copy	Click this button to copy or move the file. See Copying and moving files. **Note:** You cannot move an original file, only a copy.
 Restore	Click this button to restore the file to the original default configuration or the last saved backup copy. See Restoring files.
 Delete	Click this button to delete a file. Only copied, moved, and uploaded files can be deleted. See Deleting files.
Upload	Type the path and name of the file you want to upload to the server in this text box. See Downloading and uploading files.
Browse	Click this button to browse for the file you want to upload.
Go	Click this button to upload the file to the directory in which you are currently located. A file must be specified in the Upload File box.
Comment	Type a comment to the log file in this field.

Backup and default files

Each directory accessible through the File Manager has an associated backup and default directory. The File Manager automatically saves a backup file in the backup directory when a file is uploaded, edited, or restored. It also maintains permanent, read-only copies of the originally installed default files in the default directory. If necessary, files that have been edited can be restored from the default file or the backup copy using the restore function. See Restoring files.

Note The files in the backup and default directories cannot be edited or overwritten, only viewed and downloaded.

We strongly recommend backing up all customized files on a disk, computer, or network so in the event that you need to revert to an old version of a file, you can restore to a working file. For information about making a backup copy of a file using the download feature, see Downloading and uploading files. For information about making a temporary backup copy of a file using the copy feature, see Copying and moving files.

Downloading and uploading files

By downloading a file, you can edit the file locally to obtain the desired results, and then upload the file to the server. The download function also lets you save backup copies of your customized files.

You can also upload files to the hosting facility. This direct access to files on the server gives you the ability to manage files and provides you with a convenient interface for uploading and downloading files.

Note In the *wordlist* and *dictionary* directories, you can upload only those files that already exist in the directory. For example, if you try to upload a file called *mydict.txt* to the dictionary directory when the actual file is *userdic.tlx*, an error message displays and the upload does not execute.

To download a file

1. Click the Configuration button on the navigation pane and then double-click File Manager under Site Configuration.
2. Select the directory that contains the file from the Switch To drop-down menu.

3 Click the Download button in the Action column for the file you want to download. A message asks you to save the file or find a program to open it.

4 Click the Save button to open the Save As window.

5 Navigate to the directory where you want to save the file and type the name of the file.

6 Click the Save button to download the file to the selected directory on your workstation.

To upload a file

1 Select the directory that contains the file from the Switch To drop-down menu.

2 Type the full path of the file you want to upload in the Upload field.

Or

Click the Browse button to open the Choose File window where you can search your local and network file systems for the file. Select the file and click the Open button. The file path and name populates the Upload text box.

Important A file name cannot include spaces or special characters. In addition, a file name that includes uppercase characters is converted to lowercase when it is uploaded. After the file is uploaded, it can be copied with a new name if the file requires a name with uppercase characters. See Copying and moving files.

3 Click the Go button to upload the file to the current directory. If the uploaded file has the same file name and extension as the file you want to replace, it automatically overwrites the file. A backup copy of the current file is saved in the backup directory before the file is overwritten.

Note Only certain file types can be uploaded through the File Manager. For a list of file types that can be uploaded into each directory, see File Manager directories.

Viewing and editing files

You can view a file to help you identify the file's purpose or to help you troubleshoot issues. If necessary, the File Manager also lets you edit files located on the hosting server.

To view a file

1 Click the Configuration button on the navigation pane and then double-click File Manager under Site Configuration.

2 Select the directory that contains the file from the Switch To drop-down menu.

3 Click the View/Edit button to the left of the file you want to view. The contents of the file are displayed on the content pane.

4 Click the Cancel button to return to the main File Manager page when you have finished viewing the file.

Note When viewing or editing a file through the File Manager, you may need to scroll down to see the Save and Cancel buttons.

To edit a file

1 From the File Manager, click the name of the file you want to edit or click the View/Edit button to the left of the file.

2 Edit the file as necessary.

3 Type a brief comment in the Comment field to help you track the editing history. For information about viewing comments, see Log file.

4 Click the Save button to save the changes. A backup copy of the current file is saved in the backup directory and the current file is overwritten with the modified file. Because saving a file impacts the backup copy of the file, you will receive a warning if you attempt to save the file without making any changes.

Copying and moving files

You can copy or move a file to the current directory or the backup directory to organize and back up your files. However, you cannot move or overwrite the files in the *default* directories.

When copying files, you may want to adopt a naming convention for old or backup copies of a working file. The File Manager default file name is *copy_<filename>*. Be consistent with whatever naming convention you choose.

To copy or move a file

1 Click the Configuration button on the navigation pane and then double-click File Manager under Site Configuration.

2 Select the directory that contains the file from the Switch To drop-down menu.

3 Click the Copy button in the Action column of the file you want to copy or move.

4 To move the copy of the file to the backup directory, select it using the directory drop-down menu under the current directory.

5 To change the resulting file name from the default *copy_<filename>*, type the new name in the text box to the right of the directory drop-down menu.

6 Type a brief comment in the Comment field to help you track the editing history. For information about viewing the editing history, see Log file.

7 Click the Save button to copy or move the file to the specified directory and file name.

8 To create additional copies of the same file, repeat steps 3 through 7.

9 Click the Cancel button to return to the directory where the copied file is located.

Restoring files

You can restore a file to the most recent backup copy in the backup directory or to the original default file in the default directory. You might choose this option if you are having problems editing a file and want to revert to an earlier version. Read-only, backup copies of all files accessible through the File Manager are created in each default directory during installation to serve as permanent backup copies. Before a file is overwritten (edited, uploaded, or restored), a backup copy is saved in the backup directory.

When you use the restore function and there is both a backup and default file, you are prompted to choose which file you want to restore. If only one file exists, either a default file or a backup file, a dialog box prompts you to confirm the restoration from the existing file.

To restore a file from the backup or default directory

1 Click the Configuration button on the navigation pane and then double-click File Manager under Site Configuration.

2 Select the directory that contains the file you want to restore from the Switch To drop-down menu.

3 Click the Restore button in the Action column of the file you want to restore. A warning message asks you to verify that you want to restore the file.

4 Click the OK button. If both backup and default files exist, you are prompted to choose either the backup or default file.

5 To restore from the default file, select the Default radio button and click the Commit button to return to the directory list of files.

6 To restore from the backup file, select the Backup radio button and click the Commit button to return to the list of files.

Deleting files

You can delete copies of files or uploaded files that you no longer need. However, you can delete only those files that you have copied, moved, or uploaded. You cannot delete the original files that were created during installation or upgrade. Before the file is deleted, a copy of the file is saved in the backup directory.

Caution Deleting a file can affect your production site. Be sure that the file you are deleting is not necessary for proper functioning of your site. Always make backup copies of files that you may need in the future.

To delete a file

1 Click the Configuration button on the navigation pane and then double-click File Manager under Site Configuration.

2 Select the directory that contains the file you want to delete from the Switch To drop-down menu.

3 Click the Delete button in the Action column of the file you want to delete. A warning message asks you to continue or cancel the action.

4 Click the OK button to delete the file.

File Manager directories

The File Manager gives you access to the directories described in the following sections along with access to the backup and default directories.

Mail files

The PHP files in the *mail/cci* directory as well as the files in the expanded File Manager have been deprecated and may be permanently removed in a future release. You can customize your message content, including headers and footers, using **message templates** instead of making changes to multiple PHP files. See Message Templates.

Note The mail files display as read-only in the File Manager so that you can copy any existing message content to your organization's system-generated notifications and emails, which are defined by the message templates.

CSS files

This directory has been deprecated and is not used by standard Oracle Service Cloud functionality. You can upload and download CSS files to the customer portal *assets* folder through WebDAV. See Understanding the Customer Portal file structure, The customer folder, and WebDAV for the Customer Portal.

Custom scripts

This directory is used to store legacy files for any customization work done on your site.

Outreach and Feedback files

Using the default files in the *ma/cci* directory, you can customize pages used with Outreach and Feedback mailings and surveys. These directories do not display if Outreach and Feedback is not enabled. The following table lists the files available in the default *ma/cci* directory.

Table 81: Files in the *ma/cci/* Directory

File	Description
bottom.phph	Used to add page elements to the bottom and right of HTML pages that have been generated by PHP scripts.
head.phph	Used to link to a cascading style sheet to add head elements to the HTML pages that have been generated by the PHP scripts.
top.phph	Used to add page elements to the top and left of HTML pages that have been generated by PHP scripts.

To learn more about customizing mailing and survey pages, see Answer ID 2477 on our support site.

Image files

This directory has been deprecated and is not used by standard Oracle Service Cloud functionality. You can upload and download image files to the customer portal *assets* folder through WebDAV. See Understanding the Customer Portal file structure, The customer folder, and WebDAV for the Customer Portal.

Chat file directories

The Chat image files directory contains the images used in Chat, including the logo used on the client window. The Chat Agent transcript images directory contains the images used to modify the Transcript section of the chat sessions workspace. The Chat Agent transcript templates directory contains the style sheet, JavaScript file, and HTML template used to modify the Transcript section of the chat sessions workspace. These directories do not display if Chat is not enabled.

Wordlist files

The files in this directory enable you to customize the words used during keyword indexing, text searching, and SmartSense rating. See SmartSense Emotive Rating.

Note The Wltool utility runs automatically after editing these files. However, if you edit the *exclude_incidents.txt* or *exclude_answers.txt* files, the Keywordindexer utility must run by Oracle Cloud Operations before your changes become active. To schedule this, submit an incident on our support site.

The following table lists the files available in this directory.

Table 82: Files in the *wl/en_US/* Directory

File	Description
aliases.txt	This file is initially empty, but you can add synonyms, phrases, or aliases to link terms specific to your industry to similar terms that may be used during a search. For example, a customer might search for an acronym, such as “GPS,” but all of your answers regarding GPS might spell out “global positioning system” rather than using the initials. The *aliases.txt* file lets you link terms that customers might search on with synonymous terms in your answers. The first word in the line is the search word that customers can enter. It can contain spaces so you can use phrases as synonyms for the search word. It cannot contain ampersands or slashes, although it can contain hyphens. All entries on the line must be uppercase and comma delimited, as shown in this example: GPS, GLOBAL POSITIONING SYSTEM, NAVIGATIONAL SYSTEM If a customer enters the first word in a line as a search word, all answers containing that word or any other term on the line are returned. In this example, a customer who enters GPS as a search word is directed to all answers containing “GPS,” “global positioning system,” or “navigational system.”
do_not_suggest.txt	This file is initially empty, but you can add terms you do not want to appear in Suggested Searches on the Answers page. Enter each word on a separate line of the text file.
exclude_answers.txt	This file contains common words such as prepositions, adverbs, and pronouns that are excluded from indexing and searching functions on the customer portal. If you have specific words that you do not want customers to be able to search on, you can add these stopwords to the *exclude_answers.txt* file to exclude them from being indexed. Stopwords must be uppercase and typed on separate lines. **Note:** Words in this file are also excluded when using **SmartAssistant** to search for an answer.

Table 82: Files in the *wl/en_US/* Directory (Continued)

File	Description
exclude_incidents.txt	This file contains common words such as prepositions, adverbs, and pronouns that are excluded from indexing and search functions on the administration interface. If you have specific words that you do not want agents to be able to search on, you can add these stopwords to the *exclude_incidents.txt* file to exclude them from being indexed. Stopwords must be uppercase and typed on separate lines. **Note:** SmartAssistant does not exclude words from *exclude_incidents.txt* when searching incidents on the administration interface or the customer portal.
exclude_responses.txt	This file contains common words such as prepositions, adverbs, and pronouns that are excluded from use in clustering responses. If you have specific words that you do not want agents to be able to search on, you can add these stopwords to the *exclude_responses.txt* file to exclude them from being indexed. Stopwords must be uppercase and typed on separate lines.
smartsense.txt	This file contains emotive override words and values that are checked before the standard emotive word list. You can add unrated words, give different ratings to already rated words, or remove words. Each word is rated between -10 and +10. Word values are used for internal calculations to result in the final displayed SmartSense ratings of +3 to -3. The word and its value must be separated by a tab. In addition, entries must be uppercase and typed on separate lines. Any changes affect new incidents, updated incidents, and text question responses in surveys. When adding words to this file, you must add all forms of the word (on separate lines), not just the root word.

Table 82: Files in the *wl/en_US/* Directory (Continued)

File	Description
thesaurus.txt	This file contains a list of words and their synonyms used in the Similar Phrases search technique on the Answers page. Words in the text search are matched with synonyms to extend the searching capability to include ontologies. The word and its synonyms must be uppercase and comma delimited as seen in this example: ABIDE, BIDE, STAY, ENDURE, STOMACH, BEAR, STAND, TOLERATE, BROOK, SUFFER where ABIDE is the main word and BIDE, STAY, ENDURE, and so on are synonyms. In *thesaurus.txt*, each word in the list is a synonym of the first word, not synonyms of each other. For example, the word "abide" has the synonyms "stay" and "endure." Endure has no synonyms, unless "endure" had its own entry. **Note:** The synonyms can be multi-word phrases, but the first term in the line must be a single word.

Asian language dictionaries

The Asian language dictionaries directory contains additional dictionary word lists that are used for part-of-speech (POS) tagging and similar phrase searching. By adding words to the user dictionary files with special parameters, you can override the default segmentation.

Note User dictionary files are available only for Chinese and Japanese languages, specifically Mandarin (*user.dict_CN.utf8*), Cantonese (*user.dict_HK.utf8*), Taiwanese (*user.dict_TW.utf8*), and Japanese (*user.dict_JP.utf8*).

You can create user dictionaries for words specific to an industry or application by adding new words, personal names, and transliterated characters of other alphabets. In addition, you can specify how existing words are segmented. For example, you may want to prevent a product name from being segmented even if it is a compound. The system performs a lookup of more than 500,000 words to determine segmentation. Using the dictionary, alias list, and keywords, you can influence how words are segmented.

If you edit a user dictionary file, you must use a specific format. The word you want to add is followed by the user dictionary part-of-speech tag (listed below), and an optional decomposition pattern (DecompPattern) in the form of a comma-delimited list of numbers specifying the number of characters from the word to include in each component of the string. (Use a zero (0) to indicate that a DecompPattern is *not* needed.)

For example, the user dictionary entry AABBCC ORGANIZATION 2,2,2 indicates that AABBCC should be decomposed into three, two-character components.

User Dictionary POS Tags for Mandarin, Cantonese, and Taiwanese (case insensitive)

- NOUN
- PROPER_NOUN
- PLACE
- PERSON
- ORGANIZATION
- FOREIGN_PERSON

User Dictionary POS Tags for Japanese (case insensitive)

- NOUN
- PROPER_NOUN
- PLACE
- PERSON
- ORGANIZATION
- GIVEN_NAME
- SURNAME
- FOREIGN_PLACE_NAME
- FOREIGN_GIVEN_NAME
- FOREIGN_SURNAME

Important Oracle Cloud Operations must run the Keywordindexer utility before your changes to the word list files are active. To schedule this, submit an incident on our support site.

Spellchecker dictionaries

The spellchecker dictionary directory, *spell/dict/,* contains an additional dictionary word list, *userdic.tlx,* which is used for spell checking and similar phrase searching. Add words you want to be included in the spell checking dictionary. Words added to this file are not flagged as misspelled during spell checking. Type each word on a separate line.

Integration files

The files in this directory are templates used for external events and email integration. Contact your Oracle account manager for help with these files.

Certificate directories

The Additional root certificates, Intermediate certificates, and Certification revocation lists directories are used to store files used for email security. See Email security overview.

Log file

The log file is a useful tool for tracking the history of a file. It records the details of the actions taken on a file (for example, uploading, restoring, copying, or deleting), including the staff member who executed the action, the IP address of the staff member's workstation, the date and time of the action, and comments. You can send the log file through email or download the log file to your workstation in either CSV (comma-separated value, or comma-delimited) or HTML format.

The following table describes the fields in the log file.

Table 83: Log File Description

Field/Button	Description
File Name	This field displays the name of the file.
User	This field displays the staff member who executed the logged action.
IP Address	This field displays the IP address of the workstation the logged action was executed from.
Date/Time	This field displays the date and time that the logged action occurred.
Change Type	This field describes the type of logged action (for example, upload, default restore, backup restore, copy, or delete).
Comment	This field contains any comments that were added by the staff member during the logged action.
Your Email Address	Type your email address to be used as the From address when the log file is sent.
Send the Log File To	Type the email address to which you want to send a copy of the log file.
Email Log File	Click this button to send the log file by email.
Comma Delimited (CSV)	Select this radio button to download the log file in CSV format.
HTML	Select this radio button to download the log file in HTML format.

Table 83: Log File Description (Continued)

Field/Button	Description
Download Log File	Click this button to download the log file to your workstation.

To email the log file

1 Type your email address in the Your Email Address field. This will be the From address.

2 Type the recipient's email address in the Send the Log File To field.

3 Click the Email Log File button.

To download the log file

1 Select the format for downloading the file (Comma Delimited (CSV) or HTML).

2 Click the Download Log File button.

3 Select the location where you want the file saved and click the Save button.

Viewing log files

Log files let you view errors and other information generated by the CGI and PHP scripts, the **Techmail** and **Agedatabase** utilities, and Oracle Service Cloud products. The log files can be helpful in troubleshooting issues with your Oracle Service Cloud application.

The following log files are available.

- **Error log**—This log contains application and data errors.
- **Info log**—This log contains informational errors, such as processing too much data.
- **Security log**—This log contains security errors, such as an invalid security string.
- **External Search log**—This log describes external searches of your site's pages performed by spiders or robots. See Indexing web pages.
- **Rule log**—This log describes the business rules that have fired against a specified record. See Verifying rules using the rule log.

The following procedure describes how to access the log files and the information in the error, info, and security logs.

To open log files

1 Click the Configuration button on the navigation pane.

2 Double-click Logs under Site Configuration. The content pane displays the log viewer.

3 Click the Error Log, Info Log, or Security Log button on the ribbon to open the corresponding log file.

4 Select the options from the drop-down menus described in the following table.

Table 84: Log File Menus Description

Field	Description
Interface	Click this drop-down menu and select the interface of the logs you want to view.

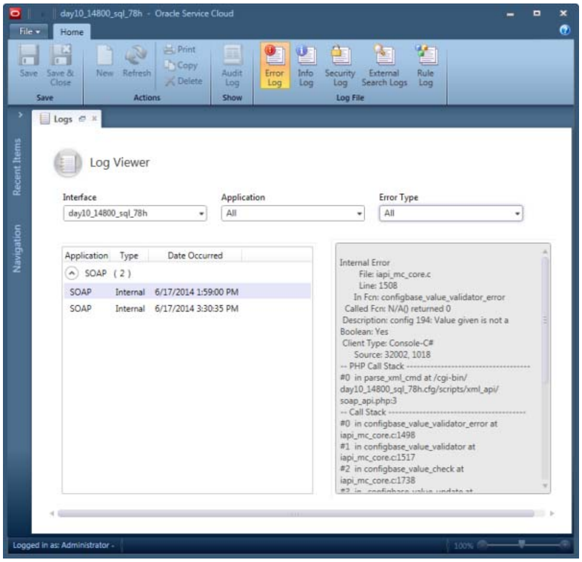
Table 84: Log File Menus Description (Continued)

Field	Description
Application	Click this drop-down menu and select the application for which you want to view messages. By default, All is selected in the menu to display messages associated with any of the applications. The following options are available. • All • Agedatabase • Bulkdel • Certool • Dataminer • DBAudit • DBStatus • DBUpdate • DQA • Kexport • Keyword Indexer • Kimport • Lang CVT • Mailer • Messagebase Compiler • Oracle Service Cloud • Oracle Service Cloud PHP • Oracle Service Cloud Upgrade • RD • Reportgen • Sawmill • Techmail • Unknown • WLTool **Note:** When you open the error, info, or security logs, all messages in the log are displayed and are grouped together by application. You can click the header for each group to expand or collapse the messages listed in the group.
Error type	Click this drop-down menu and select the type of messages that you want to view. The following options are available.
All	Select this option to see all types of messages. This is selected by default when you open the log file.
Campaign	Select this option to see messages generated by campaigns.

Table 84: Log File Menus Description (Continued)

Field	Description
Configuration	Select this option to see messages generated when using the Configuration Editor.
Internal	Select this option to see internal server errors.
POP3 Protocol	Select this option to see messages returned by **Techmail** when it is trying to retrieve email from the Service or Outreach mailboxes.
Rules	Select this option to see messages generated when rules are being processed.
SMTP Protocol	Select this option to see messages created by Techmail when it is trying to send email.
SQL	Select this option to see SQL messages returned by the database management system.
SSL	Select this option to see messages created with email using **SSL**.
Unclassified Bounce Message	Select this option to see messages generated when an Outreach email is bounced for a reason that cannot be classified.

The following figure shows the error log on the log viewer.



The columns in the error, info, and security logs display the name of the application that generated the message, the error type, and the date and time the event occurred. Details of the first message in the list are also shown.

Important Messages in the log files are removed after thirty days.

5 To view the details of a specific message, select the message on the log.

6 Click X on the upper right of the content pane to close the log viewer.

Service update notifications

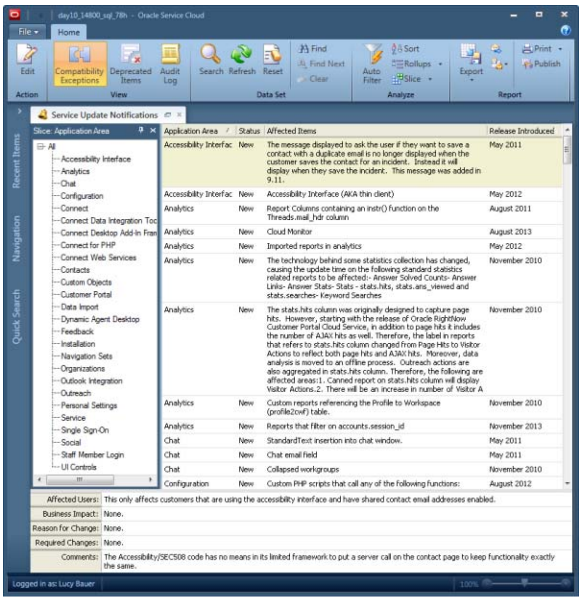
You can view changes that have been made in this version of the product that may affect you if you are upgrading from an earlier version. Two standard reports, Compatibility Exceptions and Deprecated Items, drive the data that displays on the content pane. The layout for both reports is similar, designed with a split-level display of the content pane. The top portion of the content pane is scrollable, displaying data that you can search, filter, slice, and export. The bottom portion of the content pane is always visible, displaying data specific to the row you have selected in the top content pane.

- **Compatibility exceptions**—This report describes changes that may result in different behavior or functionality from previous versions. It also describes which users are affected by the change, its business impact, and the steps you can take to remedy the effects of the change. See Compatibility exceptions.
- **Deprecations**—This report describes items that have been **deprecated** in this release, the reason for their deprecation, if replacements are available and what they are, and the migration steps you can take to replace the functionality that was deprecated. See Deprecated items.

You can choose to view all service updates data or slice the data to view only the application areas you want to see. You can also make inline edits to the Status column of each report to help you track how service updates affect your site.

Prerequisites

Before you can view service updates data, you must add the Service Update Notifications component to the **configuration list** for the Configuration button. See Creating a navigation set for the administrator.



To view Service Update Notifications

1 Click the Configuration button on the **navigation pane**.

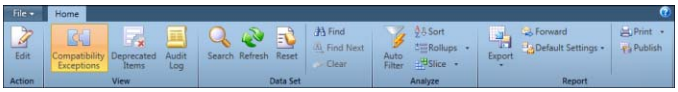
2 Double-click Service Update Notifications in the configuration list. The Compatibility Exceptions report opens.

3 To view deprecated items, click the Deprecated Items button on the ribbon.

4 To copy text from any row in the top portion of the content pane, select the text, right-click, and select Copy Cell to Clipboard.

Service Update Notification ribbon

Most of the buttons on the service update notifications ribbon reflect common Oracle Service Cloud functionality and work the same way as they do in reports. In addition to viewing Compatibility Exceptions and Deprecated Items reports, you can search and filter the report data, define how you want the data to display on the report, and export data in a variety of formats. You can also edit the Status column of each report.



The groups and buttons on the service update notification ribbon are described in the following table.

Table 85: Service Update Notification Ribbon Description

Group/Button	Description
Action	The button in this group lets you edit the Status column of the report.
Edit	Click this button to edit the Status column of the displayed report. To edit the status of multiple rows, press **Ctrl** while selecting each record you want to edit at the same time. You can also press **Shift** to select multiple consecutive rows.
View	The buttons in this group let you view and edit records using inline editing. See To edit Status inline.

Table 85: Service Update Notification Ribbon Description (Continued)

Group/Button	Description
Compatibility Exceptions	Click this button to display the Compatibility Exceptions report. This report describes changes that may result in different behavior of functionality from previous versions. It also describes which users are affected by the change, its business impact, and the steps you can take to remedy the effects of the change. See Compatibility exceptions. **Note:** The Compatibility Exceptions button is selected by default when you open service update notifications.
Deprecated Items	Click this button to display the Deprecated Items report. This report describes items that have been replaced in this release, the reason for the deprecation, if replacements are available and what they are, and the migration steps you can take to replace the functionality that was deprecated. See Deprecated items.
Audit Log	Click this button to view the audit log for the selected row.
Data Set	The buttons in this group let you search for data in the report, refresh the display, and reset the search criteria to the report's defaults.
Search	Click this button to open the report's Search window to select criteria for variables and run-time selectable filters. See Searching in reports.
Refresh	Click this button to reload the data shown using the report's current search criteria.
Reset	Click this button to reload the data shown using the report's default search criteria.
Find	Click this button to open the Find window to enter text, numeric values, or special characters you want to locate in the report's output. Report cells that contain the search value are highlighted on the report. See Finding content in reports.
Find Next	Click this button to highlight the next instance of the search values entered on the Find window.
Clear	Click this button to clear the search values entered on the Find window.

Table 85: Service Update Notification Ribbon Description (Continued)

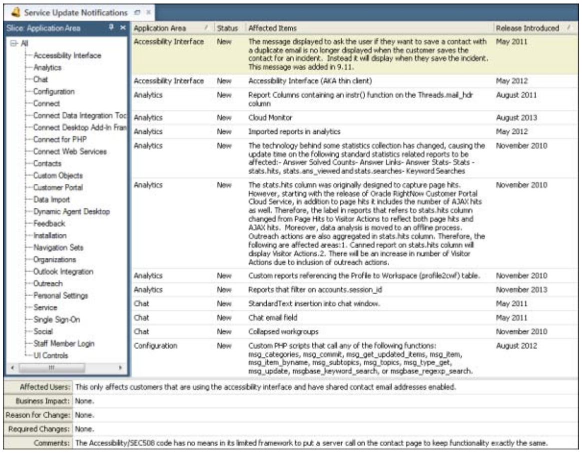
Group/Button	Description
Analyze	The buttons in this group let you sort the data shown on the report and apply auto-filtering, rollups, and slicing to the data.
Auto Filter	Click this button to enable auto-filtering in the report. Auto-filtering provides column filtering after the report has been generated. See Using Auto Filter.
Sort	Click this button to open the Sort window and select which output columns to sort by and the sort method. See Changing sort options.
Rollups	Click this button to select **rollup** options and open the Rollups window. See Displaying rollup levels.
Slice	Click this button to select slice options and open the Slice window. Slicing groups data so you can view only the subset of records you are interested in. See Slicing report data.
Report	The buttons in this group let you export the report, forward the report in an email, and save and restore default settings.
Export	Click this button to export the data from a report to a file for use with third-party applications. You can export report data in the following formats: HTML, PDF, Excel, XML, Image, and Delimited. You can also copy report data to the clipboard. See Exporting report output. **Note:** Permission to export, print, and forward reports must be enabled in your profile for this button to display. See Analytics permissions.
Forward	Click this button to send the report to individuals or **distribution lists** in an email. See Forwarding reports. **Note:** Permission to export, print, and forward reports must be enabled in your profile for this button to display. See Analytics permissions.
Default Settings	Click this button and select Save as Default to save your personalized display and data settings for a report for later use. Select Restore to remove personalized display and data settings from a report and restore the settings to those defined in the report. See To reset display and data settings.

Table 85: Service Update Notification Ribbon Description (Continued)

Group/Button	Description
Print	Click the arrow on this button to access printing options.
Publish	Click this button to save the current report as a read-only snapshot of the current data. The snapshot will be an exact representation of the current data set, including any display options or customizations. You will be prompted to name the report and save it to a folder in the Reports tree where it can be accessed through the Reports explorer. See [Reports explorer]().

Compatibility exceptions

When changes to this version of Oracle Service Cloud cause changes to existing APIs, the administration interface, functionality, or how features are configured, these changes are noted as compatibility exceptions. The Compatibility Exceptions report describes the changes, identifies who might be impacted by the change, and notes its potential business impact. It also describes the steps you can take to mitigate the results of the change.



The following report columns display on the top of the content pane.

- **Application Area**—Area of Oracle Service Cloud affected by the service update.
- **Status**—Contains a drop-down menu that can be edited inline to designate how a service update has been addressed. Status options include New, Not Applicable, and User Remediated. See [To edit Status inline]().

- **Affected Items**—Lists the application components affected by the service update.
- **Release Introduced**—Date the service update was added to the product.

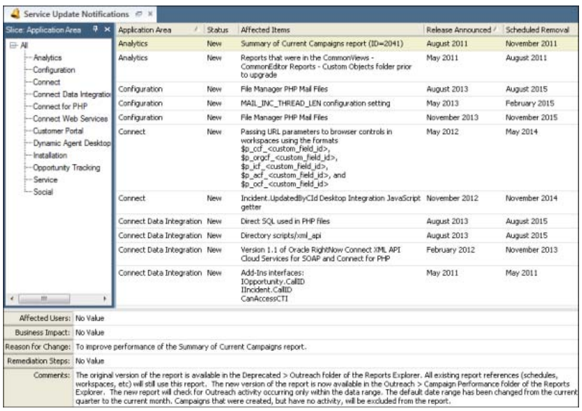
The following report rows display on the bottom of the content pane specific to the selected row.

- **Affected Users**—Lists the user types affected by the service update.
- **Business Impact**—Describes the effect of the service update on business activity.
- **Reason for Change**—Describes the cause of the required service update.
- **Required Changes**—Lists the steps required before your site can take advantage of the service update.
- **Comments**—Captures any additional explanation regarding the service update.

Deprecated items

When you click the Deprecated Items button on the ribbon, the Deprecated Items report displays. When a component or feature has been deprecated, it is usually replaced with newer functionality. Your existing functionality remains unchanged for two years, so you will not experience problems as a result of deprecation. However, you should migrate to the new functionality within that time frame.

The deprecation may occur to Oracle Service Cloud functionality or to third-party components used within the Oracle Service Cloud application, such as PHP features. When replacements are not available, the report contains information you need to review in order to modify your current functionality to phase out use of the deprecated item.



The following report columns display on the top of the content pane.

- **Application Area**—Area of Oracle Service Cloud affected by the service update.
- **Status**—Contains a drop-down menu that can be edited inline to designate how a service update has been addressed. Status options include New, Not Applicable, and User Remediated. See To edit Status inline.
- **Affected Items**—Lists the application components affected by the service update.
- **Release Announced**—Release the deprecation was announced.
- **Scheduled Removal**—Release the functionality/component is scheduled to be removed.

The following report rows display on the bottom of the content pane specific to the selected row.

- **Affected Users**—Lists the user types affected by the deprecation.
- **Business Impact**—Describes the effect of the deprecation on business activity.
- **Reason for Change**—Describes the reason for the deprecation.
- **Remediation Steps**—Lists the steps required to accommodate the deprecation.
- **Comments**—Captures any additional explanation regarding the deprecation.

To edit Status inline

1. Select the row in the report you want to edit.

   Or

   Press **Ctrl** while selecting each row you want to edit at the same time. You can also press **Shift** to select multiple consecutive rows.

2. Hover over the status until the field is highlighted in blue, and then click to activate the drop-down menu.

   Or

   Click the Edit button on the ribbon to apply edits to multiple rows.

3. Select one of the following options from the drop-down menu.
   - **New**—Designates that you still need to address the service update. New is the default option.
   - **Not Applicable**—Designates a service update that does not affect your site. For example, there may be a compatibility exception for Chat, but your site does not use Chat.

- **User Remediated**—Designates that you still need to address the issue or that you have completed the steps to address the issue. For example, you have either removed the deprecation and it is no longer an issue, or you have read the compatibility exception, understand the suggested workaround, and have remediated the issue.

4 To apply the edit inline, press **Enter** or click outside the column you are editing.

Or

Click the OK button to apply edits to multiple rows.

Changing the interface display name

You may decide you want to change the name of the interface as it displays for staff members. Changing the interface name affects only the display of the interface name as it appears to staff members on the **agent desktop**. URLs to your interface continue to use the original interface name.

To change the interface display name

1 Click the Configuration button on the navigation pane.

2 Double-click Interfaces under Site Configuration.

3 Click the interface name you want to edit.

4 Type the new interface name in the Display Name text box.

5 Click the Save and Close button on the ribbon to save the new display name.

Note To change the answers report that displays on the Answers page of your customer portal, see Changing the report on the Answers page.

Configuring currencies and exchange rates

If your organization conducts business outside of the United States, you might need to add foreign currencies to your **knowledge base**. You can add multiple currencies and set **exchange rates** for each.

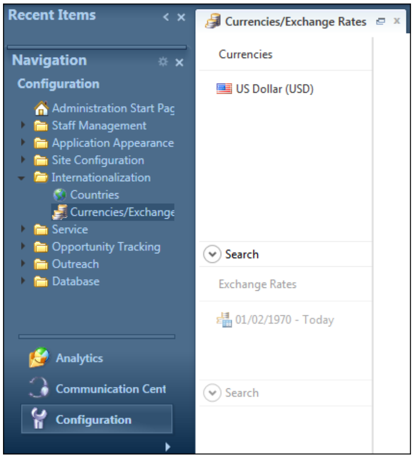
Adding and editing currencies

By adding currencies, you can define the **currency** associated with each country or province in your knowledge base. Once you create currencies, you can assign a default currency to each **staff account**, and your staff members can use them to select the appropriate currency for contacts, organizations, and **forecasts**.

Important You can add and edit currencies, but you cannot delete them.

To add or edit a currency

1 Double-click Currencies/Exchange Rates under Internationalization. The **content pane** displays the Currencies and Exchange Rates trees.



2 To edit a currency, click the currency in the tree and go to step 4.

Or

To add a currency, click the New button on the ribbon and select Currency. The Installed Cultures list opens.

Note When you select a culture, the Currency editor automatically populates with the associated culture information contained in the related region on you workstation. Once you select a standard culture and save the currency, you cannot change the culture association.

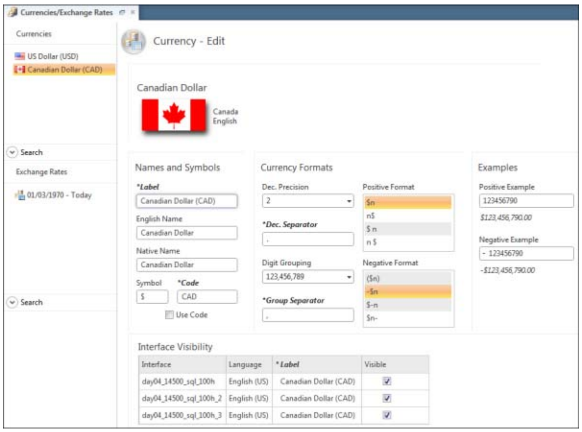
The list of installed cultures depends on the regions installed on your workstation and varies based on your operating system. You can see the list of installed regions by opening Region and Language Options in the Windows Control Panel. If the matching culture does not appear in the list, you can either add a custom currency (see step 3) or contact your organization's information technology team and have the associated language pack installed on your workstation.

3 To select a standard culture, double-click the culture that matches the currency. The Currency editor opens.

Or

To add a custom culture, double-click Custom Culture at the top of the Installed Cultures list.

Tip If you initially choose to create a custom culture, you can select a standard culture by editing the currency. This lets you associate a standard culture with the currency if the standard culture becomes available on your workstation.



4 Enter the following field information.

Table 86: Currency Editor Description

Field	Description
Names and Symbols	
Label	Type the name of the currency as it appears in the Currencies tree.
English Name	Type the English name of the currency.
Native Name	Type the name of the currency as it appears in the associated country.
Symbol	Type the symbol that represents the currency you are adding. For example, the symbol for the United States dollar is $. **Note:** You may need to use your operating system's character mapping feature to determine the keystrokes for entering symbols that do not appear on your keyboard.
Code	Type three letters to represent the currency. For example, USD is the currency code for the United States dollar.
Use Code	Select this check box to use the three-letter currency code instead of the symbol to represent the currency.
Currency Formats	
Decimal (Dec.) Precision	Click this drop-down menu to select decimal precision, which defines the number of digits displayed after the decimal symbol. For example, the decimal for the United States dollar is two decimal places ($123.44).
Decimal (Dec.) Separator	Type a symbol to represent the decimal place. For example, the decimal separator for the United States dollar is a period ($678.99).
Digit Grouping	Click this drop-down menu to select a digit-grouping format.
Group Separator	Type the symbol used to separate digit groups. For example, the digit grouping separator for the United States dollar is a comma ($1,234,567.99).
Positive Format	Select a format to represent positive and negative currency.
Negative Format	

Table 86: Currency Editor Description (Continued)

Field	Description
Examples	
Positive Example	Type the number you want used in the positive and negative currency example. An example of the positive and negative currency format (based on the currency format settings and example number) displays in the field below.
Negative Example	
Interface Visibility	
Label	Type the currency label as you want it to appear on each interface.
Visible	Select the check box for each interface where you want the currency to appear.

5 Click the Save and Close button on the ribbon.

Adding and editing exchange rates

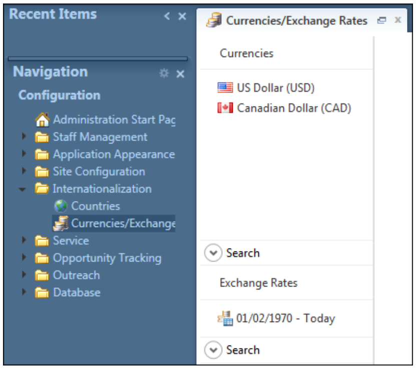
Keeping **currencies** and the associated **exchange rates** up-to-date helps your sales representatives provide the most accurate **quotes** for customers. Once you add currencies, you can add and edit exchange rates.

Prerequisites

Currencies must be created before adding exchange rates. See Adding and editing currencies.

To add or edit exchange rates

1 Double-click Currencies/Exchange Rates under Internationalization. The **content pane** displays the Currencies and Exchange Rates trees.



2 To add exchange rates, click the New button on the **ribbon** and select Exchange Rate. The Exchange Rate editor opens.

Or

To edit exchange rates, click the date in the tree.

3 Enter the following field information.

Table 87: Exchange Rates Editor Description

Field	Description
Start Date	The Start Date becomes the name of the exchange rate in the tree. Type the date that the exchange rates take effect or click the drop-down calendar and select a start date. **Note:** The start date can be a past date but not a future date.
Rates	Type exchange rates in this table. The number in the table cell is the multiplier used to convert the currency in the first column to the currency in the corresponding column.

4 Click the Save button to save the exchange rates.

Example

In this example, one U.S. dollar (USD) is equivalent to 1.10154 Canadian dollars (CAD), 5.94126 Croatian kunas (HRK), 0.78517 euro (EUR), and 0.96471 Australian dollars (AUD). Similarly, to convert other currency to U.S. dollars, multiply the number of Canadian dollars by 0.98406, the number of Croatian kunas by 0.16833, the number of euros by 1.27264, and the number of Australian dollars by 1.03650.

Exchange Rates

From: / To:	USD	CAD	HRK	EUR	AUD
USD	1.00000	1.10154	5.94126	0.78517	0.96471
CAD	0.98406	1.00000	5.86753	0.77326	0.94953
HRK	0.16833	0.17116	1.00000	0.13234	0.16255
EUR	1.27264	1.29340	7.55562	1.00000	1.22813
AUD	1.03650	1.05300	6.15173	0.81427	1.00000

Screen pops

Screen pop functionality lets you communicate with Oracle Service Cloud from a third-party program to submit a screen pop request. For instance, you can open, or "pop," a report or an editor as a new **content pane** tab on the Service Console by sending a request from a third-party application. When you pop an editor, you can view and edit records from the new window. When you pop a report, you can pass **run-time filter** values to the report and perform all normal report functions.

Note Before you can integrate the screen pop feature with an external program, it must be enabled and configured. Contact your Oracle account manager.

Configuring third-party software for screen pops

After screen pop has been enabled and configured, you must configure your third-party software to submit an HTTP GET in the proper format. You can generate the screen pop request URL by scripting Microsoft.XMLHTTP, Internet Explorer, or any other HTTP-aware controls or languages.

HTTP GET is the only supported method. All others will return a 403 Forbidden error message. In addition, a request from a computer other than the localhost will also return a 403 Forbidden error message. If HTTP GET is used from the localhost, Oracle Service Cloud will return a status code of 200 OK, 403 Forbidden, or 404 Not Found.

Note The staff member making the screen pop request must be logged in to Oracle Service Cloud at the time of the request.

Following is an example of a URL for a screen pop request.

http://localhost:<port>/screenpop?param1=value1&param2=value2

The <port> variable is populated with the value specified in the EXT_CONSOLE_WS_PORT configuration setting located at RightNow Common > Screen Pop > General. See Customizing configuration settings.

Tip You can override the EXT_CONSOLE_WS_PORT value for individual staff members by updating the External Screen Pop Port field on the Staff Accounts editor. See Adding and editing staff accounts.

The following table describes the screen pop function parameters and their available values.

Table 88: Parameters Description

Parameter	Description
t	Specifies the type of screen pop, either editor (t=editor) or report (t=report). The editor screen pop opens a record editor of the type specified by the recordType variable. The report screen pop opens the report specified by the id variable.
recordType	Specifies which editor is displayed when the console is popped. • 1—Incident • 2—Answer • 4—Opportunity • 5—Contact • 6—Organization • 7—Task • 17—Campaign (requires flowID=<int>)

Table 88: Parameters Description (Continued)

Parameter	Description
id	Specifies the ID of the record (when used with t=editor) or the report ac_id (when used with t=report) to open. **Note:** When opening an editor, a new record also opens if no ID is supplied.
<run-time filter name>	This parameter is used with the t=report parameter to specify the value of a run-time-selectable filter in the specified report. This parameter should be the filter name of a run-time filter you want to use to select data. The value should be the string you want to search on (for example, contacts.last_name=Jones or opportunites.assgn_acct_id=12).

Examples

The following URL is an example of an editor screen pop that opens a contact record with the contact_id of 23.

http://localhost:57575/screenpop?t=editor&recordType=5&id=23

The following URL is an example of a report screen pop that opens the Agent Activity report using the run-time filter accounts.display_name with the value Abby Parker.

http://localhost:101/screenpop?t=report&id=55&accounts.display_name=Abby%20Parker

13

Email Management

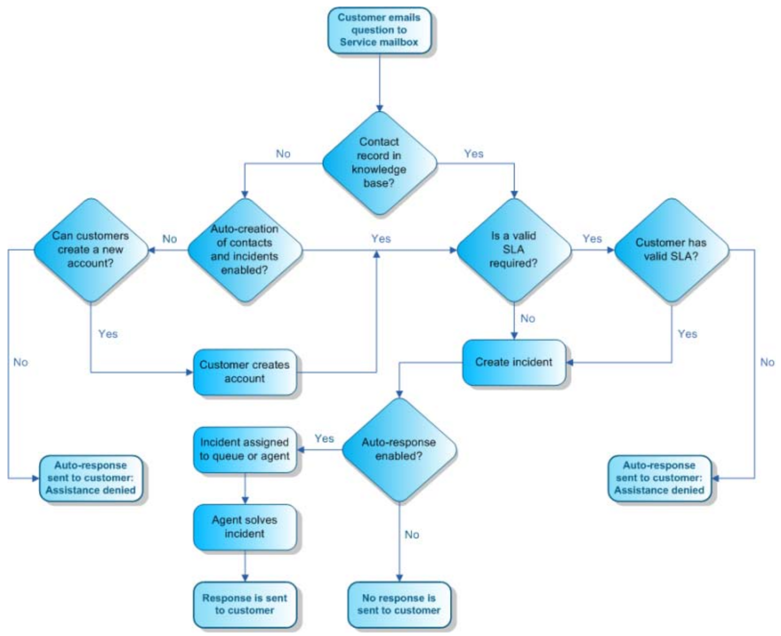
Communicating clearly and promptly through email is essential to providing great customer experiences. Handling high volumes of email efficiently requires you to give careful thought to important topics such as process, automation, and security. With Oracle Service Cloud, you can achieve high quality and efficiency in all of your service and marketing communication. Whether responding to service questions or broadcasting mailings and surveys to large audiences, the **email management** features give you complete control over the handling of inbound and outbound email messages.

Email handling in Service

Oracle RightNow Cloud Service (Service) email management system is a flexible solution for handling email communication between your customers and your customer service team. The system evaluates each incoming email to ensure it meets your criteria for service, and then manages all back-and-forth email replies between the agent and contact until the incident is resolved. Along the way, Oracle Service Cloud can automate key service functions to help your team deliver timely, world-class service.

Note A set of system-generated administrator notifications, administrator emails, and contact emails are sent to staff and contacts to support activities and events occurring throughout the system. Message templates let you quickly apply your organization's brand across all notifications and emails. You can also customize your messages, including the message content, enabling and disabling specific notifications and emails, and defining the message format as HTML or text. For complete details and procedures on working with the Message Templates editor, see Message Templates.

The following diagram illustrates how incoming customer email messages are handled in Service.



When a customer emails a question to your customer support email account, Service handles it using the following email management process.

1 **A contact record is associated**—The **Techmail** utility first searches all contact records for the email address in the Reply To field of the message's mail header. If no match is found, Techmail looks for the address in the mail header's From field. If a match is found, the contact record is associated with the incoming request. If the customer's email address is not found in an existing contact record, a new contact record is created for the customer.

Note By default, an email address cannot be shared by multiple contact records. However, when email address sharing is enabled and an email is received from an address shared by two or more contacts, Techmail invokes a contact-matching process to associate the contact. Refer to Email address sharing.

2 **Contact validity is verified**—Once the email management system identifies a matching contact record, customer information is evaluated to determine whether it meets your organization's requirements for service. If **SLAs** are required, the system checks to ensure

the customer has a valid SLA before creating an incident. If the customer does not have a valid SLA, an auto-response denying assistance is generated and sent to the customer. Refer to Configuring service level agreements.

3 **An incident is created**—Once a contact record is matched and any SLA requirements are met, Techmail creates an incident using the contents of the email message. If the message is multipart (a common MIME type containing both HTML and text versions of the same message), the text version of the message is added to the incident thread and the HTML version is discarded. If the message contains HTML only, it is converted to text and added to the thread.

4 **The incident is processed by business rules**—Upon incident creation, Oracle Service Cloud sends the contact an auto-generated receipt for the question. However, business rules are often configured to perform additional functions such as assigning an SLA, sending an auto-response, and assigning the incident to an agent for a response. Rules can also be configured to escalate the incident if the assigned agent does not answer the customer's question within a specified time period. See Business rules overview.

5 **The agent responds**—When an agent responds to the contact's question, an email is sent to the contact containing the agent response. Occasionally, a contact may reply with additional questions or information for the agent. Techmail identifies the reply message by looking for specific markers (such as the contact email address, the reference number in the subject line, and the message tracking string in the mail header) and applies the update to the incident, extending the conversation until resolved. See Email reply processing and Cross-site email management.

Note To further complement the email management process described here, additional options are available for customizing the process to meet unique business needs. For descriptions of these settings, refer to Advanced configuration for email handling.

Email reply processing

Service lets customers update incidents by replying to email messages. However, sometimes customers include the original message in their reply, quoting back the email they received. When the **Techmail** utility detects an email reply, it attempts to identify the part of the message containing the customer's reply, and strips out any text that may have been quoted back from the original message thread. In this way, new replies are added to the incident as a new entry in the incident thread, while text from previous thread entries is ignored. Techmail uses several methods to determine which blocks of text in a message consist of previous thread entries.

Most email clients mark or "block quote" the original message when replying. In text messages, the original text is often block quoted by inserting a greater than symbol (>) or a vertical bar (|) at the beginning of each line of the original text. In HTML messages, the original message is usually enclosed in block quote HTML tags (<blockquote>). Parameters in the block quote HTML tag indicate how the message should be displayed (for example, each line begins with a vertical bar or an indent). The Techmail utility's block-quoted reply detection method finds block-quoted text and removes it from the email, leaving only the reply from the customer.

Tip You can define additional characters besides > and | as block-quoted text indicators in the EGW_QUOTE_CHARS configuration setting. Refer to Advanced configuration for email handling.

If you enable EGW_REPLY_BETWEEN_ENABLED and select the Force Reply Between Lines check box, Techmail can easily separate the reply from the original email text, as customers are directed to compose their reply between two distinct line markers. If you enable the configuration setting but do not select Force Reply Between Lines on the mailbox's Incoming Email settings, Techmail first checks for a reply between the lines. If it does not find text between the markers, it looks for the > or | block-quoted text indicators or block quote HTML tags. In addition, when the Force Reply Between Lines check box is not selected, the system inserts **checksum** code at the bottom of the email so that the reply part of the email can be identified.

Tip The EGW_CHECKSUM_STYLE configuration setting defines the style that is applied to the checksum code. To make the checksum code font blend with the background color of your email, you can change the style and text formatting by editing this setting through the Configuration Settings editor. See Customizing configuration settings.

If a customer replies to multiple points within the original email, intermixing the reply with the original text, the message may contain multiple blocks of quoted text. In this case, the replies may refer to the original text above them, which may be important, so Techmail includes the entire email message in the incident.

If a customer replies within the original text, and the reply text begins with a block quote, such that the reply is indistinguishable from the original text, Techmail can determine that additional text has been added within the original text by comparing checksums in the reply to checksums in the original message. If the checksums differ, the entire email is added to the incident to ensure that no reply text is lost.

Techmail can also detect and remove "boilerplate" messaging while leaving the customer's content intact. Boilerplate messaging is text that has been added to an email message by a mail client, such as a line of embedded advertising text. This helps to ensure that the thread is not diluted with advertising and contains only information pertinent to the discussion.

Single-send email response logic

If a contact is associated with multiple email addresses, service responses are sent to *all* associated addresses by default. This means that if an incident contact has a primary email address and two alternate email addresses, every time an incident response is sent to that contact, it is sent to all three email addresses.

You can limit your responses to be sent to a single email address by enabling the site-wide configuration setting OE_SVC_SENDMAIL_SINGLE_ADDRESS (Common > General > Outgoing Email). See Advanced configuration for email handling.

Once enabled, service responses are sent only to the specified email address and agents can select which one of the contact email addresses they want to send the response to from the incident workspace. That email address value remains for the life of the incident. However, any new incidents for that contact will default to the primary email address. See Sending responses.

The default value for a response sent from the incident workspace is the primary email address. However, if the incident is created from the customer portal or a chat session (when no login is required), or by the Techmail utility, the value is set to the email address the request was sent from. Following are examples using these cases.

- **Customer portal (when no login is required)**—If the email address is available on the Ask A Question page and matches an alternate address of a contact, the alternate address is used as the response address.
- **Chat (when no login is required)**—If the email address is available on the Chat page and matches an alternate address of a contact, the alternate email address is used as the response address.
- **Techmail**—If incoming incidents are processed by Techmail, it evaluates the email address for a match from the contact record and uses the matching address as the response address.

Cross-site email management

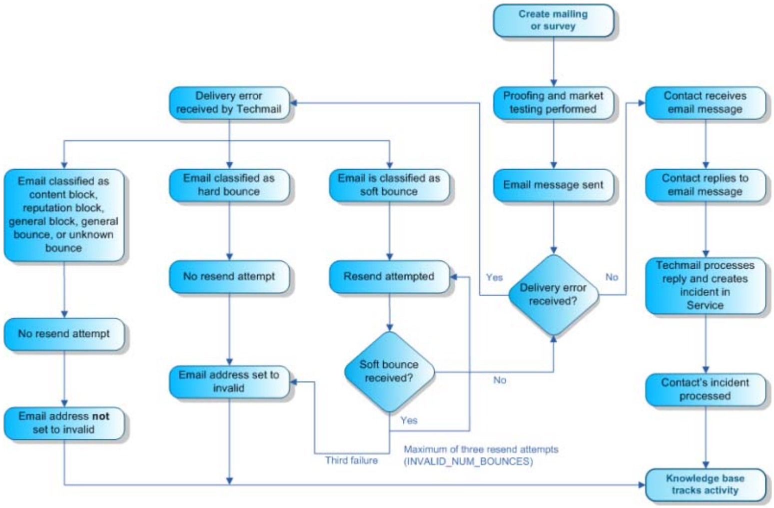
Service automatically handles email between separate Oracle Service Cloud sites and the site-specific incidents are accurately updated on each site even if unique reference numbers are used for the same incident. Therefore, you can be confident that when emails pass between sites, all incident information will be current and accurate. See Incidents overview.

For instance, suppose your organization has an airline division and a hotel division, each with its own site. Now suppose that an incident was created from the airline site about a hotel issue. An incident response is sent to the hotel site and, when processed, the incident is assigned a reference number that is appropriate for that site—a different number from the airline site reference number. An agent on the hotel site responds to the incident. In the meantime, an agent on the airline site has new information that she adds to the original incident. The system recognizes the relationship between the two incidents and both are updated appropriately on their respective sites.

Important Both sites need to be running the August 2014 version of Oracle Service Cloud or greater for cross-site email management to work.

Email handling in Outreach and Feedback

Oracle RightNow Outreach Cloud Service (Outreach) and Oracle RightNow Feedback Cloud Service (Feedback) provide an efficient system for handling all email communication related to **mailings** and **surveys**, including proofs, market tests, and delivery error notifications. The following diagram illustrates the general sequence of email communication supported by this process.



As the figure illustrates, the process of sending mailings and surveys includes a number of points where outgoing and incoming email communication can occur.

- **Message proofing**—Once a mailing or survey is designed, staff can send one or more proof versions to the necessary contacts and staff members for feedback and approval.
- **Market testing**—This option lets staff send small batches of a mailing or survey in advance to a subset of the audience to test different designs and messaging. They can then review the results before selecting and sending the final version.
- **Message delivery**—Once proofs have been approved and market testing is complete, the mailing or survey can be sent or scheduled for delivery to the remaining audience.
- **Customer reply**—A customer who receives a mailing or survey may attempt to reply to it by email. The **Techmail** utility can process these replies and convert them to incidents.
- **Delivery error notification**—In the event that a mailing or survey is sent to an address that is invalid or is experiencing technical issues, the recipient mail server may return a delivery error or "bounce" notification in the form of an email sent to the Envelope From/Bounce Address defined in your outgoing email settings. See Outgoing Email Settings. The Techmail utility can process most delivery errors and address them appropriately, as described in Email bounce handling.

Unless the From and Reply To fields are customized within a mailing or survey, the system uses the addresses defined in the default mailbox (under Configuration > Site Configuration > Mailboxes) for all proofs, market tests, and production mailings and surveys. Specifically, if the optional field, Friendly From/Branded Address is defined, then that address displays as the From address in delivered email. However, if only the Envelope From/Bounce Address is defined, and Friendly From/Branded Address is blank, then the address in Envelope From/Bounce Address is used. See Outgoing Email Settings.

This email management process applies to most basic Outreach and Feedback implementations. However, additional options exist for customizing the process to meet your organization's unique needs. Refer to Advanced configuration for email handling for descriptions of these additional options.

Adding and editing mailboxes

Mailboxes are used to define outgoing email settings and to specify the email accounts to pull email messages from. You cannot send or receive email in Oracle Service Cloud until at least one mailbox is configured and enabled for the interface you are using. **Oracle-managed Service mailboxes** and general Service mailboxes are used only with the Service application, while Outreach mailboxes are used with either Outreach or Feedback.

You can configure mailboxes to handle only outgoing email, only incoming email, or both. You can also define security settings for your mailboxes.

- **Outgoing email settings** define the identifying information to be included in outgoing email sent by the mailbox, such as the Envelope From/Bounce Address, Friendly From/Branded Address, Reply-To Address, and Display Name.
- **Incoming email settings** define the POP server, POP account, and password used to access incoming email. Other incoming settings provide methods to filter mail messages (by applying discard filters and restricting file attachments by size and file type) and forward rejected messages to another email address.

Important If you use Oracle-managed Service mailboxes, the Incoming Email Enable check box and the POP Server, POP Account, and Password fields on the Incoming Email page are read-only fields because they have already been defined by Oracle.

- **Security settings** can be used to enable SSL and S/MIME authentication for your email. Refer to Email security overview.

Important To enable processing of bounce errors in Outreach or Feedback, the Envelope From/Bounce Address in your Outreach mailbox's outgoing email settings must use the POP server and the POP account defined in the incoming settings. For example, if the POP server is mail.rnmk.com and the POP account is globalsupport, then the Envelope From/Bounce Address needs to be defined as globalsupport@mail.rnmk.com. Refer to Email bounce handling.

Using branded email domains

Using email addresses branded with your company's domain name, such as support@yourcompany.com, can help recipients recognize your organization as the sender, improving **deliverability**. However, care must be taken to ensure that bounce notifications are processed correctly. For best practice information about using branded domains to send mailings and surveys, refer to Customizing mailing message headers and Customizing survey invitation message headers.

Service mailboxes

There are two types of mailboxes that can be used with Service—Oracle-managed Service mailboxes, the recommended type, and Service mailboxes, also referred to as general Service mailboxes.

Oracle-managed Service mailboxes

We recommend using Oracle-managed Service mailboxes because of several inherent advantages. Oracle-managed Service mailboxes are mailboxes that Oracle initially configures for you by defining crucial incoming email settings. You can customize Oracle-managed Service mailbox settings that let you brand your mailbox, but settings that control the essential functions of incoming email processing are read-only. This eliminates any risk of those settings being misconfigured. Because Oracle handles these settings for you, you can be certain that your mailbox has been set up correctly. Oracle-managed Service mailboxes give you the following benefits.

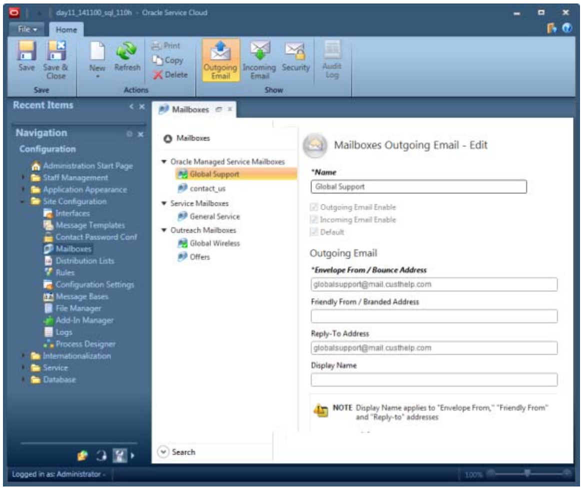
- **Easy setup**—Oracle configures crucial incoming email settings for you, such as enabling incoming email and defining your Pop Server, POP Account, and Password fields.

- **Faster and more reliable email processing**—Techmail has been designed to handle large volumes of messages through parallel message processing, which ultimately enables your staff to respond to incidents faster.
- **Reliability**—Oracle monitors Oracle-managed Service mailboxes twenty-four hours a day, seven days a week.

Note This procedure assumes that Oracle has already added an Oracle-managed Service mailbox for you. Oracle-managed Service mailboxes can be added in Oracle RightNow VCIO Cloud Service (VCIO). For information about accessing VCIO, see Answer ID 5296.

To edit an Oracle-managed Service mailbox

1. Click the Configuration button on the navigation pane.
2. Double-click Mailboxes under Site Configuration. The Mailboxes tree displays on the content pane.
3. Select an Oracle-managed Service mailbox in the tree. The outgoing email settings display on the editor.



Note Oracle-managed Service mailboxes display only if one (or more) has been added to your site. Oracle-managed Service mailboxes can be added in VCIO. For information on accessing VCIO, see Answer ID 5296.

4 Enter the following field information to enable mailbox functionality.

Important For Oracle-managed Service mailboxes, the Incoming Email Enable field is **read-only**. However, this field can be edited in VCIO. For information on accessing VCIO, see Answer ID 5296.

Table 89: Mailboxes Editor Description

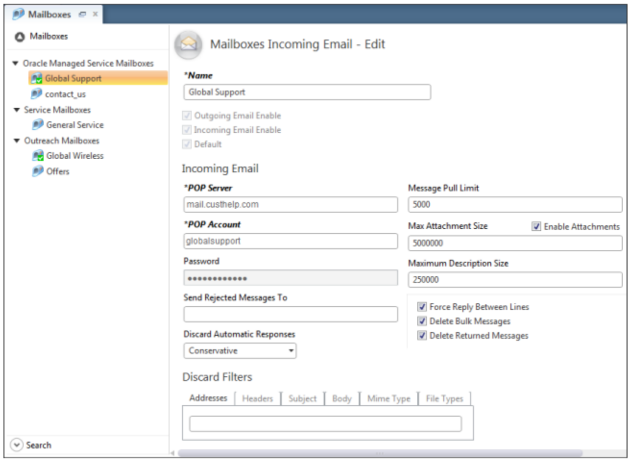
Field/Button	Description
*Name	Type the mailbox name in this field. **Note:** For Oracle-managed Service mailboxes, this field, which can be edited, is set to the name that was designated when Oracle initially added the mailbox to your site.
Outgoing Email Enable	Select this check box to enable the mailbox to send outgoing email. When this check box is cleared, the mailbox cannot send outgoing email and agents cannot respond to incidents associated with this mailbox. The default is enabled.
Incoming Email Enable	Select this check box to enable the mailbox to receive incoming email. The default is enabled. **Important:** For Oracle-managed Service mailboxes, this check box has been selected for you and is read-only.
Default	Select this check box to set this mailbox as the interface's default mailbox. You must designate one mailbox as the default. For Service mailboxes, after designating this mailbox as the default Service mailbox, the mailbox name will then display in the Mailbox field on the Details tab of the agent's incident workspace. This lets your agents easily associate incidents with the correct mailbox when responding to customers. See Adding incident information on the Details tab. **Important:** This check box is selected by default for general Service and Outreach mailboxes, but **not** for Oracle-managed Service mailboxes. When the Default check box is selected, it becomes disabled and cannot be cleared. You must set another mailbox as the default, and then save your changes in order to clear this check box.

5 Enter the following field information to configure outgoing email for this mailbox.

Table 90: Outgoing Email Settings

Field	Description
*Envelope From/ Bounce Address	Type the email address that is used as the return path for bounced emails. (For Oracle-managed Service mailboxes, this field is set to the email address that was designated when Oracle initially added the mailbox to your site.) The value in this field displays as the From address in the outgoing email unless the Friendly From/Branded Address field is defined. See Email bounce handling. **Important:** To ensure that your bounced emails process correctly, we recommend using the email address provided when your account was set up. For example, a typical Oracle-managed Service or general Service mailbox would be "example@mail.custhelp.com." A typical Outreach mailbox would be "example@mail.rnmk.com."
Friendly From/ Branded Address	Use this optional field to brand your email message. If you use this field, this is the email address your recipients will see in the email you send. For example, if you want the email address that displays to your recipients to be different from the email address defined in the Envelope From/Bounce Address, type the address the way you want it to appear in this field. **Note:** If you define an email address in this field, it displays as the From address in the outgoing email.
Reply-To Address	Typically, the reply-to address is the same as the address specified in the Envelope From/Bounce Address field, but you can use this optional field if you want customers to send their responses to a different email address. (For Oracle-managed Service mailboxes, this field is set to the email address that was designated when Oracle initially added the mailbox to your site.) The Reply-To Address field must contain a valid email address in order to receive messages. If the Reply-To Address field is not defined, then either the Envelope From/Bounce Address or the Friendly From/Branded Address is used as the default email address. **Caution:** If you use incidents, the Reply-To Address must match the Envelope From/Bounce Address unless your own mail administrator has set up SMTP forwarding for this address to automatically forward to the Envelope From/Bounce Address. See Answer ID 1272 on our support site.
Display Name	Type the name you want to appear on outgoing messages as the sender. For example, Global Wireless Customer Service.

6 To enter incoming email information, click the Incoming Email button on the ribbon. The incoming email settings display on the editor.



7 Enter the following field information.

Important For Oracle-managed Service mailboxes, the POP Server, POP Account, and Password fields are **read-only**. However, these fields can be edited from VCIO. For information on accessing VCIO, see Answer ID 5296

Table 91: Incoming Email Settings

Field	Description
***POP Server**	Type the address or IP address of the POP server. For example, the POP server for jsmith@mail.custhelp.com would be “mail.custhelp.com.” For Oracle-managed Service mailboxes, this field has been set up for you and is **read-only**. **Important:** To ensure that your bounced emails and replies process correctly, you must use the POP server configuration provided when your account was set up.

Table 91: Incoming Email Settings (Continued)

Field	Description
***POP Account**	Type the account name of the mailbox. For example, the account name for jsmith@mail.custhelp.com would be "jsmith." For Oracle-managed Service mailboxes, this field has been set up for you and is **read-only**. **Important:** To ensure that your bounced emails and replies process correctly, you must use the POP account configuration provided when your account was set up.
Password	Type the password of the mailbox. **Note:** For Oracle-managed Service mailboxes, this field has been set up for you and is **read-only**.
Send Rejected Messages To	Type an email address to send all rejected messages to, including all bounced and returned messages and automatic responses. This can help you determine why a message has been rejected so you can take action to resolve the issue if necessary.
Discard Automatic Responses	Select an option from this drop-down menu to determine the level of automatic response filtering.
Off	Select this option to turn off automatic response filtering. All automatic responses received by the mailbox are turned into incidents.
Conservative	Select this option to activate conservative response filtering. This is the default setting for new mailboxes.
Moderate	Select this option to activate moderate response filtering.
Aggressive	Select this option to activate aggressive response filtering.
Message Pull Limit	Type the maximum number of email messages to pull from the mailbox during a **Techmail** run. The remaining messages are left on the POP server until the next time Techmail runs. The default pull limit is 5,000 messages. **Note:** Messages that are filtered are not counted toward this limit. Only emails that create incidents are counted. For example, if Message Pull Limit is set to 100 and the mailbox contains 200 messages, but 50 of them are filtered by rules, Techmail pulls 100 of the remaining messages from the mailbox and leaves 50 for future processing.

Table 91: Incoming Email Settings (Continued)

Field	Description
Max Attachment Size	Type the maximum size, in number of bytes, allowed for file attachments. The default maximum size is 5,000,000 bytes (5MB). **Note:** Because this feature is designed to support incident-based work processes and is not intended to serve as a large format file repository, we recommend keeping this value low. While there is no upper limit to the value you may specify, several external factors determine the actual size limitation of files that may be received. See Answer ID 280 on our support site.
Maximum Description Size	Type the maximum size, in bytes, allowed for the incident description. If an email exceeds this limit, it is added to the incident as a file attachment and a small thread entry refers agents to the attached file. The maximum value allowed for this field is 250,000.
Force Reply Between Lines	Select this check box to require that customers type their reply between the two line markers included in an incident response email. When customers reply between these lines, Techmail separates their reply from the quoted response text and adds it as a new thread. • If this check box is selected and customers do not reply between the lines, an incident thread is not created from their reply. Another email is sent automatically to request that they reply between the lines. • If this check box is not selected and customers do not reply between the lines, Techmail looks for block-quoted text indicators to find the customer's reply. Refer to Email reply processing.
Delete Bulk Messages	Clear this check box to turn bulk messages into incidents. By default, this box is selected to delete bulk email. An email is considered bulk when the Precedence: header is set to bulk, junk, or list.
Delete Returned Messages	Clear this check box to turn returned messages into incidents. By default, this check box is selected to delete returned email. An email is considered to be returned when the From address begins with postmaster or mailer_daemon, or if the MIME type is Multipart/Report. **Note:** This option is not available for Outreach mailboxes.

Table 91: Incoming Email Settings (Continued)

Field	Description
Discard Filters	Select from any of the following filters to discard all incoming email with the specified characteristics.
Addresses	Type the email addresses you do not want to receive email from. Separate entries in the list with commas. An asterisk (*) may be used as a wildcard to match any characters. For example, to discard all email from jsmith@example.com and all example.org addresses, type: jsmith@example.com,*@example.org
Headers	Click this tab and type any strings found in any header that identifies email you want to discard. Type each entry on a separate line using up to 4,000 characters. The text comparison is not case sensitive. For example, to discard all email with any header line referencing a specific IP address or any email with the custom header of X-BulkPrecedence, type: [124.456.789.321] X-BulkPrecedence:
Subject	Click this tab and type any text found in an email subject line that identifies email you want to discard. Type each entry on a separate line. The text comparison is not case sensitive. For example, to discard all email with the following text in the subject line, type: Mortgage rates Marketing solution Bargain alert
Body	Click this tab and type any text found in an email body that identifies email you want to discard. Type each entry on a separate line using up to 4,000 characters. The text comparison is not case sensitive. For example, to discard all email with the following text in the body, type: Be your own boss If you do not wish to receive further mailings To unsubscribe

Table 91: Incoming Email Settings (Continued)

Field	Description
Mime Types	Click this tab and type a list of attachment types you will not accept in MIME format (type/subtype). The major MIME types are application, audio, image, message, model, multipart, text, and video. Separate entries in the list with commas or new lines. An asterisk (*) can be used as a wildcard to match any characters. For example, to exclude MPEG video attachments, GIF images, and all audio formats, type: video/mpeg, image/gif, audio/* **Note:** This filter blocks only matching file attachments. The remaining contents of the email continue to process.
File Types	Click this tab and type a list of attachment types you will not accept based on the file name extension. Separate entries in the list with commas or new lines. Specific file names can be specified, or an asterisk (*) can be used as a wildcard to match any characters. For example, to exclude all executable files, screen savers, and any script titled worm.vbs, type: *.exe, *.scr, worm.vbs **Note:** This filter blocks only matching file attachments. The remaining contents of the email continue to process.

8 To enter security settings, click the Security button and refer to Email security overview.

9 To view the mailbox configuration **audit log**, click the Audit Log button.

10 Click the Save and Close button to save your changes and close the editor.

General Service mailboxes

General Service mailboxes are not managed by Oracle. Therefore, you handle the entire mailbox setup yourself. If you decide to use general Service mailboxes, keep in mind that your mailbox will not be monitored by Oracle and advantages that are inherent to Oracle-managed Service mailboxes will not be available.

To add or edit a general Service mailbox

1 Click the Configuration button on the navigation pane.

2 Double-click Mailboxes under Site Configuration. The Mailboxes tree displays on the content pane.

3 Click the New button on the ribbon and select New Service Mailbox.

Or

To edit a mailbox, select it in the tree.

Note General Service mailboxes are not managed by Oracle.

4 Enter field information described in Mailboxes Editor Description to enable mailbox functionality.

5 To configure outgoing email for this mailbox, enter field information described in Outgoing Email Settings.

6 To configure incoming email for this mailbox, click the Incoming Email button on the ribbon and enter field information described in Incoming Email Settings.

7 To enter security settings, click the Security button on the ribbon and refer to Email security overview.

8 To view the mailbox configuration audit log, click the Audit Log button.

9 Click the Save and Close button to save your changes and close the editor.

Outreach mailboxes

If you use Outreach or Feedback on your site, you will also need to add an Outreach mailbox.

Important To ensure accurate processing of replies, inbound messages, and bounces, Outreach mailboxes cannot be shared with either type of Service mailbox. Techmail handles messages in Oracle-managed Service mailboxes and general Service mailboxes differently from how it handles them in Outreach mailboxes. For this reason, you must set up one mailbox for Service and a separate mailbox for Outreach and Feedback.

To add or edit an Outreach mailbox

1 Click the Configuration button on the navigation pane.

2 Double-click Mailboxes under Site Configuration. The Mailboxes tree displays on the content pane.

3 Click the New button on the ribbon and select New Outreach Mailbox. The editor opens.

Or

To edit a mailbox, select it in the tree.

4 Enter field information described in Mailboxes Editor Description to enable mailbox functionality.

5 To configure outgoing email for this mailbox, enter field information described in Outgoing Email Settings.

6 To configure incoming email for this mailbox, click the Incoming Email button on the ribbon and enter field information described in Incoming Email Settings.

7 To enter security settings, click the Security button on the ribbon and refer to Email security overview.

8 To view the mailbox configuration audit log, click the Audit Log button.

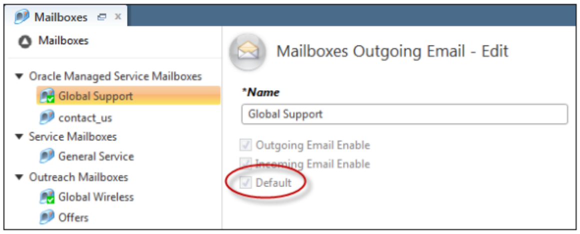
9 Click the Save and Close button to save your changes and close the editor.

Designating a default mailbox

You must designate one default mailbox for Service—either an Oracle-managed Service mailbox or a general Service mailbox. This is the mailbox that is used to send Service incident responses. After designating a default Service mailbox, the mailbox name will then display in the Mailbox field on the Details tab of the agent's incident workspace. This lets your agents easily associate incidents with the correct mailbox when responding to customers. See Adding incident information on the Details tab.

Important If you do not designate a default mailbox by selecting the Default check box, agents must manually select a mailbox each time they respond to an incident.

The default mailbox is designated by the Default check box on the editor's Outgoing Email page. Once the default mailbox is set, a green check mark displays on top of the mailbox icon in the tree.



This check box is selected by default for general Service and Outreach mailboxes, but **not** for Oracle-managed Service mailboxes. Therefore, if your Oracle-managed Service mailbox is the only Service mailbox you have, you must designate it as the default mailbox by selecting the Default check box. See Mailboxes Editor Description.

Note If you communicate with your customers through mailings and campaigns and survey your customers and prospects, you must also designate a default Outreach mailbox. See Outreach mailboxes.

Email security overview

Oracle Service Cloud provides security and privacy options for all incoming and outgoing email. Using accepted industry standards, the email security features help protect your communication in three important ways.

- **Authentication** assures the message recipient that the sender is who it appears to be and that no other parties are misrepresenting themselves as the sender.
- **Message integrity** ensures that the content of the message has not been deliberately or accidentally changed during transmission.
- **Privacy** ensures that the message is not readable by anyone other than the intended recipient.

To safeguard your email communication, Oracle Service Cloud supports SSL and S/MIME security methods along with the ability to manage certificates and authentication options. Together, these features can provide a high level of security for messages traversing the Internet between you and your customers.

Security configuration is an important part of your Oracle Service Cloud application and we realize that your organization may have unique security needs. For an in-depth discussion about security practices in Oracle Service Cloud and how to protect your data, see Security Practices.

Configuring SSL security

SSL (secure sockets layer) protocol is the industry standard for securing Internet-based data transfer. SSL encrypts the data stream during transmission to prevent the exposure of sensitive information, such as passwords, to unauthorized parties.

Servers with SSL capability have been issued a **public certificate** and a **private key** by a **certification authority**. When a client (such as **Techmail**) communicates with an SSL-enabled server, the server sends the client its public certificate for verification. After the certificate has been validated to be current and signed by a trusted certification authority, the communication channel between the client and server is encrypted and can then be used to securely exchange information. The information remains encrypted as it travels between the two parties and is secure until the server or client decrypts it at the other end.

If you are hosting a POP mail account on your own mail server, configuring an SSL connection between the Techmail utility and the mail server protects the security of email messages as they are processed.

Note SSL is not used for accessing POP accounts hosted by Oracle because the mail server and Techmail utility reside within the same secure network.

The SSL settings let you specify the method used to establish the secure connection and set conditions on how strictly Techmail validates the server's SSL certificate before connecting.

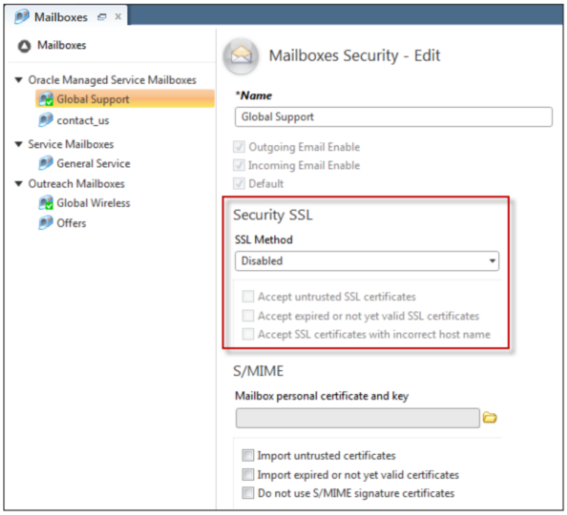
To configure SSL security settings

1 Click the Configuration button on the navigation pane.

2 Double-click Mailboxes under Site Configuration. The Mailboxes tree displays on the content pane.

3 Click the mailbox you want to edit in the tree.

4 Click the Security button on the ribbon to display the mailbox security settings.



5 Enter the following field information.

Table 92: SSL Security Settings

Field	Description
Security SSL	Select the SSL method and set certificate verification requirements.
SSL Method	Click this drop-down menu to select an SSL option that determines how Techmail retrieves messages from the mailbox.
Disabled	Select this option to use regular POP3 (on port 110) without SSL encryption. This is the default setting. **Note:** The check boxes for accepting SSL certificates are grayed out if you select Disabled for the SSL method.
Using POP3 SSL port	Select this option to use POP3 with SSL encryption on port 995.
Using STLS command	Select this option to use the standard POP3 port (port 110) with SSL encryption. After the server greeting, the “Start TLS” command is used to switch to an SSL-encrypted connection.

Table 92: SSL Security Settings (Continued)

Field	Description
Accept untrusted SSL certificates	Select this check box to bypass verification that the mail server's SSL certificate is signed by a trusted certificate authority.
Accept expired or not yet valid SSL certificates	Select this check box to bypass verification that the mail server's SSL certificate is current and not yet expired.
Accept SSL certificates with incorrect host name	Select this check box to bypass verification that the mail server's host name is the same host specified in the SSL certificate.

6 Click the Save button to save your mailbox settings.

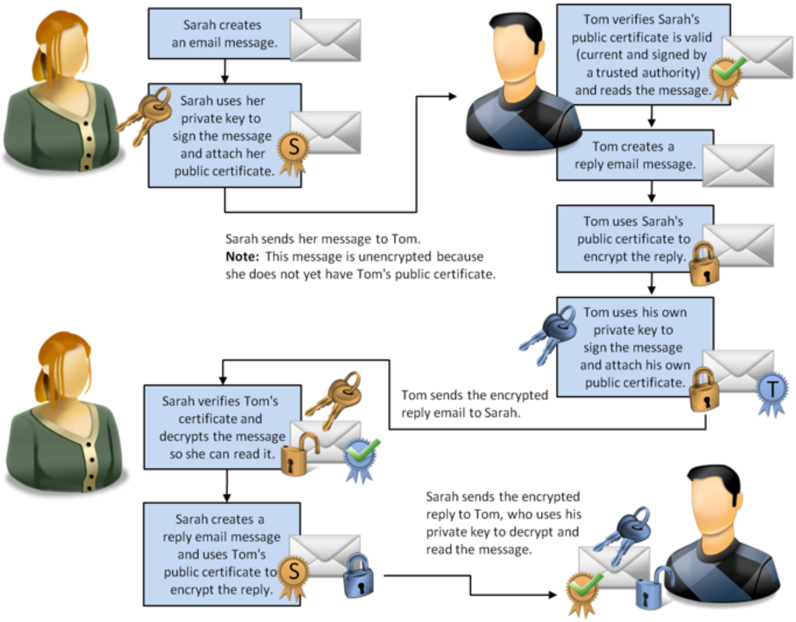
Configuring S/MIME security

In addition to SSL encryption, Oracle-managed Service mailboxes and general Service mailboxes support **S/MIME**, an industry standard for ensuring the security of message content through the use of electronic signatures, encryption, or both. An email address that uses S/MIME has a **public certificate** as well as a **private key** that corresponds to the public certificate. The public certificate authenticates the sender and can be used for encryption. The person who replies to the email can use the sender's public certificate to encrypt the reply, which can then be decrypted only by the original sender using the original sender's private key.

Note There are certain situations where S/MIME security options are **not** available.

- In Outreach and Feedback mailboxes.
- When editing multiple incidents simultaneously. You can send a response to more than one incident at a time, but you cannot use secure mail when doing so.
- When using delayed reporting on the Workspace editor. S/MIME works only if you clear the Delay Report Execution check box under the Report Behavior drop-down menu for the Contacts relationship item control on the Workspace editor's Design tab. See Report properties.

The following figure illustrates a secure correspondence between two parties, both of whom have S/MIME capability.



Customers who have S/MIME email can send messages signed with their public certificate to any Oracle-managed Service mailbox or general Service mailbox. When **Techmail** receives a signed message, it verifies and stores the customer's certificate and uses it to encrypt any response messages sent to that customer. The customer can then decrypt the response using the certificate's private key.

Note Agents responding to a signed message can send a non-encrypted response by selecting Do Not Encrypt from the incident response options. Refer to To sign and encrypt an incident response.

Service's S/MIME settings also let you set conditions on how strictly Techmail validates a customer's public certificate for incoming messages. If Techmail cannot verify a customer's public certificate, it does not update the customer's contact record with that certificate.

Tip When Techmail attempts to decrypt an incoming message or verify an attached certificate (and you have enabled EGW_SAVE_EMAIL_HEADERS to save incoming email headers), the results are appended to the saved mail header.

Note that the customer's original message is not encrypted. In order to encrypt messages sent from a customer to an Oracle-managed Service mailbox or general Service mailbox, the mailbox must be configured with its own certificate and key, as described in the following procedure. Agent response emails are then signed with the mailbox certificate which customers can use to validate the messages and send encrypted replies. Techmail uses the certificate's key to decrypt those replies and process the message contents normally.

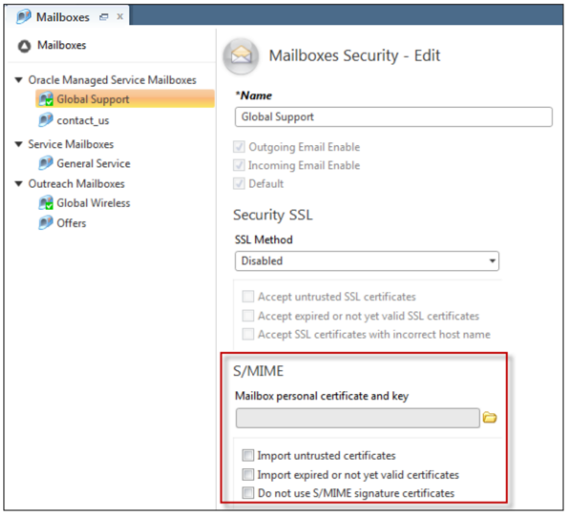
To configure S/MIME security settings

1 Click the Configuration button on the navigation pane.

2 Double-click Mailboxes under Site Configuration. The Mailboxes tree displays on the content pane.

3 Click the mailbox you want to edit in the tree.

4 Click the Security button on the ribbon to display the mailbox security settings.



5 Enter the following field information.

Table 93: S/MIME Security Settings

Field	Description
S/MIME	Identify the mailbox's public certificate/private key file and set certificate import requirements.
Mailbox personal certificate and key	Click the Browse button to locate the file containing the public certificate and private key assigned to the mailbox by the **certification authority**. The file you import should be in a password-protected Personal Information Exchange PKCS#12 format, using a *.pfx* or *.p12* file extension. It must also contain the email address of the mailbox exactly as it was entered for outgoing email. See Outgoing Email Settings. When prompted, enter the original password (the password used to encrypt the file) and the new password (the password the **private key** is to be encrypted with in the database). **Note:** The file is not imported until you click the Save button to save all mailbox settings.
Import untrusted certificates	Select this check box to bypass verification that the mailbox certificate file to be imported (set in the mailbox personal certificate and key field above) or a contact certificate extracted from a signed S/MIME email is signed by a trusted certification authority. **Note:** Changing this setting does not affect previously imported and stored certificates.
Import expired or not yet valid certificates	Select this check box to bypass verification of the certificate date for the mailbox certificate file to be imported (set in the mailbox personal certificate and key field above) or a contact certificate extracted from a signed S/MIME email. The Techmail utility will then accept certificates from S/MIME emails sent to this mailbox that have expired or are not yet valid. This setting applies to every certificate in the certificate chain, from the root certificate through any subordinate certificates to the POP3 server's certificate. **Note:** Changing this setting does not affect previously imported and stored certificates.
Do not use S/MIME signature certificates	Select this check box to allow unverified S/MIME signed emails for incident creation and updates. If this check box is selected, certificates from signed emails are not stored with the contact record.

6 Click the Save button to save your mailbox settings.

Certificate validation options

To supplement the SSL and S/MIME email security settings, Oracle Service Cloud provides you with the following resources for managing the validation and revocation of certificates. These resources are accessed using the File Manager. Refer to Managing files.

- **Trusted certification authorities**—Service uses a predefined list of trusted certification authorities for verifying certificates from POP3 servers and S/MIME email senders. This list contains well-known root certification authorities. Depending on your organization's circumstances, you may want to add or remove trusted certification authorities.
- **Certification revocation lists**—Certification authorities regularly publish certificate revocation lists, which you can use to check the validity of certificates. If you upload any lists, certificate revocation checking is automatically enabled. As a result, all root certification authority certificates that are used (in either SSL connections or email certificates) must have a corresponding certificate revocation list. If there is no corresponding list, the certification check fails.
- **Intermediate certificates**—Some certificates that are not defined as trusted root certificates still need to be stored in order to verify a customer's certificate (the one that was used to sign the customer's S/MIME email). These are called intermediate certificates and are automatically extracted from emails, requiring no intervention on your part. You can also upload intermediate certificates if, for example, you receive signed emails without the necessary intermediate certificate embedded in them.

Additionally, the configuration setting, USE_KNOWN_ROOT_CAS (Common > General > Single Sign-On), controls whether the known root certificate authorities list that is embedded within the Oracle server is consulted when verifying X509 certificates. For example, when checking S/MIME email or **SAML 2.0** signatures.

To add or remove certification authorities

1. Click the Configuration button on the navigation pane.
2. Double-click File Manager under Site Configuration. The File Manager displays on the content pane.
3. Click the Switch To drop-down menu and select Additional Root Certificates.
4. Click the Browse button and select the root certificate file you want to upload. The file should be in DER Encoded Binary X.509 *(.cer* or *.crt)* or Base-64 Encoded X.509 *(.pem)* format.

5 Click the Go button to upload the file.

6 To delete a root certificate file, click the Delete File button on the line that contains the file you want to delete.

   a Click the OK button to confirm the deletion.

To add or remove intermediate certificates

1 Click the Configuration button on the navigation pane.

2 Double-click File Manager under Site Configuration. The File Manager displays on the content pane.

3 Click the Switch To drop-down menu and select Intermediate Certificates.

4 Click the Browse button and select the intermediate certificate file you want to upload. The file should be in DER Encoded Binary X.509 *(.cer, .crt)* or Base-64 Encoded X.509 *(.pem)* format.

5 Click the Go button to upload the file.

6 To delete an intermediate certificate file, click the Delete File button on the line that contains the file you want to delete.

   a Click the OK button to confirm the deletion.

To add or remove certification revocation lists

1 Click the Configuration button on the navigation pane.

2 Double-click File Manager under Site Configuration. The File Manager displays on the content pane.

3 Click the Switch To drop-down menu and select Certificate Revocation Lists.

4 Click the Browse button and select the certificate revocation list file you want to upload. The file should be in a DER Encoded Binary *(.crl)* format.

5 Click the Go button to upload the file.

6 To delete a certificate revocation list file, click the Delete File button on the line that contains the file you want to delete.

   a Click the OK button to confirm the deletion.

Troubleshooting filtered out or rejected email

Incoming email messages are filtered out or rejected by the Techmail utility for a variety of reasons, such as the header content, email subject, or because the sender does not have a customer account (that is, a contact record in the knowledge base). The logic that determines which email messages will be processed is based on mailbox settings, configuration settings, and your site's business rules.

The Incoming Email Filter Details report (Public Reports > Service > Email Reports) can help you troubleshoot why certain emails are being filtered out or rejected by Techmail. This report lists every email filtered out or rejected in the past twenty-four hours, including the email address the message was sent to, the date the email was created, the filter type, the filter description, and the name of the mailbox from which the email was sent. Techmail stores this information in the Techmail Filter Details (*tm_filter_details*) table. For a description of information logged in this table, see the Data Dictionary located under Configuration > Database > Data Dictionary.

The following table lists the filter types associated with the Techmail Filter Details table. It also lists the settings and rules that cause a message to be filtered out by Techmail.

Table 94: Filter Type Descriptions

Filter Type	Description
techmail_filter_address	This message was filtered out because the email address matches a value on the Addresses tab in the Discard Filters section of your Incoming Email settings.
techmail_filter_header	This message was filtered out because the header information matches a value on the Headers tab in the Discard Filters section of your Incoming Email settings.
techmail_filter_subject	This message was filtered out because the email subject matches a value on the Subject tab in the Discard Filters section of your Incoming Email settings.
techmail_filter_body	This message was filtered out because content in the email body matches a value on the Body tab in the Discard Filters section of your Incoming Email settings.

Table 94: Filter Type Descriptions (Continued)

Filter Type	Description
techmail_filter_mime	This message was filtered out because the MIME type matches a value on the MIME Type tab in the Discard Filters section of your Incoming Email settings.
techmail_filter_file	This message was filtered out because the file format matches a value on the File Types tab in the Discard Filters section of your Incoming Email settings.
techmail_filter_bulk	This message was filtered out because the Delete Bulk Messages check box is selected in your Incoming Email settings. When Delete Bulk Messages is selected, bulk email messages are *not* converted to incidents. Instead, they are deleted. An email is considered bulk when the Precedence: header is set to bulk, junk, or list.
techmail_filter_returned	This message was filtered out for the following reasons: • Mailbox type = Service • Techmail determines the email is a bounced message • Delete Returned Messages check box is selected in your Incoming Email settings
techmail_filter_wrong_db	This message was filtered out because the system recognized that it came from a separate database. **Note:** No configurable setting is associated with this filter type.
techmail_filter_autoresponse	This message was filtered because of the setting in the Discard Automatic Responses field (Off, Conservative, Moderate, or Aggressive) in your Incoming Email settings. Based on this setting, the system detects industry-standard auto-responses, such as Out of Office, in the subject and header data.
techmail_filter_duplicate_incident	This message was filtered out because the configuration setting EGW_DISCARD_DUPLICATE_ENABLED is enabled (Default = Yes). In this case, any message that matches an existing incident (with the same date, email address, subject, and body) is classified as a duplicate.
techmail_filter_proof_reply	This message was filtered out because it was a reply to a proof message. Emails related to proof messages are not processed. **Note:** No configurable setting is associated with this filter type.
techmail_filter_reject_disabled	This message was filtered out because the contact record is disabled. **Note:** No configurable setting is associated with this filter type.

Table 94: Filter Type Descriptions (Continued)

Filter Type	Description
techmail_filter_reject_reply	This message was filtered out for the following reasons: • EGW_REPLY_BETWEEN_ENABLED = Yes (Default = No) • Force Reply Between Lines check box is selected in your Incoming Email settings.
techmail_filter_reject_sla	This message was filtered out because the system determined that the contact does not have a valid SLA allowing incidents to be created through email for the specified interface.
techmail_filter_reject_account	This message was filtered out because a customer account is required. The system determines a customer account is required when the following are true. • EGW_AUTO_CONT_CREATE_MA = Yes (Default = No) • EGW_AUTO_CONT_CREATE = Yes (default) • Incoming message's email address is not associated with a contact record in the knowledge base
techmail_filter_reject_rule	This message was filtered out because of how the site's business rules are defined.
techmail_filter_reject_smime_sign	This message was filtered out because of an invalid S/MIME signature certificate, which is defined by the S/MIME security settings of the mailbox.
techmail_filter_reject_smime_decrypt	This message was filtered out because of a decryption error as defined by the S/MIME security settings of the mailbox.
techmail_filter_unsubscribe	This message generates an email in an attempt to unsubscribe the user from further communication. **Note:** Techmail *does* process this unsubscribe message in order to ensure the contact is opted out. The message is considered "filtered" because no incident is created or updated as a result of the email.

Email bounce handling

Occasionally, a recipient mail server determines that an email message cannot be delivered and replies with a "bounce" notification (delivery error). To process these errors, the Envelope From/Bounce Address in your Outreach mailbox's outgoing email settings must use the POP server and POP account configured in the incoming settings.

Important To ensure that your bounced emails and replies process correctly, you must use the email address that was provided when your account was set up.

When the **Techmail** utility encounters a bounce error, it attempts to classify the error as one of the following bounce types.

Soft bounce—An email was returned because of a temporary problem with the recipient's mailbox (for example, the mailbox has exceeded its available size limit). Service incident emails that result in soft bounces are not automatically re-sent by the system. If you want to resend an incident response that has bounced, you must manually respond to the incident again. Conversely, when Techmail detects that a soft bounce has been returned from a mailing or survey invitation email, it places that message in a mail queue and attempts to resend it for up to seven days (the default value specified by the BOUNCE_RETRY_WINDOW).

However, if a contact's email address returns soft bounces three consecutive times with no contact activity in the previous fifteen days (as specified by the INVALID_NUM_BOUNCES and INVALID_NUM_DAYS configuration settings), the address is marked invalid. Once a contact's email address has been invalidated, the system does not send mailings or surveys to that address. Refer to Invalid contact email addresses.

Hard bounce—An email was returned because of a permanent problem with the recipient's mailbox, and the problem is not expected to be resolved (for example, the recipient mail server indicates that the email address does not exist). When a hard bounce is received, the contact email address is marked invalid and no resend attempt is made.

Note If email address sharing is enabled, and a shared email address is invalidated due to a hard bounce, the address is marked as invalid for each contact associated with it. Refer to Email address sharing.

General bounce—A mailing or survey invitation email was returned due to technical problems with the delivery of the message. That is, the problem is not on the sender's end nor the recipient's end, but in the transmission of the message over the network in between. It is therefore difficult to predict the likelihood of resolution. General bounces are logged in the database but no further action is taken. No resend attempt is made and the contact email address is not marked invalid.

Unknown bounce—An email was returned for a reason that could not be determined. Unknown bounces are logged in the database but no further action is taken. No resend attempt is made and the contact email address is not marked invalid.

In other cases, Techmail may receive an error code indicating that a mailing or survey invitation email was blocked by the recipient mail server. When this happens, Techmail attempts to identify the reason for the block and classifies it as one of the following block types.

Content block—An email was blocked due to its content. In other words, some part of the message content triggered a filter that prevented the message from being delivered.

Sender block—An email was blocked due to the sender's reputation. This means that the sender has not developed a trusted relationship with the recipient mail provider. See *Best Practices for Email Marketing*.

General block—An email was blocked for a reason that could not be determined.

When Techmail encounters a block error, it logs the error in the database but does not attempt to resend the message, nor does it invalidate the contact email address.

Delivery errors logged by the system can be accessed with reports, specifically the Invalid Email Address Domains report (Public Reports > Outreach > Contacts > Database Snapshot) and the Invalid Email Addresses by Mailing report (Public Reports > Outreach > Contacts).

You may also find it valuable to build a custom report using other data stored in the Bounced Messages (*bounced_msgs)* table. For example, you could create a custom report that includes the email address that the message was sent to, the text of the error received, the type of block or bounce it was classified as, and whether the email address was invalidated as a result. See Custom Reports.

Oracle Service Cloud stores a copy of the original email message for 60 days. (You can change or disable this purging interval by editing the OE_BOUNCE_PURGE_DAYS configuration setting.) See Editing configuration settings.

When a delivery error is returned from an incident response, a View Bounce Messages button appears in the header of the response thread that was bounced. Clicking this button opens a window displaying the contents of any delivery errors resulting from the response. Refer to Viewing bounced messages.

Note Because email technology is constantly evolving, Oracle Service Cloud regularly monitors delivery errors that are not categorized and attempts to classify them accordingly. If an email is blocked or bounced for a reason that cannot be determined (an unknown bounce or general block has occurred), it is often because not enough information was provided by the delivery error to classify it appropriately.

Invalid contact email addresses

In a contact workspace, an invalid email address is flagged by a warning indicator to the right of the Email field. In the database, validity is tracked for primary and alternate email addresses in three fields: *contacts.email_invalid*, *contacts.email_alt1_invalid*, and *contacts.email_alt2_invalid*. When these fields are updated, the contact **audit log** is updated accordingly. These fields can also be used in reports or as conditions in an incident or contact rule. See Creating reports and Business Rules Management.

If an agent attempts to send an incident response to a contact with at least one valid primary or alternate email address, Oracle Service Cloud sends the message to the valid address and no warning is given. However, if an agent attempts to send a response to a contact whose primary and secondary email addresses are all marked invalid, Oracle Service Cloud displays a warning message asking whether to proceed. If the agent clicks Yes, the system sends the response and sets all of the email addresses back to a valid state. However, if the response results in a bounce message that indicates an address is still not valid, **Techmail** invalidates the address once again.

Especially useful for identifying invalid email addresses is the Contacts with Invalid Email Addresses report (Public Reports > Common > Contact Reports). This report lists all contacts with one or more invalid primary or alternate email address, resulting from both hard and soft bounces. It also lists the most recent invalid date.

Tip It is not possible to override bounce detection to prevent Techmail from setting an email address to invalid. However, if a message that is not a bounce message is received from an address flagged as invalid, Techmail automatically updates the contact and revalidates the address. You can manually revalidate a contact's address by slightly modifying it, saving the record, and then reopening the record and setting it back to its original state. For example, if you change the address joe@example.com to joe@example.com.invalid and save the contact, then change it back to joe@example.com, the address is set as valid.

Email loop detection

Occasionally, an Oracle Service Cloud email message may be sent to an address that returns an automated reply (such as an out-of-office notification). If **Techmail** then receives and processes the automated reply, another Oracle Service Cloud message (such as an incident receipt or rule response) could be sent, generating another automated reply, forming an email loop.

To avoid this problem, the Techmail utility automatically terminates email loops using three detection methods.

- **Duplicate messages**—If Techmail detects that it has processed an identical email earlier in the same run, the duplicate email is deleted. Emails are considered duplicates if they are found in the same mailbox and contain the same email address, subject, send date, and body as a previous message.
- **Oracle Service Cloud messages**—Techmail also looks for any incoming message header that contains a reply-to address matching the reply-to address of any mailbox. In this way, Techmail deletes any messages originating from the system (such as receipts and escalation notifications) to prevent continuous internal email loops within Service.

- **Multiple messages**—Techmail also enforces a maximum number of messages allowed from a single email address in a specified period of time, regardless of content. By default, no more than twenty-three messages are allowed from the same address in the same twelve-hour period. Additional messages from that address within that time period indicate that an email loop has occurred and are deleted to terminate the loop.

Important To ensure accurate processing of replies, inbound messages, and bounces, Outreach mailboxes cannot be shared with either type of Service mailbox. Techmail handles messages in Oracle-managed Service mailboxes and general Service mailboxes differently from how it handles them in Outreach mailboxes. For this reason, you must set up one mailbox for Service and a separate mailbox for Outreach and Feedback.

The following table describes the configuration settings you can use to configure the Techmail email loop prevention function. See Editing configuration settings.

Table 95: Email Loop Prevention Configuration Settings

Setting	Description
RightNow Common > Service Modules > Oracle Email	
EGW_LOOP_PREVENT_ENABLED	If enabled, any email where the reply-to email address matches the reply-to email address of any Oracle-managed Service mailbox, general Service mailbox, or Outreach mailbox is discarded and no incident is created. In this way, the mailbox deletes any messages from itself, which can prevent continuous email loops. Default is enabled (Yes).
EGW_DISCARD_DUPLICATE_ENABLED	If enabled, any email having the same date, email address, subject, and body as an existing incident are classified as a duplicate message and are discarded. Default is enabled (Yes).
EGW_MAX_MSG_DURATION	Specifies the number of hours in which EGW_MAX_PER_ADDRESS is calculated. By default, the system only accepts 23 messages from a given email address in a 12-hour period. Since a high number of messages in a short period of time is reasonable, it is recommended the duration not be less than 8 hours or more than 24 hours. Default is 12.

Table 95: Email Loop Prevention Configuration Settings (Continued)

Setting	Description
EGW_MAX-_PER_ADDRESS	Specifies the maximum number of emails that are accepted from an individual email address within a EGW_MAX_MSG_DURATION hour period. This is used to identify and stop auto-responder email loops. For example, if this setting is set to 23, and 24 emails are received from the same address within EGW_MAX_MSG_DURATION hours, the 24th email from that address is discarded and no response email is sent, thereby breaking the email loop. Setting the value to zero turns off this loop detection. Default is 23.

In the rare event that Techmail's automated detection features are insufficient to prevent an email loop, you can use either of the following options to break the loop by temporarily discarding messages received from a specific email address.

- To end a loop using business rules, set up a temporary rule to delete email received from the address causing the loop. Refer to Adding rules.
- To end a loop using mailbox settings, temporarily add the email address to the Discard Addresses field for incoming email on the Mailboxes editor. See Adding and editing mailboxes and Incoming Email Settings.

Advanced configuration for email handling

To better fit our email management processes to your business needs, you can customize a variety of configuration settings to modify the system's default behavior. The settings described in the following procedures are used to configure mail processing functions such as the email gateway, contact record creation, email loop prevention, and **mailer daemon** (also called RNMD) parameters. See Working with the Configuration Settings editor.

To edit Common outgoing email settings

1. Click the Configuration button on the navigation pane.
2. Double-click Configuration Settings under Site Configuration. The Search window opens, where you can filter your search results.
3. To display all outgoing email settings, select the Site check box (in addition to the Logged In check box, which is selected by default) under the Configuration Base field.

4 Clear the Select All check box under the Folders field and then select the Common check box.

5 To search for a specific configuration setting in the Common folder, type the setting name in the Key field.

Tip You can search part of a configuration setting name by appending a wildcard (either an asterisk or a percentage sign) to the end of your search term.

6 Click the Search button. The Configuration Settings editor displays the settings in the Common folder that match your search criteria.

Tip To display configuration settings in alphabetical order, click in the Key column header.

7 Expand the folders under Common > General and edit the configuration settings under the Outgoing Email folder.

For information about a setting, click the setting and see the description that appears on the Configuration Settings editor. For complete details about the Configuration Settings editor, including searching, editing, and creating custom configuration settings, see Site Configuration.

To edit Service email settings

1 Click the Configuration button on the navigation pane.

2 Double-click Configuration Settings under Site Configuration. The Search window opens, where you can filter your search results.

3 Clear the Select All check box under the Folders field and then select the RightNow Common check box.

4 To search for a specific configuration setting in the RightNow Common folder, type the setting name in the Key field. (The Key field is not case sensitive.)

Tip You can search part of a configuration setting name by appending a wildcard (either an asterisk or a percentage sign) to the end of your search term.

5 Click the Search button. The Configuration Settings editor displays the settings in the RightNow Common folder that match your search criteria.

Tip To display configuration settings in alphabetical order, click in the Key column header.

6 Expand the folders under RightNow Common > Service Modules and edit the configuration settings under the RightNow Oracle folder.

For information about a setting, click the setting and see the description that appears on the Configuration Settings editor. For complete details about the Configuration Settings editor, including searching, editing, and creating custom configuration settings, see Site Configuration.

To edit Outreach and Feedback email settings

1 Click the Configuration button on the navigation pane.

2 Double-click Configuration Settings under Site Configuration. The Search window opens, where you can filter your search results.

3 Clear the Select All check box under the Folders field and then select the Outreach and Feedback check box.

4 To search for a specific configuration setting in the Outreach and Feedback folder, type the setting name in the Key field. (The Key field is not case sensitive.)

Tip You can search part of a configuration setting name by appending a wildcard (either an asterisk or a percentage sign) to the end of your search term.

5 Click the Search button. The Configuration Settings editor displays the settings in the Outreach and Feedback folder that match your search criteria.

Tip To display configuration settings in alphabetical order, click in the Key column header.

6 Expand the folders under Outreach and Feedback > General.

7 Edit the configuration settings under the specific Bounced Mail Processing, Campaigns, Invalidate Contacts, Mailer Utility, Mailings, Miscellaneous, and RNM Daemon folders.

For information about a setting, click the setting and see the description that appears on the Configuration Settings editor. For complete details about the Configuration Settings editor, including searching, editing, and creating custom configuration settings, see Site Configuration.

Managing distribution lists

Distribution lists are email address lists that you can use when scheduling reports, configuring rule notifications, and forwarding incidents and opportunities. You can also use email address lists in the CC and BCC fields in incident responses. Distribution lists are used to define sets of email addresses not associated with contact records or **staff accounts** in your knowledge base.

For example, you might want to schedule an email report to be sent to a group of executives who do not have staff accounts in Oracle Service Cloud. By adding their addresses to a distribution list, you can then include that list when defining subscribers to that report.

The Distribution Lists editor consists of a list of available addresses. Addresses are included in the distribution list by selecting the check box next to them in the list.

To add or edit a distribution list

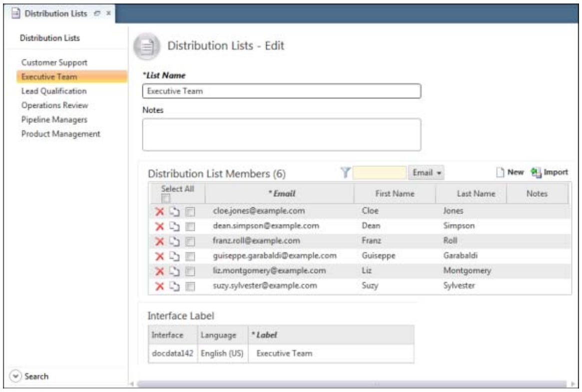
1 Click the Configuration button on the navigation pane.

2 Double-click Distribution Lists under Site Configuration. The Distribution Lists tree displays on the content pane.

3 To add a distribution list, click the New button on the ribbon.

Or

To edit a distribution list, click it in the tree.



4 Type the distribution list name in the List Name field.

5 To add an internal note about the distribution list, type it in the Notes field.

6 Enter the following field information.

Table 96: Distribution Lists Editor Description

Field	Description
Distribution List Members	This section contains the list of addresses available for the distribution list.
Filter	Type filter text and click the drop-down menu to select a column to filter the address list. **Note:** Filtering is available only when editing a list that has been saved.
New	Click this button to add a new address to the address list.
Import	Click this button to open the Import Email Addresses window and enter multiple email addresses that you want to add to the address list. You can also add first and last names for each address. Refer to Adding email addresses. **Note:** You can copy and paste a list of contact email addresses into the Email field, but each address must appear on its own line followed by a return.

Table 96: Distribution Lists Editor Description (Continued)

Field	Description
Select All	Select this check box to include all available addresses in the distribution list, or select the check box next to an individual record to include the record in the distribution list.
	Click this button to remove the selected member from the address list. **Caution:** Deleting the email address removes it from all distribution lists that it has been added to.
	Click this button to copy the selected address in the address list.
***Email**	Type the email address.
First Name	Type the first name associated with the email address.
Last Name	Type the last name associated with the email address.
Notes	Type internal notes about the email address.

7 To enter a different name for the distribution list based on interface, select the Label value next to the Language name in the Interface Label section and type the name. (This is helpful if your site has multiple interfaces of different languages.) By default, the label is set to the list name you defined in step 4.

8 To view the list **audit log**, click the Audit Log button on the ribbon.

9 Click the Save and Close button to save the distribution list and close the editor.

Adding email addresses

You can add email addresses to your distribution lists from the Import Email Addresses window. You can also copy and paste multiple addresses that are saved in another program, such as Microsoft Word, Excel, or Notepad. Once added, your new addresses can be included in any distribution list.

To add email addresses

1 On the Distribution Lists editor, click the Import button. The Import Email Addresses window opens.

2 Type the email addresses you want to add.

Or

Copy and paste multiple email addresses from another program.

Note Each address must appear on a single line followed by a return.

3 To include first and last names along with an email address, you must type that information (on a single line followed by a return) in the following order and format.

<first name>, <last name>, <email address>

For example, Lucy, Bauer, lucybauer@example.com

4 Click the OK button to add the email addresses to the distribution list. A message tells you that any changes made to distribution lists will be saved first and asks if you want to continue.

5 Click Yes. A Success window displays.

6 Click OK.

Best practices for sending email

Many external factors can impact the deliverability of email. Due to the vast amount of spam transmitted to consumers each day and the aggressive systems used to combat it, legitimate business emails are sometimes filtered without notice. In addition, customers who do not recognize the sender or contents of a valid message may regard it as spam, putting organizations at risk of having their addresses blacklisted by ISPs or email-reputation management services.

At Oracle, we follow key internal processes to protect the integrity of our hosted mail domains. In addition, we promote and enforce high standards of behavior among our customers who share resources in our multi-tenant hosting environment. However, as an administrator, it is equally important to align your processes with the best practices described here to minimize the risk of interference with your email communications.

Note The following practices apply to mail sent from Service. To review best practices for sending mailings and survey invitations, see *Best Practices for Email Marketing*.

Implement authentication—Organizations that send messages from branded domains should use a form of authentication to protect their reputations and delivery rates, while guarding against so-called “phishing” scams and forged messages.

- **Sender Policy Framework**—Sender Policy Framework (SPF) is an email authentication option that designates permitted senders of email originating from your domain, excluding those with mismatched or incorrectly specified SPF records. If your email address was supplied by Oracle using custhelp.com or rnmk.com domains, SPF has been implemented for you and no further action is needed. Otherwise, refer to Answer ID 2489 on our support site for information about implementing SPF on your site.

- **DomainKeys/DomainKeys Identified Mail**—DomainKeys (DK) and DomainKeys Identified Mail (DKIM) are email authentication options that use cryptographic signatures to designate email as originating from an authorized email delivery provider, excluding messages sent from those with unsigned or incorrectly assigned signatures. If we supplied your email address using custhelp.com or rnmk.com domains, your emails are already signed by Oracle Service Cloud and no further action is needed. Otherwise, refer to Answer ID 2701 on our support site for information about implementing DK and DKIM on your site.

Include your address and privacy policy—Edit your mail footers to include your business address and a link to your privacy policy. All emails governed by the CAN-SPAM law must contain the physical address or post office box of your organization. In addition, a link to your organization's privacy policy explaining how profile information is used can build trust with your contacts. For information about editing your mail footers, refer to Working with the Message Templates editor and Customizing the global template.

Review invalid email addresses—Use reports to regularly monitor all contacts marked as invalid. A high percentage of invalid addresses indicates a need to reevaluate your contact record maintenance practices. In addition, the Invalid Email Address Domains report helps you check for contact email addresses from well-known domains that contain common typographical errors (such as "htomail.com" instead of "hotmail.com"). For information about the email management system's handling of invalid addresses, refer to Invalid contact email addresses. For information about creating and using reports, refer to Creating Basic Reports.

Send from familiar addresses—Use easily identifiable email addresses in your mailbox configuration to help recipients recognize your organization as the sender. Do not include special (non-alphanumeric) characters, as they can cause filters to falsely identify the email as spam. For information about editing your mailbox configuration, refer to Adding and editing mailboxes.

Refine the message subject—The subject line is the first part of your message that your contacts see, so it must be concise and informative. When responding to an incident, make sure the subject clearly states the topic being discussed. If a contact fails to enter a descriptive and accurate subject, consider modifying it for clarity.

Promote addition to address books—Ask contacts to add your email address to their address books. This reaffirms their interest and ensures consistent delivery of your messages to their inbox.

Avoid using content associated with spam—Do not use all caps, special characters, or certain words often associated with spam in incident responses, as these can register false positives in many spam filters.

Honor abuse complaints—Regularly monitor administration accounts, such as abuse@yourdomain.com or postmaster@yourdomain.com, and honor all abuse complaints as unsubscribe requests by opting out or disabling the associated contact record.

Note The Answer Update notification message is the only subscription-based notification sent from Service and includes an unsubscribe link for each updated answer. If an answer matches multiple subscription criteria (for example, it was subscribed to by both answer ID and product), the message provides options to unsubscribe from each subscription type. In this way, a contact can unsubscribe from answers without assistance from your staff.

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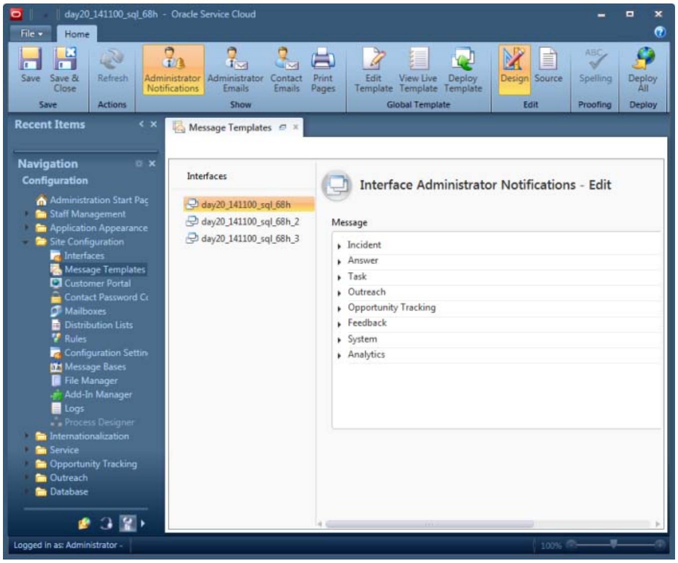
Message Templates

Message templates let you customize your administrator notifications, administrator emails, and contact emails for each interface. You can customize your message content, enable and disable notifications and emails, as well as define the message format as HTML or text. Message templates also let you quickly apply your organization’s brand across all notifications and emails, including Oracle RightNow Cloud Service (Service) email.

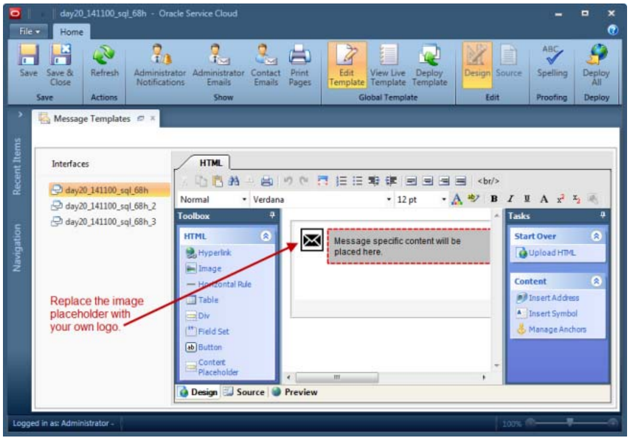


Note Staff members must have the Message Templates permission on the Administration tab of the Profiles editor in order to customize message templates. See Administration permissions.

Working with the Message Templates editor

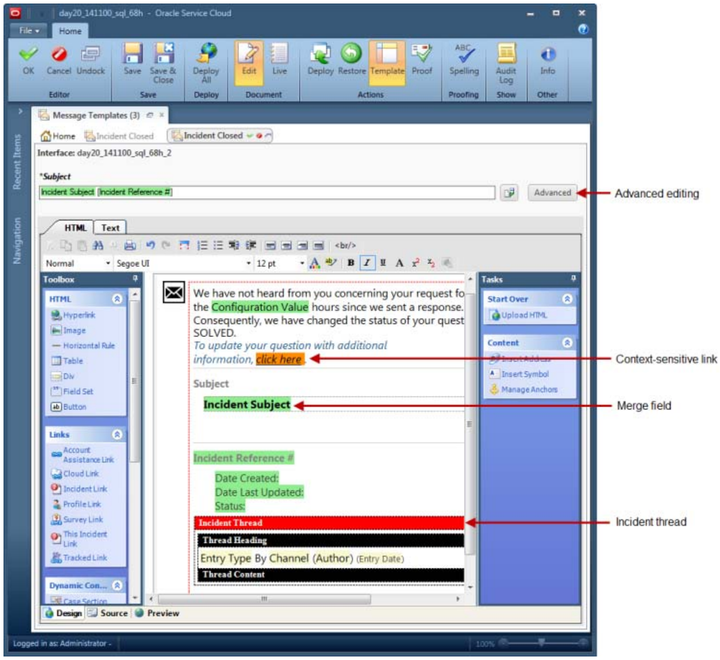
The Message Templates editor contains the global template and a set of system-generated messages. Using an HTML editor similar to the HTML editors used to create content for mailings, surveys, and answers, you can edit the global template and the messages directly on the **Service Console**. See Using the HTML editor.

The global template contains the content that frames the message-specific content in each of your individual messages. Think of the global template as a wrapper for your entire set of notifications and emails. Using the HTML editor, you can standardize the design of your outgoing messages giving them all the same look and feel. For example, you can insert your organization's logo in the header and your customer service information in the footer of the global template. When you are ready to deploy your global template, your brand can be applied to a single message or across all of your messages. See Customizing the global template.



The system-generated messages are sent to staff and contacts to support activities and events occurring throughout the system. Using an HTML editor, you can personalize your email subject lines to tailor your message to different audiences with advanced editing. You can also insert links that appear as clickable text and use merge fields to customize each message. The tools that display on the HTML editor are context-sensitive and are the logical tools you would use for the specific message you are customizing.

Additionally, you can edit multiple messages at the same time, which is especially useful if you want to compare similar messages or if you work with more than one interface. Each time you edit a message template, it opens on a sub-tab, making it easy to move between different message templates.

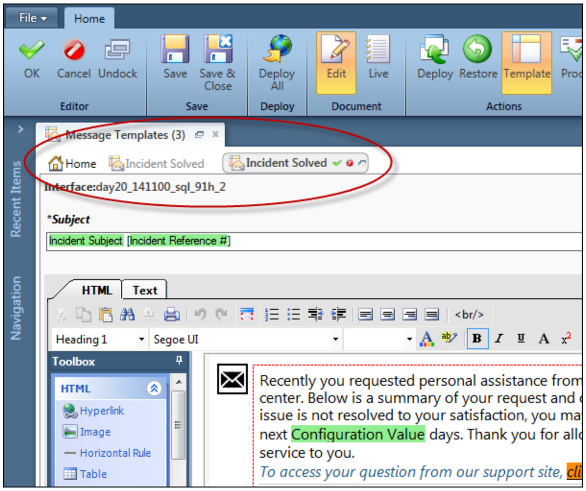


Working with sub-tabs

Using the Message Templates editor, you can work with multiple templates at the same time, which is especially useful if you want to compare similar messages or if you work with more than one interface. In addition, you can also move to other areas of Oracle Service Cloud without needing to close your message templates. For instance, say you need to open an incident while you are editing your message templates. There is no need to close the message templates you are working on because you can move to your incident workspace and come back to your message templates when you are ready.

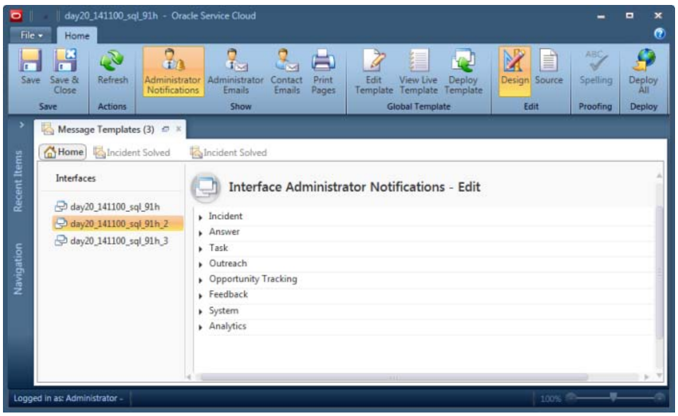
Managing multiple message templates across multiple interfaces is easy through the use of content pane sub-tabs. Here's how they work.

When you open a message template, the Home tab displays as does the tab for the message template. Both tabs appear below the Message Templates editor content pane tab and are called sub-tabs. The following figure shows the Incident Solved message template for two separate interfaces, each one open on its own sub-tab.

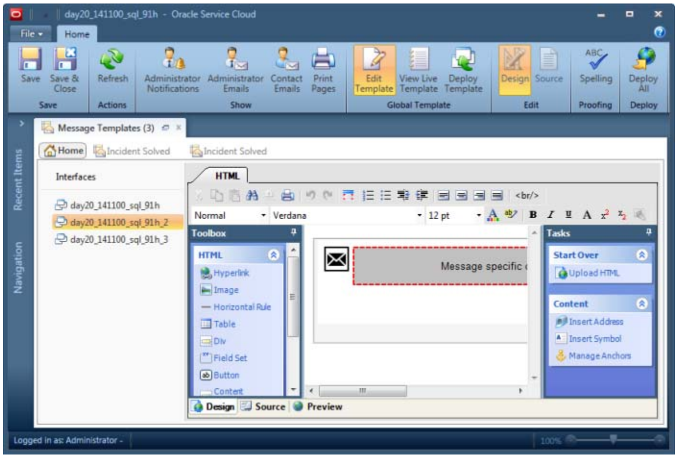


Notice the number in parentheses on the Message Templates editor tab. This identifies the number of sub-tabs you currently have open (in this case, the number 3 represents the Home sub-tab and two Incident Solved sub-tabs).

You'll use the Home sub-tab when you want to return to the Message Templates main editor to open other templates or the global template. Clicking the Home sub-tab displays the interfaces you have available on the left and a list of categories for the message type (administrator notifications, administrator emails, contact emails, or print pages) displays on the right. From here you can select a template to open or click a button on the Show group of the ribbon to change the message type.

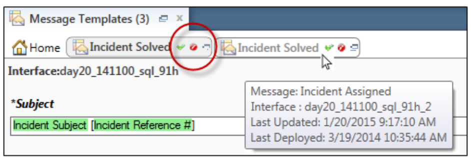


If you want to edit the global template, click the Home sub-tab, click the applicable interface on the left, and click the Edit Template button on the ribbon. See Customizing the global template.



Note Because each interface has its own global template, you cannot edit more than one global template at the same time.

Each message template sub-tab contains buttons that correspond to the buttons on the Editor group of the Message ribbon: OK, Cancel, and Undock. All sub-tabs, except for the Home sub-tab, contain these buttons for taking actions on the individual message templates. From the active sub-tab (or when you hover over an inactive sub-tab), these buttons let you save and cancel your changes as well as undock your message template without needing to use the message's ribbon buttons. Hovering over a sub-tab also shows a tooltip that includes the name of the message, interface, and the last updated and deployed dates.

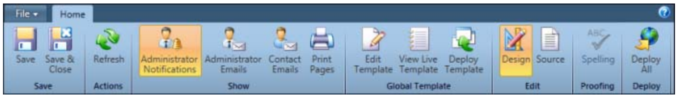


- **OK**—Clicking this button accepts the changes you have made and closes the sub-tab. However, it does not save changes to the database until you click the Save or Save and Close button on the message templates ribbon.

- **Cancel**—Clicking this button closes the sub-tab if you haven't made changes to the message template. If you have made changes, a message asks if you want to save your changes.
- **Undock**—Clicking this button undocks the message template from the editor and opens it in its own window. To redock the message to the editor, click the Dock to Console button on the window's ribbon.

Message templates ribbon

The message templates ribbon contains buttons for accessing the individual system-generated messages and for working with the global template. You can view the live global template, edit and deploy the global template, and deploy the entire set of messages and the global templates across all interfaces at the same time.



Some buttons apply only to the global template while others apply to the system-generated messages. Those differences are noted in the following table.

Note The buttons on the message templates ribbon are inactive until you select the interface you want to customize.

Table 97: Message Templates Ribbon Description

Group/Button	Description
Save	The buttons in this group commit changes to the database for the global templates as well as the messages across all interfaces.
Save	Click this button to commit pending changes and keep the editor open.
Save and Close	Click this button to commit pending changes and close the Message Templates editor.

Table 97: Message Templates Ribbon Description (Continued)

Group/Button	Description
Actions	
Refresh	Click this button to abandon pending changes and reload the most recently saved version. This button applies to the global template as well as the messages.
Show	The buttons in this group let you toggle between the different message types that are available. See Message types.
Administrator Notifications	Click this button to open the categories for administrator notifications.
Administrator Emails	Click this button to open the categories for administrator email messages.
Contact Emails	Click this button to open the categories for contact email messages.
Print Pages	Click this button to open the print templates available for viewing records and items from the agent desktop as well as printing hard copies of incidents, answers, tasks, organizations, contacts, opportunities, and quotes. See Print templates.
Global Template	The buttons in this group apply to the global template that is used to apply a standard look and feel across all of your messages.
Edit Template	Click this button to open the global template.
View Live Template	Click this button to view the most recently deployed global template. **Important:** Before you click the Deploy Template button, View Live Template displays the active version that has been deployed on your site. After you click the Deploy Template button, the version you are editing displays. However, it has yet to be committed to the database.

Table 97: Message Templates Ribbon Description (Continued)

Group/Button	Description
Deploy Template	Click this button to deploy the edited version of your global template. At this point, the deployed version is applied to the entire set of messages. Keep in mind that you have not committed this version to the database. **Important:** You must click the Save button to commit your deployed version to the database. After you save, your global template is active.
Edit	The buttons in this group define the mode (either design or source) in which the global template and the entire set of messages open on the HTML editor.
Design	Click this button to set the global template and the messages to open in design mode on the HTML editor. This is the default mode.
Source	Click this button to set the global template and the messages to show the source code on the HTML editor.
Proofing	
Spelling	Click this button to spell check the global template.
Deploy	
Deploy All	Click this button to deploy the global templates as well as the entire set of messages across all interfaces at the same time. **Important:** You must save after clicking the Deploy All button to commit your edits to the database.

Customizing the global template

The global template contains the content that frames the message-specific content in each of your individual messages. You can standardize the look of your messages by inserting your own logo. You can also customize your headers and footers to display information that needs to be communicated in all of your messages.

Note Because each interface has its own global template, you cannot edit more than one global template at the same time.

In the middle of the global template's HTML editor are two placeholders—one is an image placeholder and the other is a placeholder for the message-specific content. You can insert HTML above and below the placeholders. The global template, like all messages, is interface specific.

Tip Since the system default global template cannot be restored from the Message Templates editor, we recommend that you copy and paste the original template's HTML into a text file, such as Notepad, in case you need it at a later time. You can do this from the Source tab on the HTML editor.

To edit the global template

1. Click the Configuration button on the navigation pane.
2. Double-click Message Templates under Site Configuration. The Message Templates editor opens.
3. Select the interface you want to customize. By default, the categories for administrator notifications display on the right.
4. Click the Edit Template button on the ribbon. The global template for the interface you selected opens.
5. To insert your logo or another image, double-click the image placeholder to the right of the content placeholder. The Image Editor window opens. See Inserting images.
6. To edit the global template using the hyperlinks, buttons, and other features available on the HTML editor, see Adding HTML in design mode.
7. To customize your header and footer content, type above or below the placeholders.

8 To discard your pending changes and revert to the most recently saved global template, click the Refresh button on the ribbon.

Important The Refresh button applies only to the most recently saved global template. For example, if you have made changes and have not saved, then you can refresh to your previous version. However, once you have saved, then that is the version that is available to refresh.

9 To see the currently deployed template, click the View Live Template button on the ribbon. The content pane refreshes to display the version of the global template that is currently applied to all notifications and messages.

Tip Suppose you have made changes, but want to go back to some of the elements used in your active version. As long as you haven't deployed your template, clicking the View Live Template button lets you see a read-only version of the active content that you can copy and paste into the version your are editing.

10 To spell check the global template, click the Spelling button on the ribbon.

11 To preview your changes to the global template, click the Preview tab at the bottom of the HTML editor.

12 Click the Save button on the ribbon to save your edits to the global template.

At this point, your edits have not been deployed or committed to the database. See Deploying the global template.

Deploying the global template

When you deploy the global template, you copy the version you are currently editing to the version that is sent throughout the system to the entire set of messages. Once you deploy, you still have the option to make changes to your global template because you have not committed anything to the database. It is also true at this point that you can no longer view the active version of the global template. Once you save, your deployed version is the only one you can see.

To make your deployed version active, you must commit your changes to the database by saving after you deploy. It is only after you have saved your deployment that your global template changes are active and are also applied to the entire set of active messages.

Note Because each interface has its own global template, you cannot edit more than one global template at the same time.

To deploy the global template

1. After saving changes to the global template, click the Deploy Template button. A message asks you to confirm your decision to deploy.
2. Click the OK button. Your deployed version is copied to the version that is sent throughout the system.

Note At this point, if you click the View Live Template button, the version you are editing displays. Likewise, if you open any of your messages, your edited version has been applied, but it has yet to be committed to the database.

3. Click the Save button on the ribbon to commit your deployed version to the database.

Now, your deployed version is your active global template and is applied to your entire set of active messages.

To deploy the global template and the messages at the same time

1. After saving changes to the global template, click the Deploy All button. A message asks you to confirm your decision to deploy the global template as well as all of your messages.

Note Deploy All applies to the global templates and messages across all interfaces.

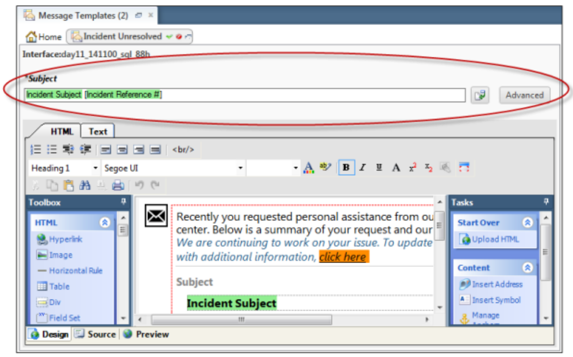
2. Click the OK button. Your deployed version is copied to the version that is sent throughout the system and the Last Deployed labels on all of your messages display “Pending...” under the message descriptions. However, neither your deployed global template nor your messages are active at this point.
3. Click the Save button on the ribbon to commit your deployed version and all of your messages to the database.

Now, your deployed version is your active global template and is applied to your entire set of messages. Your deployed messages are also active.

Customizing messages

Oracle Service Cloud provides a variety of system-generated messages that are sent to staff members and contacts to support activities and events occurring throughout the system. All messages are enabled by default, but you can disable messages that you don't need. You can also define the message format (HTML or text) as well as edit and deploy a single message or all messages.

At the top of most message templates is a subject line that you can customize to tailor your message to different audiences. You can also add **merge fields** and conditions to your subject line to further personalize your subject. See Adding conditional subject lines.



Note There are certain message templates that do not contain a subject line, such as those that forward emails and print templates as well as the Survey Proof and Send Quote templates.

Messages open with standard HTML editor tools such as links that appear as clickable and dynamic content, including **case sections**, **conditional sections**, **incident threads**, and merge fields and reports. Tools that display on the HTML editor are context-sensitive and are the logical tools you would use for the type of message you are customizing. For complete details on how to use these context-sensitive tools in messages, see Adding HTML in design mode.

Message types

The buttons on the Show group on the message templates ribbon can be used to toggle between the different types of messages that are available, including administrator notifications, administrator email messages, and contact email messages. See Message templates ribbon.

Administrator notifications—Oracle Service Cloud can send automatic notifications to alert staff members of key events such as incident escalations, answer, task and opportunity assignments, mailing completions, and system errors. You can also send custom broadcast notifications containing short text messages from the Notifications component on the **agent desktop**. Staff members are alerted to new notifications through a toast and can view all their notifications from the Notifications component. When a notification is sent to staff members who are not logged in to Oracle Service Cloud, a notification email is sent instructing them to log in to view the notification. See Opening your notifications.

Tip To send emails containing more information about the event that triggered a notification, you can select a detailed notification option from the Email Notifications menu on the Staff Accounts editor (see Adding and editing staff accounts). Staff members can also set notification preferences in their personal settings (see Changing your personal settings).

Administrator email messages—Incident, opportunity, answer, and task information can be automatically emailed to staff members by business rules or forwarded manually. Contact, organization, and asset information can be forwarded manually. Staff members can also be sent automated account assistance emails if they have difficulty logging in.

Contact email messages—Customers can receive a broad range of email messages supporting their activities on your site, such as incident receipts and responses, answer update subscriptions, and account assistance requests.

Context-sensitive tools

Oracle Service Cloud contains an HTML editor for creating dynamic content in messages. When you edit a message, you can use word processing functions to create HTML, as well as dynamic content, such as **case sections**, **conditional sections**, or **incident threads**.

You can add several types of links to your content. Links appear as clickable text when the document is used in a message. When a link is added, you have the option of defining certain attributes depending on the type of link. Links and dynamic content elements are located in the toolbox.

Important The tools that display on the HTML editor are context sensitive and are the logical tools you would use for the specific message you are customizing. Links and dynamic content that were designed with message templates in mind are described in the following table. For a complete list of links, including those not listed below, see Adding HTML in design mode.

Table 98: Context-Sensitive Tools Description

Button	Description
Links	Buttons in this section are used to insert the available context-sensitive links in your message content.
Account Assistance Link	This button inserts a link to the Account Assistance page on your customer portal where customers can request an email containing either their user name or a link to a page for resetting their password. See Inserting account assistance links.
Answer Link	Click this button to insert a link to any answer you specify. See Inserting links to answers.
Incident Link	This button inserts a link to any incident you specify in the message. See Inserting links to incidents.
Profile Link	This button inserts a link to the Account Settings page on your customer portal where customers can change their user name and update their profile information. See Inserting profile links.
Proof Comments Link	This button lets you add more than one comment field to the Survey Proof message template that is sent to proofreaders of website link surveys. See Inserting proof comments links.
Proof Survey Link	This button inserts a link to the website link survey you want your proofreaders to review. See Inserting proof survey links. **Note:** This link is included, by default, on the Survey Proof message template.

Table 98: Context-Sensitive Tools Description (Continued)

Button	Description
Setup Password	This button inserts a link to the Finish Account Creation page on your customer portal. See Inserting setup password links.
Survey Link	Click this button to insert a link to a survey. See Inserting links to surveys.
Survey Results Link	This button inserts a link to a web page that shows the survey's responses. See Inserting survey results links. **Note:** This link is included, by default, on the Survey Notification message template.
This Answer Link	Click this button to insert a link to the incident that triggered the message being sent. See Inserting links to answers.
This Incident Link	This button inserts a link to the incident that triggered the message being sent. For example, the standard Question Receipt email sends a confirmation message after a customer submits a question through the Ask a Question page, an email, or a chat session. By adding a This Incident Link to your Question Receipt message template, you can provide your customers with easy access to the incident created from their question. See To insert a this incident link.
Unsubscribe All Answers Link	This button inserts a link that lets contacts who receive answer notifications unsubscribe from future communications. See Inserting unsubscribe all answers links.
Unsubscribe This Answer Link	This button inserts an unsubscribe link to a specific answer that's been returned as the result of a repeatable answer section. See Inserting unsubscribe this answer links.
Dynamic Content	Buttons in this section are used to insert dynamic content in your message content.
Attached File List	This button inserts a list of file attachment links that will display as long as attachments have been added to the record the template is referencing. See Print templates. **Note:** This button is available only for print templates.
Answer Section	Click this button to add any repeatable answer details on your answer update notification messages. See Inserting answer sections.

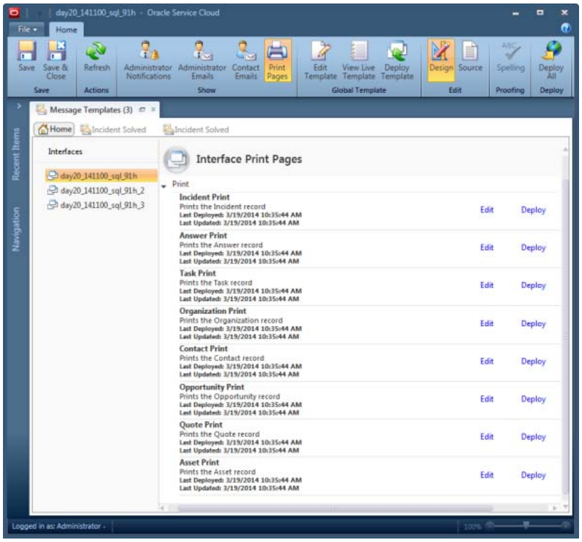
Table 98: Context-Sensitive Tools Description (Continued)

Button	Description
Case Section	Click this button to add a case section to your conditional text. See Inserting case sections.
Conditional Section	This button inserts a conditional section that you can define to filter content by contact, profile, runtime variable, or record type. For example, you could add a conditional section that displays a coupon based on the product specified in the incident. See Inserting conditional sections.
Incident Thread	This button inserts an incident thread that displays all communication between the parties associated with the incident. See Inserting incident threads.
Merge Field	Click this button to insert a merge field. See Inserting merge fields.
Merge Report	Click this button to insert a merge report. See Inserting merge reports.

For a complete list of links, see Adding HTML in design mode.

Print templates

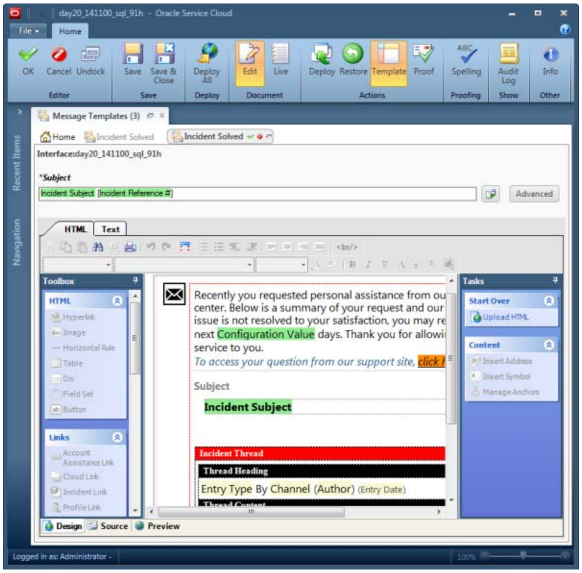
Standalone print templates are available for viewing records and items from the agent desktop as well as printing hard copies of incidents, answers, tasks, organizations, contacts, opportunities, quotes, and assets. You can customize these templates to apply your organization's brand, add dynamic content, and display any custom fields you may be using.



In addition, print templates have been designed to include a list of file attachment links. As long as file attachments exist in the record that the print template references, then that list of attachment links will display. This is especially useful for agents who frequently reference answers. See Context-Sensitive Tools Description.

Message ribbon

When you edit a message, it opens below the Message Templates editor content pane tab on its own sub-tab with several tools available on the ribbon.



The groups and buttons on the message ribbon are described in the following table.

Table 99: Message Ribbon Description

Group/Button	Description
Editor	**Note:** When you undock a message template, the label for this group changes to Commit.
OK	Click this button to save the changes you have made to the message template that is open on the active sub-tab. The sub-tab closes.
Cancel	Click this button to abandon changes you have made to your message. The sub-tab closes and the Home tab becomes the active sub-tab.
Undock	Click this button to undock the message from its sub-tab and open it in its own window.

Table 99: Message Ribbon Description (Continued)

Group/Button	Description
Console	**Note:** This group displays only when a message has been undocked.
Dock to Console	Click this button to redock the message to the editor on its own sub-tab.
Save	The buttons in this group commit changes to the database for the global templates as well as the messages across all interfaces.
Save	Click this button to commit pending changes to the database and keep the editor open. **Note:** This button is *not* available from an undocked message.
Save and Close	Click this button to commit pending changes to the database and close the Message Templates editor. **Note:** This button is *not* available from an undocked message.
Deploy	
Deploy All	Click this button to deploy the entire set of messages as well as the global templates across all interfaces at the same time. **Note:** This button is *not* available from an undocked message. **Important:** You must save after clicking the Deploy All button to commit your changes to the database.
Document	
Edit	This button, selected by default, lets you edit the message.
Live	Click this button to view the most recently deployed version of the message. **Important:** Before you click the Deploy button, the Live button displays the active version that has been saved and is live on your site. After you have clicked the Deploy button, the version you are editing displays. However, it has yet to be committed to the data-base.

Table 99: Message Ribbon Description (Continued)

Group/Button	Description
Actions	
Deploy	Click this button to deploy the working version of your message. **Important:** You must click the Save button on the message templates ribbon to commit your deployed version to the database. After you save, your message will be active.
Restore	Click this button to revert to the default system message.
Template	Click this button to remove the global template content from the message. By default, the global template is applied to all messages. Click it again to apply the global template to the message.
Proof	Click this button to send a proof email to your content reviewers. **Note:** This button sends the most recently saved version of the message. Therefore, to send a proof of the version you are currently editing, you must click the OK button on the message ribbon and then Save on the message templates ribbon.
Proofing	
Spelling	Click this button to spell check the message.
Show	
Audit Log	Click this button to view a history of changes made to the message.
Other	
Info	Hover over this button to see the message name and ID and the document ID associated with the message.

Formatting messages

By default, all Oracle Service Cloud notifications and emails are enabled and sent in multipart format, which includes text and HTML versions of the same message in a single email. You can disable most messages and you can specify the format as text only. The version that displays to recipients is ultimately determined by their mail client settings, but most mail clients display the HTML version by default.

To format messages

1 Click the Configuration button on the navigation pane.

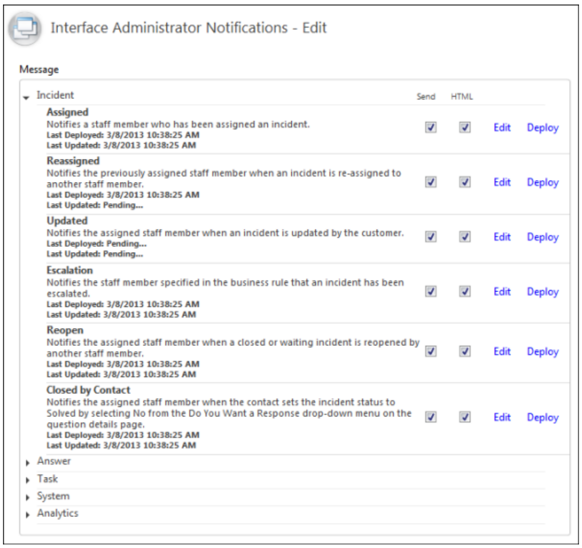
2 Double-click Message Templates under Site Configuration. The Message Templates editor opens.

3 Select the interface you want to customize. By default, the categories for administrator notifications display on the right.

4 Click the appropriate button on the ribbon's Show group. The categories for the message type (administrator notifications, administrator emails, or contact emails) display on the right.

5 Click the arrow to the left of the category to see the individual notifications or emails associated with the category.

Descriptions of each message as well as Last Deployed and Last Updated labels are listed under the category. Both labels show the date and time the latest deployment and edit was made. If a message has been edited but has not been deployed or if a deployment has not been committed to the database, the labels display "Pending..." instead of the date and time.



6 To disable any of the messages, clear the Send check box next to the message. By default, all messages are enabled.

Note Messages that do not have a Send check box cannot be disabled because they support essential functions.

7 To send the message as text, clear the HTML check box next to the message to be sent. By default, all messages are sent in multipart format.

Note Messages that do not have an HTML check box are console-only notifications and are not sent by email.

8 Click the Save and Close button.

Editing messages

When you open a message to edit, the system maintains the active message while you edit a copy on the message window. Your changes are not committed until you deploy and save them. This prevents any disruption in automatic notifications and emails during the editing process.

Because you are making edits to a copy of your message, your site's active content is not affected until you are confident in your changes and ready to deploy them. In case you make any accidental changes while editing, you can restore your message by reverting to the original system default message at any time.

You can also view your active content so that you can copy and paste it into the version you are working on. For instance, suppose you have made changes to your edited version and then want to go back to some of the elements used in your active version. This feature lets you see a read-only version of the active content that you can copy and paste into your working message.

To edit a message

1 Click the Configuration button on the navigation pane.

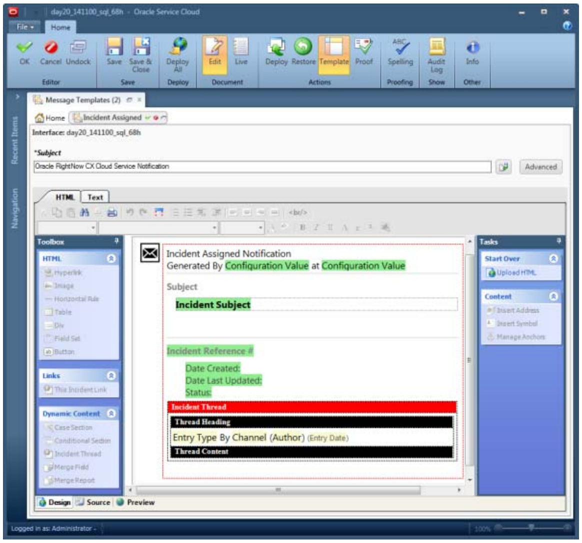
2 Double-click Message Templates under Site Configuration. The Message Templates editor opens.

3 Select the interface you want to customize. By default, the categories for administrator notifications display on the right.

4 Click the appropriate button on the ribbon's Show group. The categories for the message type (administrator notifications, administrator emails, or contact emails) and print templates display on the right.

5 Click the arrow to the left of the category to see the individual notifications or emails associated with the category.

6 Click Edit to the right of the HTML check box for the message you want to customize. The message opens on a sub-tab and becomes the active sub-tab.



7 To edit the subject of the message, type in the Subject field.

Writing effective subject lines

Because most mail clients list new messages by From address and subject, the contents of these fields are critical to having your message read. Refine your message subject to be concise yet informative and make sure it clearly states your purpose. If it isn't clear who you are or what you want, your message can be easily passed over.

8 To edit a merge field in the subject, double-click the merge field. See Inserting merge fields.

9 To add a merge field in the subject, click the Merge Field button (to the right of the Subject field) and select the field. See Inserting merge fields.

Tip You can add up to 5 merge fields to your subject line with a maximum of 400 total characters. However, remember that the best subject lines are simple, descriptive, and to the point. Also keep in mind that email clients have their own limits on the maximum number of characters allowed in subject lines. Being aware of these limits will help you determine the best subject line length for your message.

You cannot add merge fields to the subject of print templates or any of the forward-type messages.

10 To add conditional subject lines to your message, click the Advanced button to the right of the subject's Merge Field button and refer to Adding conditional subject lines.

11 Type in the content placeholder (which is designated by the area inside the red box), and edit the message using the hyperlinks, buttons, dynamic content, and other features available on the HTML editor. See Adding HTML in design mode.

12 To view your most recently deployed content, click the Live button on the ribbon.

13 To revert to the system default message, click the Restore button on the ribbon.

14 To remove the global template from your message, click the Template button on the ribbon. If you click the Template button again, the global template is reapplied to your message.

15 To spell check your content, click the Spelling button on the ribbon.

16 To preview your message, click the Preview tab at the bottom of the HTML editor.

Tip To see how your dynamic content displays, either by incident or contact, click the Search button next to the Preview Incident or Preview Contact field. The Search window opens where you can search for an incident or a contact to use when the message is previewed on the Preview tab.

17 To send your edited message to another staff member for review, click the Proof button on the ribbon. See Sending proof messages.

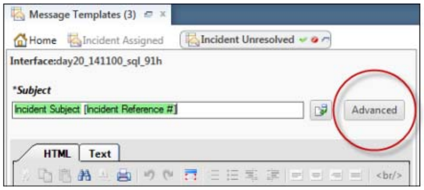
18 Click the OK button to save your edits and close the message.

At this point, your edits have not been deployed or committed to the database. See [Deploying messages](#).

Adding conditional subject lines

You can personalize your email subject lines to tailor your message to different audiences with advanced subject editing. For example, you can change the subject line dynamically based on characteristics such as product, category, or custom field. In addition to the default subject line, you can add up to ten conditional subject lines to each message template.

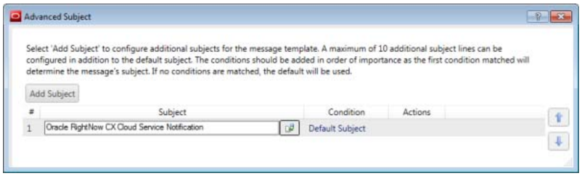
List your additional subjects in order of importance because the first one that matches will define the message's subject line. If no conditions are met, the default subject line is used. (The default subject line will always be listed last.)



Note There are certain message templates that do not contain a subject line, such as those that forward emails and print templates as well as the Survey Proof and Send Quote templates. Therefore, you cannot add conditional subject lines to these messages.

To add a conditional subject line

1 From an open message template, click the Advanced button to the right of the subject's Merge Field button. The Advanced Subject window opens.



Tip In addition to the default subject line, you can add up to ten conditional subject lines (for a total of eleven) to each message template.

2 Click the Add Subject button. The Subject Condition window opens.

3 Select the appropriate radio button for the type of condition you are adding.

Note The available options are context-sensitive and depend on the type of message template you are editing. Options can include Associated Contact, Recipient Profile, or Associated Record.

4 Select a segment, profile, or record type for the condition. When defining an associated record condition, you will also need to define an operator type and value.

Note Notice how the Title field populates based on your selection. This field populates only if you have not already typed a title.

5 To change the title populated in step 4, type the title as you want it to appear in the Title field.

6 Click the OK button to insert the subject. Each new subject line is added above the default subject line.

7 To add another subject line, repeat the applicable steps starting at step 2.

8 To edit the subject line so that it reads the way you want it to, remove the default subject line from the field in the Subject column and type the subject the way you want it to display to your customers.

9 To add merge fields to your additional subject lines, click the Merge Field button next to the Subject field. See Inserting merge fields.

Note You can add up to 5 merge fields to your subject line with a maximum of 400 total characters.

10 To edit any merge fields, right-click the merge field and select Merge Field Properties.

11 To edit a condition, click the Edit link in the Actions column and make any necessary changes to your condition.

12 To remove a condition, click the Remove link in the Actions column.

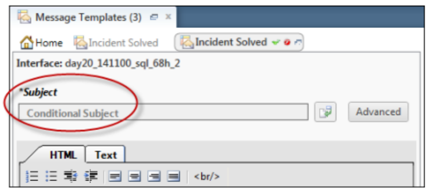
13 To reorder your additional subject lines, select the subject line you want to move and click the up or down arrow next to the Action column.

Note The default subject is always last. Therefore, you need to have more than two additional subject lines defined for the up and down arrows to be available.

14 To preview your subject lines, click the Preview tab.

Tip This is a great way to efficiently test your default subject line and any advanced subjects without the hassle of manually sending proof emails to yourself. Simply preview by applying the appropriate record that will be used by each subject.

15 Click the OK button. Notice the Subject field is now labeled Conditional Subject and is uneditable.



Note Once you add conditional subject lines to your message, you must use the advanced editing feature to make changes.

Sending proof messages

When you are finished editing your message, it's a good idea to send a proof to key staff for feedback on your design. For instance, you may need your legal department to review your language or your marketing department to review your branding. You can also customize your proof for a specific incident or contact to ensure that your dynamic content works the way you intend it to.

Important This feature sends the most recently saved version of your message. Therefore, you must save your edits to send a proof of the message you are working on.

Save works differently depending on whether you are working from a sub-tab or an undocked message. Therefore, the procedures differ slightly and are described below.

To send a proof message from a sub-tab

1 Click the sub-tab for the message you want to send and then click the Save button on the ribbon.

2 Click the Proof button on the ribbon. A message tells you to save and reopen your message. However, because you have already saved, you can continue with step 3.

3 Click OK. The Send Message Proof window opens.

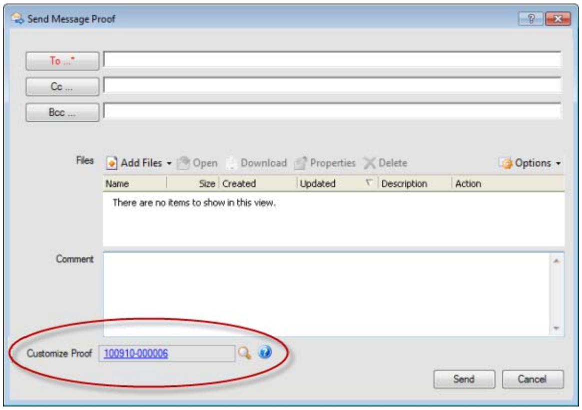
4 Type the email addresses of your reviewers in the address fields or click one of the buttons to select reviewers from a list.

5 To include any comments you want to appear in the message, type them in the Comment text box.

6 To customize your proof message so that your reviewers can see your dynamic content, click the Search button next to the Customize Proof field on the bottom of the window. Depending on the message you are editing, either the Incident Search window or the Contact Search window opens.

   a To customize your proof message by incident, type the incident reference number in the Reference # field and click the Search button. The Incident Search window closes and the reference number populates the Customize Proof field on the Send Message Proof window.

Tip You can also type part of a reference number in the Reference # field. A list of incidents that match your search criteria displays in the grid below the Reference # field. You can then select a reference number and click the Select button. The Incident Search window closes and the reference number you selected populates the Customize Proof field on the Send Message Proof window.



b To customize your proof message by contact record, type your search criteria in one or more of the available fields and click the Search button. A list of contacts that match your search criteria displays in the grid below the search criteria fields. You can then select a contact and click the Select button. The Contact Search window closes and the contact name you selected populates the Customize Proof field on the Send Message Proof window.

7 Click the Send button to send your proof message.

To send a proof message from an undocked message

1 Click the OK button on the message ribbon. Your message closes.

Important Because the system sends the most recently saved version of your message and there is no Save button on the message ribbon, you must save your edits from the message templates ribbon in order to send a proof of the message you are working on.

2 Click the Save button on the message templates ribbon.

3 Click Edit to the right of the HTML check box for the message you were editing. The message opens on a sub-tab.

4 Click the Proof button. The Send Message Proof window opens.

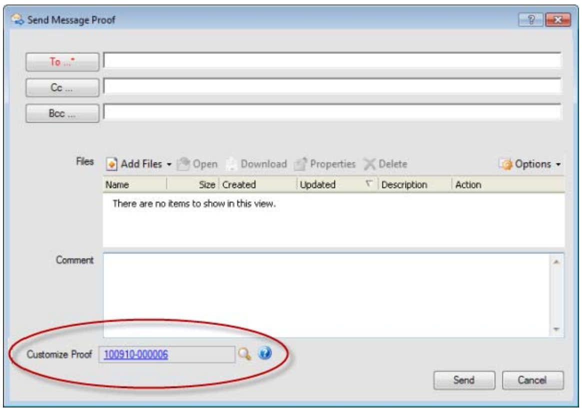
5 Type the email addresses of your reviewers in the address fields or click one of the buttons to select reviewers from a list.

6 To include any comments you want to appear in the message, type them in the Comment text box.

7 To customize your proof message so that your reviewers can see your dynamic content, click the Search button next to the Customize Proof field on the bottom of the window. Depending on the message you are editing, either the Incident Search window or the Contact Search window opens.

   a To customize your proof message by incident, type the incident reference number in the Reference # field and click the Search button. The Incident Search window closes and the reference number populates the Customize Proof field on the Send Message Proof window.

Tip You can also type part of a reference number in the Reference # field. A list of incidents that match your search criteria displays in the grid below the Reference # field. You can then select a reference number and click the Select button. The Incident Search window closes and the reference number you selected populates the Customize Proof field on the Send Message Proof window.



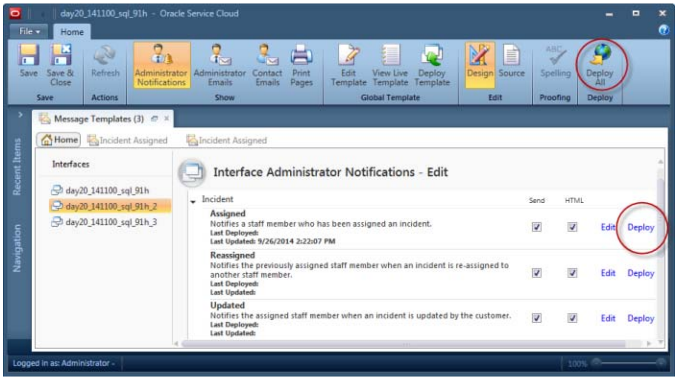
   b To customize your proof message by contact record, type your search criteria in one or more of the available fields and click the Search button. A list of contacts that match your search criteria displays in the grid below the search criteria fields. You can then select a contact and click the Select button. The Contact Search window closes and the contact name you selected populates the Customize Proof field on the Send Message Proof window.

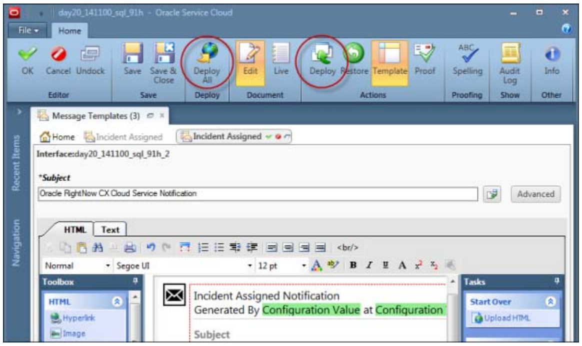
8 Click the Send button to send your proof message.

Deploying messages

There are three ways to deploy your messages.

- Click Deploy next to the message on the Home sub-tab.
- Click the Deploy button on the message ribbon.
- Click the Deploy All button on the message templates ribbon or the message ribbon.





The order in which you choose to deploy depends on several things. If you are editing only one message, it's probably most efficient to click Deploy on the message ribbon as soon as you have finished making your changes.

If you are editing several messages, you can save your changes as you make them by clicking the Save button on the message ribbon. When you are finished with all of your message edits, you can click the Deploy All button, and then click the Save button on the ribbon to commit all of your messages at the same time. Deploying all also applies to the global templates (across all interfaces) for all your messages unless you have chosen to remove it within your individual messages. This method eliminates the need for you to respond to the confirmation message that opens each time you deploy from an individual message.

Tip You can always go back to the system default message by opening your message and clicking the Restore button on the ribbon.

To deploy one message

1 Click the Deploy button on the ribbon. A message asks you to confirm your decision to deploy.

2 Click the OK button to continue.

3 Click the OK button on the ribbon. The sub-tab or editor closes depending on whether you are working from a docked or undocked message.

4 Click the Save button on the ribbon to commit your deployment.

Your deployed version is now active.

To deploy multiple messages at the same time

Note This procedure assumes you have edited more than one message and have saved your changes.

1 Click the Deploy All button on the ribbon. A message asks you to confirm your decision to deploy all messages as well as the global template.

Note Deploy All applies to the global templates and messages across all interfaces.

2 Click the OK button to confirm.

3 Click the Save button on the ribbon to commit all your deployments to the database.

Your deployed versions are now active and all of the message labels display the same date and time.

Incident response tracking

Incident response tracking lets you see how customers react to interactions they have with your agents. This helps improve your customer support because you can see if your customers are using the information you send them. For instance, suppose you are sending 500 emails a week. Incident response tracking can show you how many of those emails are opened and how many links are clicked that result in a visit to your customer portal.

In addition, incident response tracking is effective in helping you evaluate aspects of your customer experience solution, including the quality of your agent responses. Not only can you see the actions contacts take before submitting an incident, but you can also track what happens after submitting an incident. For example, suppose your agent sends an answer link in response to a contact's question. If the contact clicks the link, you can see every action the contact takes on your customer portal.

Simply stated, message templates track customer-facing incident responses, which lets you see activity related to the following contact email messages.

- **Question Receipt**—This email is sent to contacts to confirm the receipt of their question from the Ask a Question page, an email, or a chat session.
- **Rule Email**—This email is sent to a contact when the Send Response action is triggered by a business rule.
- **Incident Closed**—This email is sent to a contact when an **incident status** changes to Solved.
- **Incident Solved**—This email is sent to a contact when a staff member responds to the incident and the incident status is Solved.
- **Incident Waiting**—This email is sent to a contact when a staff member responds to the incident and the incident status is Waiting.
- **Incident Unresolved**—This email is sent to a contact when a staff member responds to the incident and the incident status is Unresolved.

You can track how often these incident response emails are viewed as well as how customers use the information that you provide in your response, such as viewed answers, clicked links, and customer portal pages that were accessed. Only unique views and clicks are tracked so you can be confident that your statistics are accurate. This also helps to keep stored data manageable.

You can also use tracked links in your messages to automatically track your hyperlinks. Before you can insert tracked links into your message content, you need to add them to your system. For complete details and procedures on adding tracked links to your system, and then inserting tracked links from the HTML editor, see Adding tracked links and Inserting tracked links.

Incident response tracking data is accessed through standard reports located in the public reports on the Reports explorer. Statistics used for this report are stored in the Message Transactions *(message_trans)* table. For a description of the information logged in the Message Transactions table, refer to the Data Dictionary located under Configuration > Database > Data Dictionary.

Important The configuration setting MESSAGE_TEMPLATES_PURGE_DAYS defines how long data in the Message Transactions *(message_trans)* table is stored. By default, data is removed after 400 days. This ensures that your database tables stay at a manageable size. You can change the value of this setting under Configuration > Site Configuration > Configuration Settings in the RightNow Common > Message Templates > General folder. See Customizing configuration settings.

- **Incident Message Statistics** (Service > Incident Reports > Incident Activity)—This report provides statistics comparing the number of incident responses sent and the number that contacts viewed over time.
- **Incident Message Transactions** (Service > Views - Service > Editor Reports - Service)—This report was designed to be added to an incident workspace. It provides statistics on run-time activity, such as message content, date and time of incident creation, message type (answer or tracked link), and if a customer portal session resulted from any contact interaction.
- **Incident Message Web Visit Details** (Service > Views - Service > Editor Reports - Service)—This report maps the incident that triggers the email as well as the customer portal session that results from a contact clicking a link in an email. It is inherently related to the Incident Message Transactions report because the run-time filter it requires is a web visit ID.

See Viewing reports and Searching in reports.

Message templates examples

This section includes scenarios where message templates can be used to accomplish more advanced and unique customization needs.

Conditional content based on message thread count

In addition to limiting the thread count on your incident thread properties, you can show content based on the number of threads that are included within the sent message. For example, if you set your message thread count to be greater than ten, when the number of threads included with the message exceeds ten, you could create a conditional section based on this message thread count threshold with content telling your customers to call the customer support team for a faster resolution.

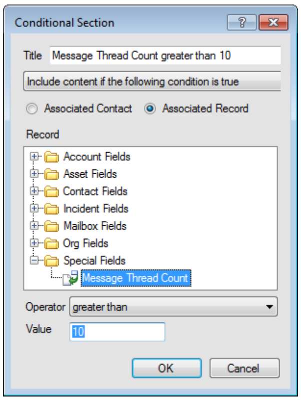
Note Keep in mind that if you have already limited the thread count in your incident thread properties, this also affects the number of threads that display. For example, if you limit your thread count to three, you'll need to make sure any conditional sections based on this message thread count do not exceed three. In other words, if you create a conditional section based on four threads and you limit the number of message threads to three, the condition will never match because the incident thread count limit will keep the message from reaching the value of four threads. See Inserting incident threads.

To define the conditional content based on message thread count

1 Add a conditional section or a case section to your message template.

2 Select the Associated Record radio button.

3 Expand the Special Fields folder and select the Message Thread Count field. See Inserting conditional sections and Inserting case sections.

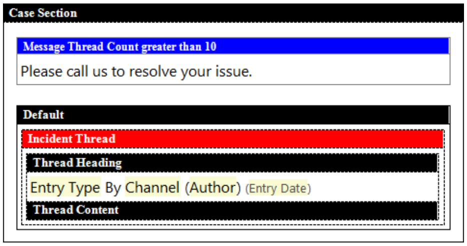


4 Select an operator from the Operator drop-down menu.

5 Type a value for the operator in the Value field.

6 Click the OK button to add the logic to your conditional content. At this point, you've defined only the If condition. Next, you need to define the content that will display.

7 Place your cursor inside the condition you just added and type the content you want to display when the condition's value is matched.



Case sections vs. conditional sections

Understanding when to use a case section instead of an independent conditional section is important so that your content is as effective as it can possibly be. For detailed descriptions of the differences as well as specific scenarios, see When to use case sections vs. conditional sections.

Branding message templates based on products within the same interface

You can also use case and conditional sections to brand your message templates based on products within the same interface. For instance, say you have one interface that represents two separate brands—each one with its own logo. You've already defined each brand as its own product. Now, you want your customer-facing message templates to display the correct logo depending on which product the message refers to.

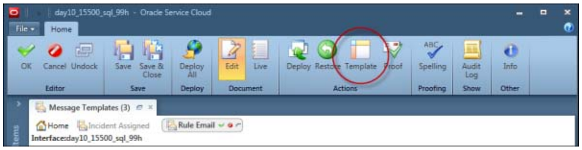
If you had a separate interface for each brand, the global template could be used to apply the same branding across the entire interface. However, since you have only one interface, the global template will not work because it is applied across *all* messages per interface.

Therefore, you must remove the global template from the individual message templates and then use case and conditional sections to display the appropriate logo based on product.

Most likely, you'll want to focus this effort on the customer-facing, incident-related message templates, although any of the messages found under the Contact Emails category should be considered. In some cases, taking a more generic approach in which the global template could be used might make more sense.

To apply product-specific logos

1 From an open message template, click the Template button on the ribbon. This action removes the global template from the message template.



2 Insert your cursor where you want your logo to display and click the Case Section button. A case section is inserted in the message template.

3 Select the conditional section inside the case section, right-click, and click Conditional Section Properties. The Conditional Section window opens.

- **a** Select the Associated Record radio button.
- **b** In the Record section, expand the Incident Fields folder and select the Product merge field.
- **c** Select Equals from the Operator drop-down menu.
- **d** Select the product you want associated with this conditional section from the Value drop-down menu.
- **e** Click OK.

See Inserting conditional sections.

4 Right-click inside the case section and select Add Conditional Section.

5 Repeat steps 3a-3d to define the condition for your second product.

6 Click inside the first conditional section and click the Image button. The Image Editor window opens.

- **a** Type the URL where the logo you want to display for this product is located. See Inserting images.
- **b** Click OK.

7 Repeat step 6 for the second conditional section.

Important Leave the Default section blank (do not delete it). This way, if the product is unknown, then no image will display.

8 Click Save.

9 Repeat steps 1-8 for each message template you want to apply different logos to.

Tip Once you define the first case section, you can easily select the case section, copy it, and then paste it into your other message templates.

At this point, your edits have not been deployed or committed to the database. See Deploying messages.

15

Data Import

With data import features, you can add new contacts, answers, **assets**, incidents, organizations, and custom objects to your Oracle database from a data file. For example, you can import lists of prospects or recently acquired customers into your knowledge base as new contacts or update existing answers to keep your database synchronized with an external knowledge base.

You can also import configuration setting values and message base text values that you have edited from the Configuration Settings and Message Bases editors. For example, suppose you want to create a site in another language and need to make changes to your text labels. You can create a **CSV** (comma-separated value) file that includes all of your message base text and do a global search and replace. Then, using the Data Import Wizard, import your file and your changes will be made to the message bases. For complete details and procedures about the Configuration Settings and Message Bases editors, see Site Configuration.

Additionally, you can import custom configuration setting and message base metadata into other sites. This can save time, especially when you have large numbers of custom settings and message bases. See Exporting configuration settings and Exporting message bases.

Oracle Service Cloud provides the following import features.

- **Data Import Wizard**—Use the powerful import wizard to map the data file to columns in the Oracle database and prescan the file for problems, such as duplicate records or invalid email addresses. After an import, you can run **external events** or business rules on the imported records. You can also add contacts to a mailing list or use them to initiate a campaign. See Importing data.
- **Data import templates**—For imports that you want to perform more than once, you can create column mapping templates that can be selected when importing data with the wizard. See Data import templates.

- **Data imports reporting**—View the Data Imports report to track information about past imports. See Data import history.

Important In order to access the Data Import Wizard and template editor, staff members must have the Data Import permission in their profile. A staff member with this profile permission can import any of the supported record types, even if the staff member's only responsibility is to import contact data for marketing purposes. See Administration permissions.

Importing data

To import data, you need a data file containing the information you want to import. The most commonly used file format is **CSV** (comma-separated value), but delimiters other than commas can also be specified.

In addition to importing data to the primary table of a supported record type, you can map data to certain database fields in associated tables. For example, when importing data to the Incidents *(incidents)* table, you can map columns to the Threads *(threads)* table to create customer proxy or note threads associated with each incident.

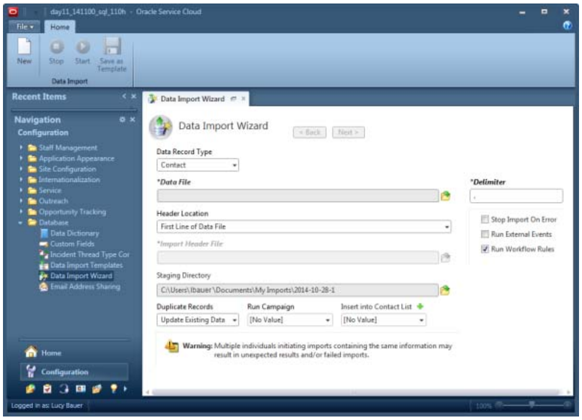
Important The data import features are designed to import specific data sets into the knowledge base, not to support full data migrations. You should be aware of the following restrictions when preparing an import.

- If Oracle RightNow Cloud Service (Service) is disabled, answer, asset, and incident record types are not available for import.
- Associated table mapping is applied only when the import creates new records. Such mapping is ignored when existing records are updated by the import.
- Only certain values can be mapped to a record's associated tables. For example, you cannot map a value for the *threads.entered* field. This value is set to the date and time the import occurred.
- The Products and Categories fields are not available for mapping to answers. If you want to associate imported answers with products or categories, you must update them manually from within Oracle Service Cloud.

To import data

1 Click the Configuration button on the navigation pane.

2 Double-click Data Import Wizard under Database. The content pane displays the Data Import Wizard.



3 Enter the following field information.

Table 100: Data Import Wizard Description

Field/Item	Description
Data Record Type	Click this drop-down menu to select the type of records you want to import.
Answer	Select this option to designate answer data as the type of record you want to import.
Asset	Select this option to designate asset data as the type of record you want to import. **Note:** Currency fields are not supported. For example, the Price field cannot be imported.

Table 100: Data Import Wizard Description (Continued)

Field/Item	Description
Config Base Entry	Select this option to designate configuration setting data as the type of record you want to import. For example, you can create a CSV file that includes your custom configuration settings and then import those settings to your other sites. The following fields are required under the Column in File and Field columns for mapping to work. Other columns may also be required depending on the data types of the configuration settings you are importing. • Key = Configuration Entry Key (entry_key) • Type = Configuration Entry Base Type (type) • Data Type = Configuration Entry Data Type (data_type) • Default Value = Default Configuration Value (default_value) **Important:** You must create a configuration base entry before you can create a configuration base value.
Config Base Value	Select this option to designate configuration setting value data as the type of record you want to import. Configuration base value records are essentially the “child” records of configuration base entries. The following fields are required under the Column in File and Field columns for mapping to work. Other columns may also be required depending on the data types of the configuration settings you are importing. • ID = Configuration Entry ID (configbase_entry_id) • Key = Configuration Base ID (configbase_id) • Value = Configuration Value (value) **Important:** You cannot create a configuration base value unless you have a configuration base entry to map it to. Therefore, you must create a configuration base entry before you can create a configuration base value.
Contact	Select this option to designate contact data as the type of record you want to import. **Note:** This is the default record type.
Incident	Select this option to designate incident data as the type of record you want to import.

Table 100: Data Import Wizard Description (Continued)

Field/Item	Description
Message Base Entry	Select this option to designate message base data as the type of record you want to import. For example, you can create a CSV file that includes your custom message bases and then import the file to your other sites. The following fields are required under the Column in File and Field columns for mapping to work. • Key = Message Base Text Key (entry_key) • Type = Message Base Entries Type (type) • Maximum Length = Message Base Text Maximum Length (max_length) • Text = Text (text) **Important:** You must create a message base entry before you can create message base text to go with it.
Message Base Text	Select this option to designate message base text data as the type of record you want to import. Message base text records are essentially the “child” records of message base entries. The following fields are required under the Column in File and Field columns for mapping to work. • ID = Message Base Entry ID (msgbase_entry_id) • Message Base = Message Base ID (msgbase_id) • Custom Text = Message Base Custom Text (custom_text) **Important:** You cannot create a message base text unless you have a message base entry to map it to. Therefore, you must create a message base entry before you can create a message base text.
Organization	Select this option to designate organization data as the type of record you want to import.
Custom Object	Select this option to designate custom object data as the type of record you want to import. **Note:** Custom objects must be enabled for this option to display. To enable custom objects, contact your Oracle account manager.
***Data File**	Click the Browse button to the right of the field to access the file containing the data you want to import. **Note:** Windows/MS-DOS format is the only supported CSV file type.

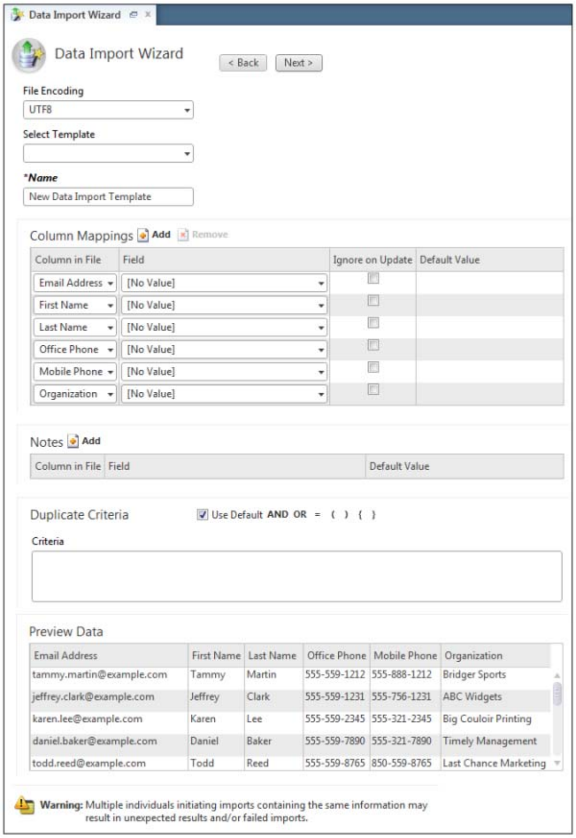
Table 100: Data Import Wizard Description (Continued)

Field/Item	Description
Header Location	Click this drop-down menu to select the location of the column headers that identify the contents of the data file.
First Line of Data File	Select this option if the column headers are located in the first row of the data file.
No Headers Specified	Select this option if there are no column headers defined for the data file.
Header File	Select this option if the column headers are located in a separate CSV file. **Note:** The header file cannot contain fewer columns than the data file.
***Import Header File**	Click the Browse button to the right of the field to access the CSV file containing your header information. This field is active when Header File is selected from the Header Location drop-down menu.
Staging Directory	Click the Browse button to the right of the field to select a location for staging the good and bad output files that are generated during the data prescan process. See Data import error handling. By default, the location is C:\Documents and Settings\<username>\My Documents\My Imports\YYYY-MM-DD-#. **Note:** The staging directory can be set to a local directory on your workstation or a shared network drive.
Duplicate Records	Click this drop-down menu and select the method used to handle records in cases where the data file and database contain duplicate records. See Duplicate record handling for data imports.
Keep Original Data	Select this option to prevent updating the database where duplicates occur. Duplicate records are not recorded as errors. **Important:** For optimal performance when adding existing contacts to a contact list, we recommend that you select this option when using the Insert Into Contact List drop-down menu. See the Insert Into Contact List description in this table. If you are importing custom configuration setting or message base metadata, you must select this option or the data import will return errors. See Exporting configuration settings and Exporting message bases.
Update Existing Data	Select this option to update the database with data from the data file where duplicates occur. Duplicate records are not recorded as errors.

Table 100: Data Import Wizard Description (Continued)

Field/Item	Description
Record Error	Select this option to prevent updating of the database where duplicates occur and to record duplicates as errors.
Run Campaign	Click this drop-down menu to select a campaign entry point for imported contact records. See Outreach Campaigns. **Note:** This option is available only when importing contacts.
Insert Into Contact List	**Important:** For optimal performance, be sure to select the Keep Original Data option in the Duplicate Records drop-down menu when using this option. See the Keep Original Data description in this table. Click this drop-down menu and select a list to associate all imported contact records with a contact list. To create a new contact list to associate with the imported records, click the New Contact List button. See Adding contact lists. **Note:** This option is available only when importing contacts.
	Click this button to create a new contact list.
***Delimiter**	Type the character used to separate columns in the data file. The default delimiter is a comma. **Note:** The tab character is not a supported delimiter.
Stop Import on Error	Select this check box to prevent any more records from being imported if an error is found during the import process. If this check box is not selected, the import continues despite any error, and only records without errors are imported. The check box is cleared by default.
Run External Events	Select this check box if you want external events to run against the data you are importing. The check box is cleared by default.
Run Workflow Rules	Select this check box if you want business rules to run against the data you are importing. The check box is selected by default.

4 Click the Next button. The content pane displays fields for defining column mapping and duplicate criteria as well as a preview of the records in the data file.


Data Import Wizard
Data Import Wizard
< Back
Next >
File Encoding
UTF8
Select Template
*Name
New Data Import Template
Column Mappings
Add
Remove
Column in File
Field
Ignore on Update
Default Value
Email Address
First Name
Last Name
Office Phone
Mobile Phone
Organization
[No Value]
Notes
Add
Column in File
Field
Default Value
Duplicate Criteria
Use Default
AND
OR
Criteria
Preview Data
Email Address
First Name
Last Name
Office Phone
Mobile Phone
Organization
tammy.martin@example.com
Tammy
Martin
555-559-1212
555-888-1212
Bridger Sports
jeffrey.clark@example.com
Jeffrey
Clark
555-559-1231
555-756-1231
ABC Widgets
karen.lee@example.com
Karen
Lee
555-559-2345
555-321-2345
Big Couloir Printing
daniel.baker@example.com
Daniel
Baker
555-559-7890
555-321-7890
Timely Management
todd.reed@example.com
Todd
Reed
555-559-8765
850-559-8765
Last Chance Marketing
Warning: Multiple individuals initiating imports containing the same information may result in unexpected results and/or failed imports.

5 Enter the following field information.

Table 101: Column Mapping Description

Field	Description
File Encoding	Click this drop-down menu to select the encoding type of the data file. The default encoding type is UTF8.
Select Template	Click this drop-down menu to select a previously saved template to use for mapping the data file columns to the database. See To add or edit a data import template. **Note:** This menu lists only templates for the record type you are importing.
***Name**	Type a template name and click the Save As Template button on the ribbon to save the current column mapping as a template. Click the Clear button to clear the field contents. The default delimiter is a comma. **Note:** The template name must be unique for the record type, and the tab character is not a supported delimiter. See Data import templates.
Column Mappings	This section defines how columns in the data file are mapped to fields in the database.
Add	Click this button to create a new row in the column mapping grid.
Remove	Click this button to remove a selected row from the mapping grid.
Column in File	Click the drop-down menu to select the column name specified in the data file or header file, or the column number if no header was specified.

Table 101: Column Mapping Description (Continued)

Field	Description
Field	For each data column that you want to import, click the drop-down menu and select the database field that you want to map the column to. The data from the column is inserted into the specified database field. If you have specified column headers that exactly match the database field names (such as *first_name*), the system attempts to automap the field for you. If the data file contains a column that you do not want to insert into your database, leave this field set to No Value. For information about database fields, refer to the Data Dictionary located under Configuration > Database. **Tip:** If you map a column to *ma_org_name*, the Data Import Wizard populates the field with the text value from the data file. If you want to associate a contact with an organization, you can either map the *org_id* to Organization ID or map the name of the organization to Organization ID. The Data Import Wizard looks up the organization and associates the name to the correct organization. If the lookup fails, an error occurs.
Ignore on Update	Select this check box if you want this column to be inserted into the database for new records, but do not want the column updated for existing records. **Note:** This option has no effect unless you select Keep Original Data from the Duplicate Records drop-down menu.
Default Value	Enter the default value to be inserted when an imported record does not contain data for the column.

6 To map a column to a table associated with a new import record type, click Add in the section corresponding to the associated table. Table mapping is available only for new records.

- **Notes**—Maps columns to the Notes *(notes)* table for answer, contact, and organization imports. Supported fields include *chan_id* and *text*.
- **Threads**—Maps columns to the Threads *(threads)* table for incident imports. Supported fields include *chan_id, seq, note,* and *entry_type*.
- **Addresses**—Maps columns to the Organization Addresses *(org_addrs)* table for organization imports. Supported fields include *oat_id, city, country_id, postal_code, prov_id,* and *street*.

For information about database fields, refer to the Data Dictionary located under Configuration > Database.

Important Be aware of the following restrictions when preparing an import.

- Associated table mapping is applied only when the import creates new records. Such mapping is ignored when existing records are updated by the import.
- Only certain values can be mapped to a record's associated tables. For example, you cannot map a value for the *threads.entered* field. This value is set to the date and time the import occurred.

7 Enter the following field information.

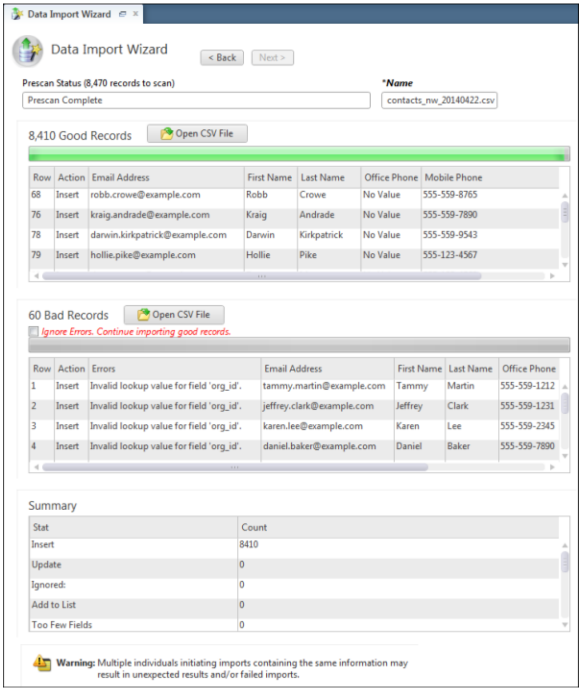
Table 102: Associated Table Mapping Description

Field	Description
Add	Click this button to create a new entry in the mapping grid.
Remove	Click this button to remove an entry from the mapping grid.
Column in File	Click the drop-down menu to select the column name specified in the data file or header file, or the column number if no header was specified.
Field	This field displays the database field that you can map a column to. The data from the column is inserted into the specified database field.
Default Value	Enter the default value to be inserted when an imported record does not contain data for the column.

8 To define custom criteria used to identify duplicate records, clear the Use Default check box and see Duplicate record handling for data imports.

9 Click the Next button. The system prescans the data file for errors (such as incorrectly formatted email addresses) and the content pane displays the results.

Note If the data file is significantly large, the prescan and import processes can take a considerable amount of time. The Data Import Wizard supports up to one million records per import. If the data file exceeds this size, you must split the data into multiple files of a million records or less.



10 Review the sample output in the good records preview to confirm that your file is mapped properly.

The Summary section of the results page displays the number of records to be inserted, updated, ignored, and added during the import process, as well as the number and types of errors returned during the prescan.

Other results include the prescan status as well counts and previews of good and bad records, as categorized by the prescan process. The good records preview consists of a random sample of up to 10,000 records that were found to be formatted correctly. The bad records preview consists of up to the first 10,000 records that resulted in an error.

For each record, the preview displays each mapped column, the data to be inserted, and the record's row number in the data file. The bad records also include an error description to assist with troubleshooting. See [Data import error handling](#).

11 To enter a name for the import as it appears on the Data Imports report, type the name in the Name field. By default, the import is given the name of the data file you are importing.

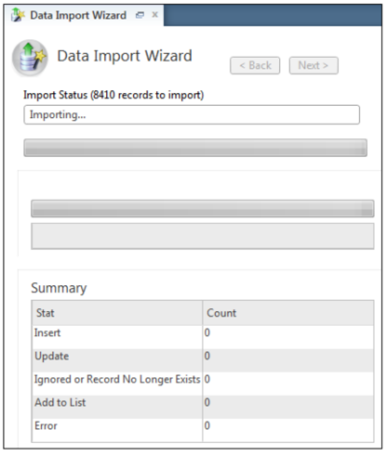
12 To see a full list of the good or bad records found during the scan process, click Open CSV File to open the list in a CSV file.

13 To view a CSV file containing the good or bad records, click Open CSV File next to the good or bad record counts.

14 To ignore errors returned by the prescan process and continue importing the records that did not return errors, select the Ignore Errors check box beneath the bad record count.

Important If errors are reported for records that you want to include in the import, you must resolve the errors before proceeding. See Data import error handling.

15 Click the Next button. The data imports to the database.



Once the import starts, the content pane displays the real-time import status, a list of any errors found during the import, and summary counts of records that were inserted, updated, ignored, added, or that experienced errors.

Note The Back and Next buttons are unavailable during the import process.

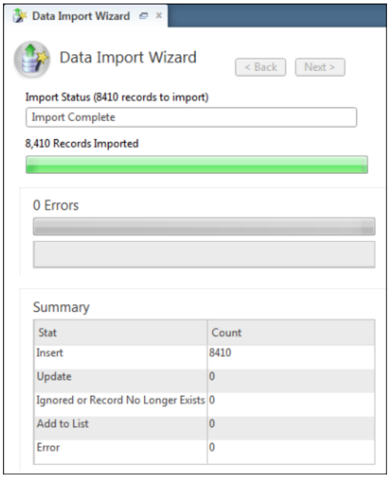
16 To pause the import process once it starts, click the Stop button on the toolbar.

a Click the Start button to resume the import.

Important Any records listed as returning errors are not imported to the database. See Data import error handling.

Also, if you close the wizard before the import is finished, the import process ends prematurely and you must begin the procedure again to complete the import.

Once the import process is complete, the Import Status field displays Import Complete.



All imported records are immediately available for use. Any additional processing that you specified on the wizard's initial screen (such as the running of a campaign, business rules, or external events) triggers automatically for the new records as soon as they are imported.

Duplicate record handling for data imports

The Duplicate Criteria section of the Data Import Wizard displays the criteria used to prevent instances of redundant records, which can be especially helpful when importing contacts. During the import process, fields listed in the criteria are compared with existing values in the primary record table in search of duplicate records. When importing contacts, duplicate values in the *email*, *email_alt1*, and *email_alt2* fields of the data file are also detected. When a duplicate is found, action is taken as specified in the Duplicate Records drop-down menu on the wizard's initial page. See Importing data.

Duplicate criteria consists of a logical expression formatted as *field_name*={*mapped column*}, where *mapped column* is the column number or header name. Multiple fields evaluate using Boolean logic.

The default expression varies based on the type of records imported and the columns mapped to the knowledge base. The following fields are automatically included as default duplicate criteria whenever they are included in the mapping grid.

- **Email Address**—When importing contacts, to simplify detection of redundant values in the primary and secondary email address fields (*email*, *email_alt1*, and *email_alt2*), the expression references them together as *any_email*. For example, *any_email*={*1*}.
- **Contact ID, Organization ID, Incident ID, Answer ID**—These fields are included as default criteria when importing their primary record type. Because these fields are unique for every record, additional criteria would not be more restrictive. For this reason, OR logic is used whenever they are added to the duplicate criteria. For example, *any_email*={*1*} OR *c_id*={*2*}.
- **First and Last Name**—If **email address sharing** is enabled, *first_name* and *last_name* is included when importing contacts. This narrows the criteria by permitting multiple contacts that share a common email address as long as they have different first or last names. For example, *any_email*={*1*} AND *first_name*={*2*} AND *last_name*={*3*}.
- **Login**—When importing contacts, this field is included in the default criteria if it is mapped. For example, *login*={*1*}.
- **Organization Name**—When importing organizations, this field is required and is always included in the default criteria. For example, *name*={*1*}.
- **Reference #**—When importing incidents, this field is included in the default criteria if it is mapped. For example, *ref_no*={*1*}.
- **Key (configuration setting name)**— When importing configuration base entries, these required fields are included in the default criteria. For example, e*ntry_key*={*Key*}.
- **ID and Key**—When importing configuration base values, these required fields are included in the default criteria. For example, *configbase_id*={*ID*} AND *configbase_entry_id*={*Key*}.
- **Key (message base name)**—When importing message base entries, this required field is included in the default criteria. For example, *entry_key*={*Key*}.

For added flexibility, you can define custom criteria by clearing the Use Default check box and entering a logical expression using any combination of mapped fields. For instance, if you want to avoid creating duplicate contacts with the same last name (mapped to column 1) and user ID (mapped to column 2), you can enter *last_name*={*1*} AND *login*={*2*}. If column headers are specified in the data file or header file, you can refer to them by header name instead, such as *last_name*={Last Name} AND *login*={User ID}.

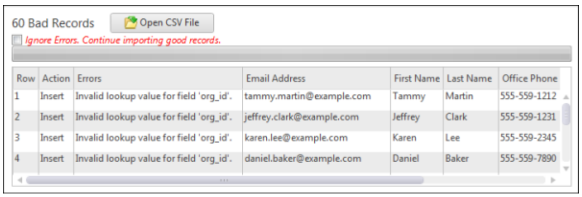
Important If you define custom criteria that does not include the email field, and email address sharing is not enabled, records matching existing contacts create new contacts with a numerical value appended to the email address. See Email address sharing.

When customizing duplicate criteria, supported Boolean operators and characters can be inserted by clicking the buttons above the criteria field or by simply typing them in.

Data import error handling

If the Data Import Wizard's prescan process returns any errors, you can select the Ignore Errors check box to ignore them and continue importing only those records that did not return errors. However, if the prescan reveals any errors involving records that you need to import, you must resolve the errors in order to proceed. You can do so by manually repairing the records in the data file and rerunning the wizard, or you can click the Back button to return to the column mapping page and either clear the mapping for columns that returned errors or map them to another field. However, if you want to import all the data as originally mapped, you need to repair the records in the data file.

To make the task of repairing the data file simpler, the prescan result page displays the erroneous data along with row numbers and error descriptions to help you locate each problem record in your original data file and correct the issue that led to the error. To view the complete list of errors in a text editor or spreadsheet program, click the Open CSV File button next to the record count.



The CSV file can also be accessed locally from the staging directory defined on the wizard's initial screen. (For most Windows operating systems, the default location is C:\Documents and Settings\<username>\My Documents\My Imports\. For Windows 7, the default location is C:\users\<username>\My Documents\My Imports\.)

The staging directory contains a subdirectory for each import with the naming convention <current date>-<import attempt number> (for example, “2010-05-15-1”). Each import’s subdirectory contains the following files.

- *<data_file_name>.bad.csv* contains all records that returned an error during the prescan process.
- *<data_file_name>.good.csv* contains all records that did not return an error.
- *<data_file_name>.badaux.csv* and *<data_file_name>.goodaux.csv* contain diagnostic information that can be provided to support for troubleshooting errors.

Once the data file is repaired, you can start the import procedure again and the errors that were addressed in the previous prescreen process should no longer occur.

In rare instances, an error may occur during import that was not detected during the prescan process. If you selected the Stop Import on Error check box on the wizard’s initial screen, the import status changes to Import Error and the process stops to prevent further records from being imported. If the Stop Import on Error check box is cleared (the default setting), the import continues despite any error and only records without errors are imported.

Data import templates

You can create data import templates for use in the Data Import Wizard. Templates allow you to skip some import wizard steps—such as mapping columns to database files and customizing duplicate criteria—when performing imports of multiple data files that have the same column ordering. This can be useful if you frequently import records from an external source where the data format does not change but the data is more current.

After a template is created, you can select it when mapping data field columns through the Data Import Wizard. See Importing data.

Important Data import features are designed to import specific data sets into the knowledge base, not to support full data migrations. For this reason, you should be aware of certain restrictions when preparing an import. See Importing data.

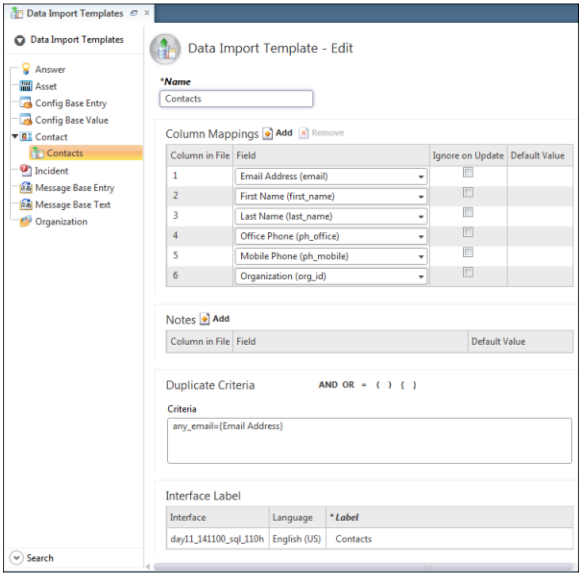
To add or edit a data import template

1. Click the Configuration button on the navigation pane.
2. Double-click Data Import Templates under Database. The Data Import Templates tree displays on the content pane.

3 To add a template, select a record type in the tree and click the New button on the ribbon to display the editor.

Or

To edit an existing template, click it in the tree.



The Data Import Templates editor consists of a set of fields for mapping columns to database fields in primary and associated tables, defining criteria for detecting duplicate records, and viewing interface visibility information for the template.

4 Enter the following field information.

Table 103: Data Import Templates Editor Description

Field	Description
***Name**	Type the name of the template.
Column Mappings	This section defines how columns in the data file are mapped to fields in the database.
Add	Click this button to create a new row in the column mapping grid.
Remove	Click this button to remove a selected row from the column mapping grid.

Table 103: Data Import Templates Editor Description (Continued)

Field	Description
Column in File	The column number that the data file will be mapped to. The maximum allowed value is 9999.
Field	For each data column that you want to import, click the drop-down menu and select the database field that you want to map the column to. The data from the column is inserted into the specified database field. If the data file contains columns that you do not want to insert into your database, leave this field blank. For information about database fields, see the Data Dictionary located under Configuration > Database > Data Dictionary. **Tip:** If you map a column to *ma_org_name*, the Data Import Wizard populates the field with the text value from the data file. If you want to associate a contact with an organization, you can either map the *org_id* to Organization ID or map the name of the organization to Organization ID. The Data Import Wizard looks up the organization and associates the name to the correct organization. If the lookup fails, an error occurs.
Ignore on Update	Select this check box if you want this column to insert to the database for new records, but do not want the column updated for existing records. **Note:** This option has no effect if you selected Keep Original Data from the Duplicate Records drop-down menu.
Default Value	Enter the default value to insert when an imported record does not contain data for the column.

5 To map a column to a table associated with the import record type, click Add in the section corresponding to the associated table.

- **Notes**—Maps columns to the Notes *(notes*) table for answer, contact, and organization imports. Supported fields include *chan_id* and *text.*
- **Threads**—Maps columns to the Threads *(threads)* table for incident imports. Supported fields include *chan_id, seq, note,* and *entry_type.*

- **Addresses**—Maps columns to the Organization Addresses *(org_addrs)* table for organization imports. Supported fields include *oat_id, city, country_id, postal_code, prov_id,* and *street.*

Note For information about database fields, refer to the Data Dictionary located under Configuration > Database.

6 Enter the following field information.

Table 104: Associated Table Mapping Description

Field	Description
Add	Click this button to create a new entry in the mapping grid.
Remove	Click this button to remove an entry from the mapping grid.
Column in File	Type the column number that the data file or header file will map to. The maximum allowed value is 9999.
Field	This field displays the database field that you can map a column to. The data from the column inserts to the specified database field.
Default Value	Enter the default value to insert when an imported record does not contain data for the column.

7 To define custom criteria used to identify duplicate records, click the Criteria field and refer to Duplicate record handling for data imports.

8 To enter a different name for the template based on interface, select the Label value next to the interface name in the Visibility section and type the name. (This is helpful if your site has multiple interfaces of different languages.) By default, each Label value is populated with the name of the template you defined in step 4.

9 Click the Save and Close button to save your template.

Data import history

Occasionally, you may want to review information about previous imports to understand how imported records were created in your site. Historical details about past imports are available in two locations, based on when the import was performed.

Imports are tracked in the Data Imports report, located in the public reports under Common > Site Administration > Data Imports. The Data Imports report contains information such as the type of records imported, start and completion dates and times, import file names, import status, and information about file locations and column mapping. The statistics used for this report are stored in the Data Imports *(data_imports)* table and can also be accessed by creating a custom report (see Creating Basic Reports). For a description of the information logged in the Data Imports table, refer to the Data Dictionary located under Configuration > Database > Data Dictionary.

16

SAML 2.0 Open Login

Oracle Service Cloud supports SAML 2.0 single sign-on (SSO) integrations, allowing your agents and customers to log in using credentials supplied by external identity providers (IdPs). Additionally, you can use Oracle Service Cloud as an IdP to provide login credentials to third-party applications. Your agents can then seamlessly log in to these applications from the **agent desktop**.

The procedures to implement your single sign-on configuration differ depending on what you want to accomplish.

- If you want your agents or customers to log in to an external IdP, from which they can then access the **Service Console** or **Oracle RightNow Customer Portal Cloud Service** (Customer Portal), refer to Logging in using external identity providers. Single logout is not supported when using this configuration.
- If you want your agents to log in on the Oracle Service Cloud login page using credentials authenticated by an external IdP, refer to Signing in using an external identity provider on the Oracle Service Cloud Login window. After logging in, Oracle Service Cloud can then act as the IdP for any internal or external service providers (SPs) configured in Oracle Service Cloud. (Refer to Logging in to external applications using Oracle Service Cloud as the identity provider.) Single logout is supported when using this configuration.
- If you want your agents to be able to access external applications from the agent desktop without being asked for login credentials, refer to Logging in to external applications using Oracle Service Cloud as the identity provider.

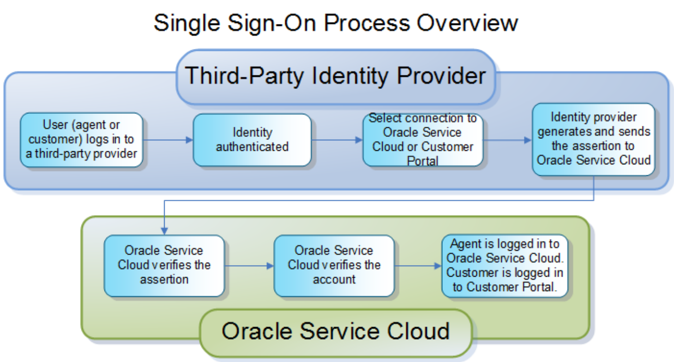
Logging in using external identity providers

Oracle Service Cloud includes single sign-on (SSO) support for agents working on the Service Console and customers using the Customer Portal. With single sign-on, agents and customers log in to a third-party identity provider outside of Oracle Service Cloud, which authenticates their identity. Then they select a connection to the Service Console (for agents) or your customer portal (for customers). Alternatively, the IdP's login page can be embedded in the Oracle Service Cloud Login window, providing a seamless method for agents to access the application and any service provider applications configured in Oracle Service Cloud. Refer to [Signing in using an external identity provider on the Oracle Service Cloud Login window](#).

When using an external page to authenticate users, the identity provider first verifies their login. It then encapsulates the result of that verification in an assertion that is signed using an X509 certificate and sends the assertion to Oracle Service Cloud. The application verifies the signature and (if successful) accepts the account information for logging in to the Oracle Service Cloud system. The assertion sent by the identity provider uses SAML 2.0 (Security Assertion Markup Language) architecture.

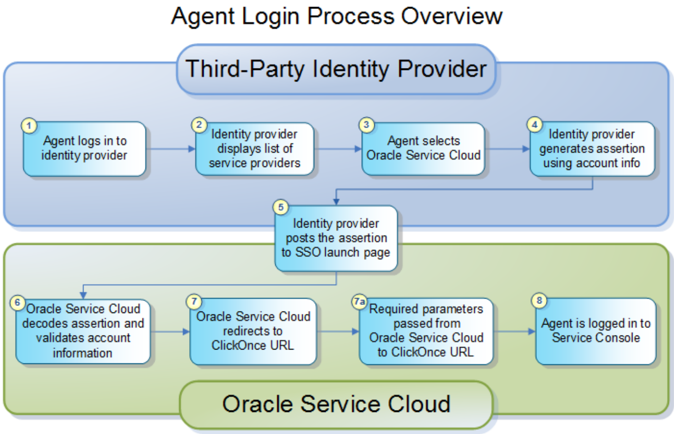
This implementation of SAML 2.0 open login lets Oracle Service Cloud accept identity provider assertions.

Important To enable single sign-on for agents, customers, or both, contact your Oracle account manager.



Agent login

The following process occurs when single sign-on is enabled for agents who work on the agent desktop, and they log in using an external IdP's login page.



1 An agent enters a user name and password to log in to the organization's identity provider (such as a PingFederate Server-based application). When the information is verified, the agent is logged in to the identity provider.

2 The identity provider displays a list of service providers, including Oracle Service Cloud, that the agent can connect to.

3 The agent selects Oracle Service Cloud.

4 The identity provider generates a signed SAML 2.0 assertion using the account login, email address, account ID, or a staff account custom field as the assertion subject. Refer to Identifying the SAML subject for agent login.

Important The assertion must be signed using W3C XML signature recommendations. If the certificate used to sign the assertion is self-signed, it must be uploaded to the Additional Root Certificates (*certs/root/*) directory in the **File Manager**. Refer to Certificate validation options. The certificate must also be listed in the SAML_20_SIGN_CERTS configuration setting or it will not be accepted for SAML signing. Refer to SSO SAML 2.0 Common Configuration Settings.

Additionally, the assertion cannot be encrypted.

5 The identity provider then submits the assertion to the Oracle Service Cloud SSO launch page using HTTP POST binding (since that is the only binding method supported). The SSO launch page is similar to the standard launch page except that it automatically starts the ClickOnce URL, which logs the agent in after validation.

6 Oracle Service Cloud decodes and verifies the assertion and validates the account by confirming that the assertion matches an account in the Oracle database.

Important Staff members logging in through an identity provider must have the SSO Login (SAML 2.0) permission enabled in their profile. Refer to Enabling single sign-on profile permission.

Because accounts cannot be created through the single sign-on process, only existing accounts can be logged in. (The public API can be used to create or update accounts if necessary.)

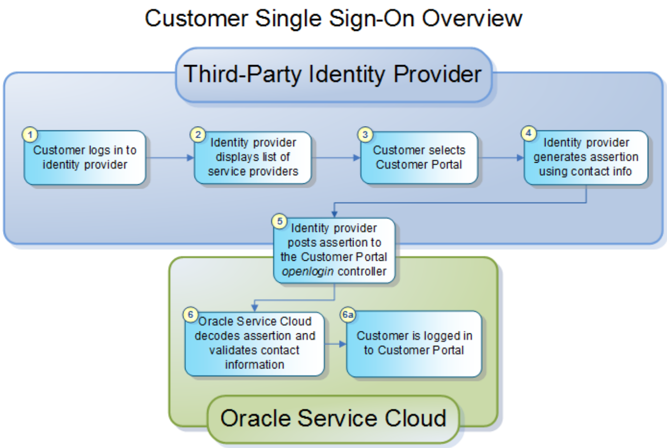
7 Oracle Service Cloud redirects the agent to the ClickOnce URL, which signals the installer to use the SSO login instead of the standard login, and passes the necessary parameters for automatic login.

8 Oracle Service Cloud verifies the account using the parameters of the ClickOnce URL for authentication. If necessary, the Oracle Service Cloud client is downloaded and installed. The application is then launched, and the agent is logged in.

Note Refer to Server and Client Configuration Issues in ClickOnce Deployments for information about browser scripting and compatibility with ClickOnce applications.

Customer login

The following process occurs when single sign-on is enabled for customers logging in to your customer portal.



1 A customer enters a user name and password to log in to an identity provider. When the identity provider verifies the information, the customer is logged in.

2 The identity provider displays a list of service providers, including your customer portal, that the customer can connect to.

3 The customer selects the customer portal.

4 The identity provider generates a signed SAML 2.0 assertion using the customer's email address, contact record ID, login name, or a contact custom field as the assertion subject. Refer to Identifying the SAML subject for contact login.

Note The assertion must be signed using W3C XML signature recommendations. If the certificate used to sign the assertion is self-signed, it must be uploaded to the Additional Root Certificates (*certs/root/*) directory in the **File Manager**. Refer to Certificate validation options. The certificate must also be listed in the SAML_20_SIGN_CERTS configuration setting or it will not be accepted for SAML signing. Refer to SSO SAML 2.0 Common Configuration Settings.

Additionally, the assertion cannot be encrypted.

5 The identity provider then submits the assertion, using HTTP POST binding (since that is the only binding method supported), to the *openlogin* controller at http://<your_site>.custhelp.com/ci/openlogin/saml/. This controller calls the SSO validation and logs in the customer.

6 Oracle Service Cloud decodes the assertion, validates the customer by confirming that the assertion matches a contact record in the database, and logs the customer in on your Support Home page. (A redirect parameter can specify that a different page opens instead. Refer to Redirecting contacts after login.)

Note Contact records cannot be created through the SSO process, so only existing customers can be logged in. (The public API can be used to create or update contacts if necessary.)

Setting up single sign-on using an external identity provider

Complete the following steps to configure single sign-on for your site.

- Contact your Oracle account manager to enable single sign-on for agents, customers, or both.
- Enable single sign-on profile permission.
- Define configuration settings.
- Set up one or more identity providers.
  - ▷ Identify the SAML subject used in the assertion for agent login.
  - ▷ Identify the SAML subject used in the assertion for customer login.

Enabling single sign-on profile permission

When single sign-on has been enabled for agents on your site, an SSO Login (SAML 2.0) permission check box appears on the Administration tab of the Profiles editor. When you add this permission to a profile, staff members with that profile can log in only through an identity provider, that is, using the single sign-on process.

For security purposes, we recommend that if the SSO Login (SAML 2.0) permission is enabled, the SEC_END_USER_HTTPS is also enabled. If both are enabled, then the SAML assertion must be sent to a secure protocol (https://). To enable SEC_END_USER_HTTPS, contact your Oracle account manager.

For an in-depth discussion about security practices in Oracle Service Cloud, see Security Practices.

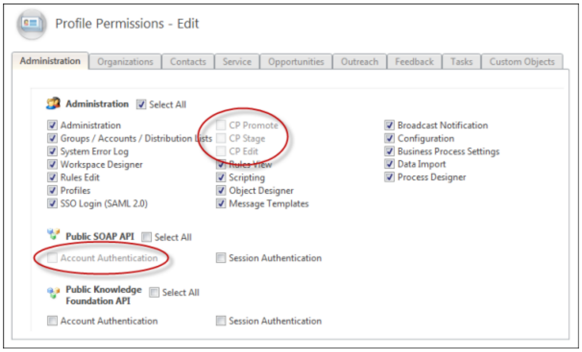
Several restrictions apply to staff members whose profile includes the SSO Login (SAML 2.0) permission. The most important one is the inability of these staff members to log in using their Oracle Service Cloud credentials. If they try to do so instead of logging in using their

IdP login credentials, they will see an access denied message. Several possible reasons for the denial are displayed in the message, including that the account belongs to a profile that allows logins only through single sign-on.

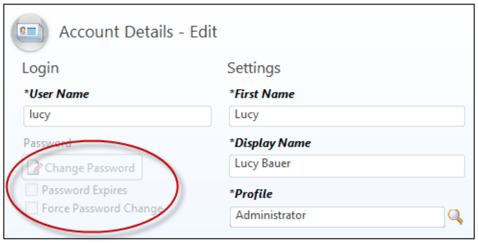
Even if you want all staff members to log in through single sign-on, we recommend that you create an administrative profile that does not have the SSO Login (SAML 2.0) permission enabled and assign at least one staff account to that profile. In the event a problem occurs with your identity provider, that account can log in to Oracle Service Cloud and change other staff member profiles (and assign them passwords, if necessary) so agents can continue to work until the problem is resolved.

When the SSO Login (SAML 2.0) permission is selected, the CP permissions (CP Promote, CP Stage, and CP Edit) are disabled if they have been enabled, and the CP permission check boxes can no longer be selected. Staff members with this profile do not have permission to edit development pages in WebDAV because WebDAV authentication requires a user name and password. Nor can these staff members deploy the customer portal. For more information about Customer Portal permission options, refer to Assigning permissions.

When the SSO Login (SAML 2.0) permission is selected, account authentication through the Public SOAP API permission is also disabled if it has been enabled, and the check boxes can no longer be selected because public SOAP API account authentication operations always require a user name and password.



Passwords cannot be changed on staff accounts assigned to profiles with SSO Login (SAML 2.0) permission enabled. The password options on the Staff Accounts editor will be disabled.



To select single sign-on permission

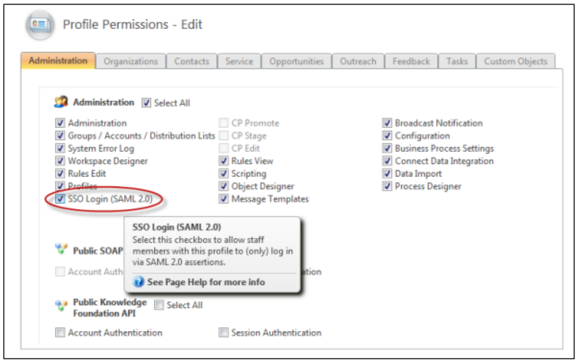
1 Click the Configuration button on the navigation pane.

2 Double-click Profiles under Staff Management and then double-click the profile you want to assign single sign-on permission to. The Profiles editor opens.

3 Click the Permissions button on the ribbon. The Permissions page opens with the Administration tab selected.

4 Select the SSO Login (SAML 2.0) check box. A warning message notifies you that all staff members having this profile will be prevented from logging in directly to Oracle Service Cloud and must instead log in through single sign-on with an identity provider. The warning message also notifies you about restrictions for the Customer Portal administration and Public SOAP API account authentication permissions.

Note Single sign-on must be enabled for this check box to display. To enable single sign-on for agents, customers, or both, contact your Oracle account manager.



5 Click the OK button.

6 Click the Save and Close button.

If you need additional help with profile permissions, refer to [To select options on the Administration tab](#).

Defining configuration settings

The configuration settings described in this procedure support the implementation of SAML 2.0 open login.

To edit single sign-on configuration settings

1 Click the Configuration button on the navigation pane.

2 Double-click Configuration Settings under Site Configuration. The Search window opens.

3 Clear the Select All check box under Folders section and then select the Common check box.

4 Click the Search button. The Configuration Settings editor opens.

5 Expand the folders under General > Single Sign-On to open the SAML_20_SIGN_CERTS and USE_KNOWN_ROOT_CAS settings on the content pane. Edit the settings under the Value column according to the descriptions in the following table. See Editing configuration settings.

Table 105: SSO SAML 2.0 Common Configuration Settings

Configuration Setting	Description
Common > General > Single Sign-On	
SAML_20_SIGN_CERTS	Identifies the only certificate(s) (a comma-separated list of SHA-1 hex thumbprints) that are accepted for SAML 2.0 signatures. The special value of "ANY-TRUSTED" may be used to accept any certificate that is trusted by the root CAs for the site. Default is blank. **Note:** If the ANY-TRUSTED setting is used, we recommend that the USE_KNOWN_ROOT_CAS setting be disabled for security reasons. **Note:** Only certificates listed in the SAML_20_SIGN_CERTS configuration setting are accepted for SAML 2.0 assertion signing. This means that if no certificates are listed in the setting—which is its default—then no certificate will be accepted for SAML signing. Listed certificates must still pass other validation criteria (that is, they must be trusted) before they can be accepted for SAML 2.0 assertion signing. If the certificate used to sign the assertion is self-signed, it must be uploaded to the Additional Root Certificates (*certs/root/*) directory in the File Manager. Refer to Certificate validation options.
USE_KNOWN_ROOT_CAS	Controls whether the known root certificate authorities list that is embedded within the Oracle server is consulted when verifying X509 certificates. For example, when checking S/MIME email or SAML 2.0 signatures. Default is enabled (Yes).

6 Click the Save button on the ribbon.

7 From the search criteria fields on the top of the editor, click the Folders drop-down menu, clear the Common check box, and then select the RightNow Common check box.

8 Click the Search button. The RightNow Common folder displays on the content pane. Expand the folders under Single Sign-On > General to open the SAML_ERROR_URL setting on the content pane.

You can use this setting to specify the URL where users will be sent if their SAML SSO log-in attempt fails. The setting supports the %error_code% and %session% placeholder variables, which are replaced with the error code the user encountered and the session of the user if the user has cookies disabled. The default value for the setting is blank. The following errors can be returned when using the %error_code% variable.

Table 106: SAML Single Sign-On Error Codes

Error name	Error ID	Description
SAML_TOKEN_REQUIRED	14	No SAMLResponse POST value was sent to the CP controller. A SAML response is required in order to start the authentication process.
SAML_TOKEN_FORMAT_-INVALID	15	The SAML response was found, but it could not be successfully Base 64 decoded.
FEDERATED_LOGIN_-FAILED	16	The call to the federated_login API call failed. This usually means that the SAML assertion succeeded, but the user does not yet exist in the database.
SSO_CONTACT_TO-KEN_VALIDATE_FAILED	17	The call to the sso_contact_token_validate API failed. This can happen in a number of ways, but the most common is that the SAML assertion contains something other than the contact login as the subject. If that login does not exist in the database, the token validation will fail.
CONTACT_DISABLED_ER-ROR	6	The SAML assertion/login succeeded, but the contact is disabled in the database.
COOKIES_REQUIRED_ER-ROR	3	The user does not have cookies enabled. Cookies are required in order to log in to CP.

9 Click the Save button on the ribbon.

Setting up identity providers

In order for Oracle Service Cloud to accept SAML 2.0 open login assertions from third-party identity providers, each identity provider needs to be configured to send the assertion URL to the Oracle Service Cloud application, either to the SSO launch page for agent login or to the *openlogin* controller for customer login (or to both).

- Identify the SAML subject used in the assertion for agent login.
- Identify the SAML subject used in the assertion for customer login.

Oracle Service Cloud can accept authentications from multiple identity providers. Configuration details vary from provider to provider, so each one must be configured separately to make the application available through the identity provider. Because the procedures vary, we cannot provide specific details. However, the following list includes some requirements and constraints you must consider as you configure an identity provider.

- Oracle Service Cloud does not support the import of SAML 2.0 metadata.
- Oracle Service Cloud does not support decryption of the SAML 2.0 assertion, so the identity provider should not be set up to encrypt the assertion. Instead, use an SSL connection for confidentiality.
- Oracle Service Cloud supports only the HTTP POST binding type, so the identity provider should be configured to send SAML responses and assertions using that method.
- The certificate used to sign the assertion must be included as part of the assertion in the XML signature.
- The identity provider server is expected to be time-synchronized with the Oracle server, so a validity range of plus or minus five minutes of the SAML assertion should be adequate.

Note If Windows ADFS (Active Directory Federation Services) is used as the identity provider, the fixed validity ranges (five minutes for *Subject.SubjectConfirmationData.NotOnOrAfter* and one hour for *Subject.Conditions.NotOnOrAfter*) can cause validation errors if the application's clock is behind the time of the identity provider, even if that difference is as small as one second. To mitigate the potential problem, a NotBeforeSkew parameter can be issued in the following PowerShell prompts.

```
PS C:\Users\Administrator> add-pssnapin
microsoft.adfs.powershell
PS C:\Users\Administrator> set-adfsrelyingpartytrust -
targetname "<relying party name>" -NotBeforeSkew 2
```

In this example, 2 refers to two minutes, but you can substitute the value you want.

Identifying the SAML subject for agent login

The parameter used to identify the SAML subject contents should be passed to the SSO launch page as a GET parameter. The subject value must be unique in order for the single sign-on to be successful. For example, if multiple staff members can have the same value for an account custom field, you should not use that custom field as the subject.

The value defines how the SAML subject is mapped to an existing staff account in the Oracle database. Only one field can be passed in the assertion subject, whose parameter name is `p_subject`. Its values include the following.

- **Account.Login**—The assertion subject is the account login, which is the preferred mapping since it requires no additional lookup from the database. That is, the value can be passed to sso_account_login( ) API. This is the default mapping value if `p_subject` is not set. The Account.Login value is case sensitive.
- **Account.Emails.Address**—The assertion subject is the account email address. The Account.Emails.Address value is case insensitive.
- **Account.ID**—The assertion subject is the account ID in the Oracle database.
- **Account.CustomFields.[customfield-name]**—The "customfield-name" variable is the actual name of the custom field in the database (and the name of the database column), and the assertion subject is the account custom field value. The custom field name is the last name in the dot-separated value. It is automatically defined with lowercase notation and the `c$` prefix.

Note The custom field value is case insensitive. The following staff account custom field data types are not supported for use in an assertion.

- Menu
- Yes/No
- Date/Time
- Date Field

The following is an example of an assertion URL that passes the value of a custom field called `accounts.c$external_id` field for the staff account being verified.

```
https://[site]/cgi-bin/[interface].cfg/php/admin/sso_launch.php?
p_subject=Account.CustomFields.ExternalPhone
```

Identifying the SAML subject for contact login

The parameter used to identify the SAML subject contents should be passed to the *openlogin* controller as a GET parameter. The format of the URL is:

<site>/ci/openlogin/saml/subject/{SAML_subject}

For example:

<site>/ci/openlogin/saml/subject/contact.emails.address

The subject value must be unique in order for the single sign-on to be successful. For example, if **email address sharing** is enabled, the potential for more than one contact having the same email address exists (even if the primary email address for one is the alternate email address of another), so you should not use the email address as the subject. A similar situation might occur with custom fields if multiple customers can have the same value for a contact custom field.

The parameter, named `subject`, is optional and defaults to `contact.login`. Its values include the following:

- **contact.emails.address**—The assertion subject is the contact email address, and the value can be the contact's primary email address or one of the alternate email addresses. The contact.emails.address value is case insensitive.
- **contact.id**—The assertion subject is the contact ID in the Oracle database.
- **contact.login**—The assertion subject is the contact login, which is the preferred mapping since it requires no lookup from the database. This is the default mapping value if `subject` is not set. The contact.login value is case sensitive.
- **contact.customfields.[customfield-name]**—The "customfield-name" variable is the actual name of the custom field in the database (as well as the name of the database column), and the assertion subject is the contact custom field value. The assertion subject is then passed to the API as `CustomField` and the name in the subject GET parameter is sent to the API as the `CustomFieldName` value. The `c$` prefix will be added if necessary.

Note The custom field value is case insensitive. The following contact custom field data types are not supported for use in an assertion.

- Menu
- Yes/No
- Date/Time
- Date Field
- Opt-in

Redirecting contacts after login

After the assertion has been verified and contacts are identified and logged in, they will be directed to your Support Home page by default. If you prefer to direct them to another page, you can add a redirect parameter to the URL that passes the subject parameter. The redirect parameter can point to any page (/app/*) or controller endpoint (/ci/* or /cc/*). It must follow the subject parameter, as shown in the following example URL.

<site>/ci/openlogin/saml/subject/contact.id/redirect/app/ask

Signing in using an external identity provider on the Oracle Service Cloud Login window

Your staff members can log in on the Oracle Service Cloud Login window using authentication from an external IdP. This lets agents log in once to be authenticated across several SP applications. Single logout is also supported, so when agents log out of any SP application, they are also automatically logged out of the IdP and any other SPs they were logged in to. Refer to Logging in to external applications using Oracle Service Cloud as the identity provider for information about configuring SPs.

Note Deployments involving Oracle Service Cloud and Oracle Sales Cloud use Oracle Identity Management since it is bundled with the Sales Cloud application.

When the staff member logs in to the IdP, an encrypted SAML token is generated and passed to Oracle Service Cloud. This method increases security since user IDs and passwords are not sent between the applications.

After being authenticated, Oracle Service Cloud provides authentication services to other SPs, alleviating the need to integrate them and the external IdP.

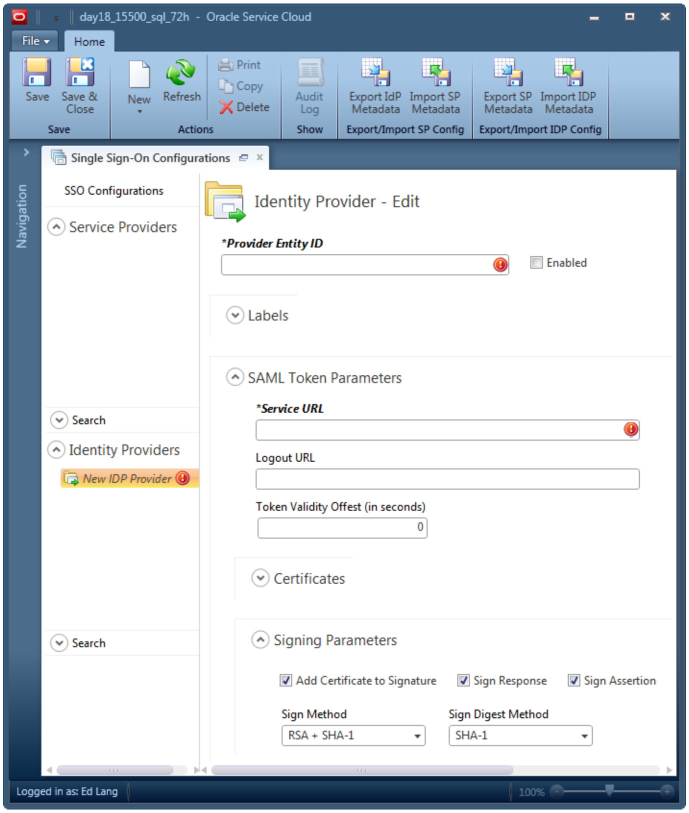
To configure an external IdP for agent authentication on the Login window

1 Enable the use of external IdPs. Contact your Oracle account manager.

2 Click the Configuration button on the **navigation pane**.

3 Double-click Single Sign-on Configurations in your configuration list. The Single Sign-On Configuration tree opens.

   a Click the New button on the ribbon and select SSO Identity Provider.



b Enter the following field information.

Table 107: Identity Provider Editor Description

Field	Description
Provider Entity ID*	Type a unique name for the IdP in this field.
Enabled	Select this check box to enable the IdP. **Note:** You can configure multiple IdPs in Oracle Service Cloud, but only one can be enabled at a time. If another IdP is already enabled, you must disable it before enabling another.
Labels*	Click the arrow next to Labels to expand the section. Type the name you want to provide for the IdP. You can specify different names to use for different interfaces and languages.

Table 107: Identity Provider Editor Description (Continued)

Field	Description
SAML Token Parameters	Enter information to configure the SAML token parameters in this section.
Service URL*	Specify the URL of the external IdP in this field. This is the URL that users are redirected to for authentication.
Logout URL	Specify the URL of the external IdP where logout requests are sent. This field is optional.
Token Validity Offset	Specify the number of seconds that the timestamp on SAML tokens is adjusted by to account for discrepancies between the Oracle Service Cloud and external IdP clocks. This field is optional.
Certificates	Click the arrow next to Certificates to expand the section. Click the folder next to Import Certificate and select the location of the certificate you want to use to validate requests and SAML tokens received from the IdP. You can also specify an alternate certificate to use when validation fails using the primary certificate.
Signing Parameters	Enter information to configure the signing method in this section.
Add Certificate to Signature	Clear this check box to prevent the signing certificate from being added to the SAML response/assertion signature.
Sign Response	Clear this check box to prevent the response part of the SAML token from being signed.
Sign Assertion	Clear this check box to prevent the assertion part of the SAML token from being signed.
Sign Method	Click this drop-down menu to select the XML signature method used to sign the SAML token. You can select from the following. • RSA + SHA-1 • RSA + SHA-256 • RSA + SHA-512
Sign Digest Method	Click this drop-down menu to select the digest method used to sign the SAML token signature. You can select from the following. • SHA-1 • SHA-256 • SHA-512

c Click Save on the ribbon to save the changes.

d Click Export SP Metadata on the ribbon to export the Oracle Service Cloud metadata to an XML file. Import the XML file that is created into the external IdP's web server. This establishes a trust relationship between the IdP and Oracle Service Cloud.

e Click Import IdP Metadata on the ribbon to import the metadata from the external IdP into Oracle Service Cloud.

f Click Save and Close on the ribbon to save your changes and close the editor.

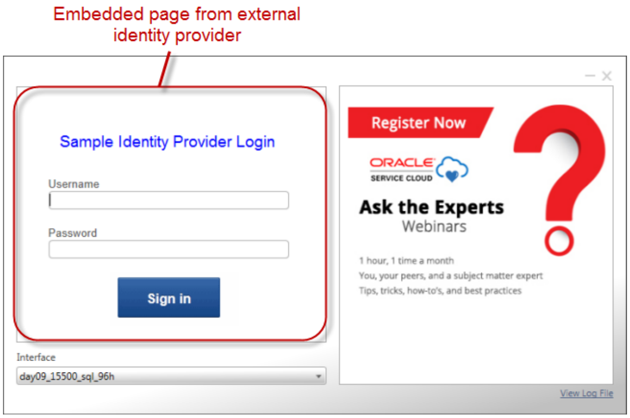
4 Create or edit a profile, click Permissions on the ribbon, and select the SSO Login (SAML 2.0) check box in the Administration section. Refer to Customizing profiles.

5 Create or edit a staff account in Oracle Service Cloud and associate the profile with it. Refer to Adding and editing staff accounts.

Important The staff account must also be a registered user in the external IdP and the user ID must match the Oracle Service Cloud user name.

Logging in

After configuring the IdP, staff members open the Oracle Service Cloud Login window as they normally would. However, the IdP's login page is now embedded in the window.

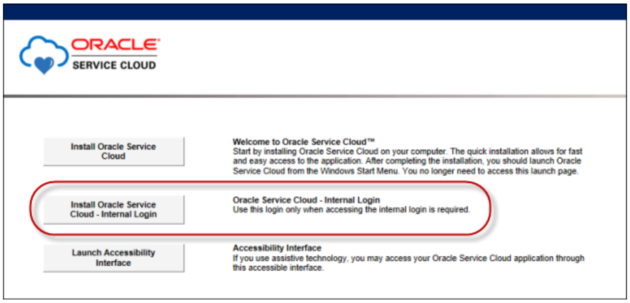


When staff members with the SSO Login (SAML 2.0) profile permission enter their login information, the IdP verifies their credentials, generates a SAML token, and sends it to Oracle Service Cloud. The SAML token is authenticated with the certificate used to sign the token. The user is then logged in to Oracle Service Cloud.

Bypassing the external identity provider

If staff members do not have the SSO Login (SAML 2.0) profile permission, the IdP can be bypassed, letting staff members log in using their Oracle Cloud Service credentials. This option is intended for troubleshooting issues with single sign-on, and is not meant to be used as a conventional sign-on process.

After configuring and enabling an IdP in Oracle Service Cloud, your site's launch page includes an internal login option.



Selecting this option loads the login window without the embedded IdP page. Following is an example of a URL for a launch page.

```
https://<your site>/cgi-bin/<interface name>.cfg/php/admin/launch.php
```

Logging in to external applications using Oracle Service Cloud as the identity provider

You can configure Oracle Service Cloud to act as an identity provider to store and authenticate credentials for other applications. This allows your agents to seamlessly access applications that reside outside the Oracle cloud from the **agent desktop**.

Important To enable the option to use Oracle Service Cloud as an identity provider, you must enable the SSO_IDP_ENABLE_EXT_APPS configuration setting and then add the Single Sign-On Configurations component to your navigation set. Refer to Site Configuration and Creating a navigation set for the administrator.

Using the single sign-on configurations editor, you can create and administer SSO service providers and SSO service applications. Service providers are containers where you group multiple service applications, so you must create a service provider before you can create a service application. Each service application in a service provider will have the same SAML response and assertion methods.

Note Service providers and applications hosted by Oracle display on the Single Sign-On Configurations editor, though you cannot modify most of their properties. You can, however, edit their labels and enable and disable them on your site. For information about hosted SSO integrations, contact your Oracle account manager.

After configuring an SSO service provider and application, you can add the application to a **workspace** where agents can then access the external application without being asked for sign-in credentials. Refer to Adding applications to the agent desktop.

When an external application is configured to use Oracle Service Cloud as the identity provider, agents will be redirected to a PHP login page if they attempt to access the external application's login page directly from a URL. Refer to Redirecting users to the Oracle Service Cloud login page.

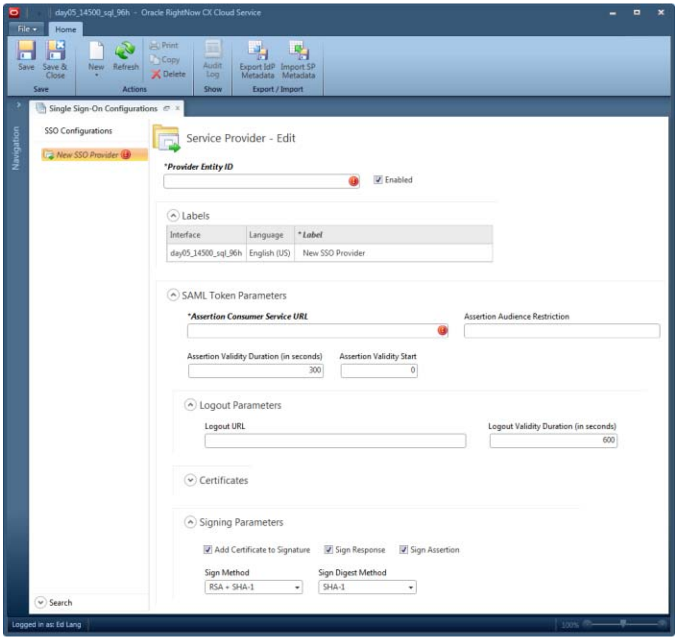
The following procedures describe how to create an SSO service provider, SSO service application, and how to view the audit log to see all related activity.

To create an SSO service provider

1 Click the Configuration button on the navigation pane.

2 Double-click Single Sign-on Configurations in your configuration list. The Single Sign-On Configuration tree opens.

3 Click the New button on the ribbon and select SSO Service Provider.



4 Enter the following field information.

Table 108: Service Provider Editor Description

Field	Description
Provider Entity ID*	Type a unique name for the service provider in this field.
Enabled	Clear this check box to prevent the service provider from being enabled for single sign-on integrations. Once you are ready to use the service provider and its associated service applications, select the check box to enable it.
Labels	Type the name you want to use for the service provider. You can specify different names to use for different interfaces and languages.
SAML Token Parameters	Enter information to configure the SAML assertion in this section.

Table 108: Service Provider Editor Description (Continued)

Field	Description
Assertion Consumer Service URL*	Type the URL where the SAML token will be posted. SAML responses and assertions will be sent to this location using HTTP POST binding.
Assertion Audience Restriction	Type the domain for which the SAML assertion is intended or for which it is valid.
Assertion Validity Duration	Type the time, in seconds, for which the SAML assertion is valid. Values can be from 0 to 86,400 (24 hours). The default value is 300 (5 minutes).
Assertion Validity Start	Type the relative offset, in seconds, to the current time when a generated SAML assertion's validity should start. Values can be from -1800 to +1800. The default value is 0.
Logout Parameters/ Certificates	The fields in these sections are used to configure certificates for single logout for external service applications when using Oracle Service Cloud as the identity provider. Refer to Single logout for SSO applications.
Signing Parameters	Enter information to configure the signing method in this section.
Add Certificate to Signature	Clear this check box to prevent the signing certificate from being added to the SAML response/assertion signature.
Sign Response	Clear this check box to prevent the response part of the SAML token from being signed.
Sign Assertion	Clear this check box to prevent the assertion part of the SAML token from being signed.
Sign Method	Click this drop-down menu to select the XML signature method used to sign the SAML token. You can select from the following. • RSA + SHA-1 • RSA + SHA-256 • RSA + SHA-512
Sign Digest Method	Click this drop-down menu to select the digest method used to sign the SAML token signature. You can select from the following. • SHA-1 • SHA-256 • SHA-512

5 Click the Save button on the ribbon to save the changes to the service provider.

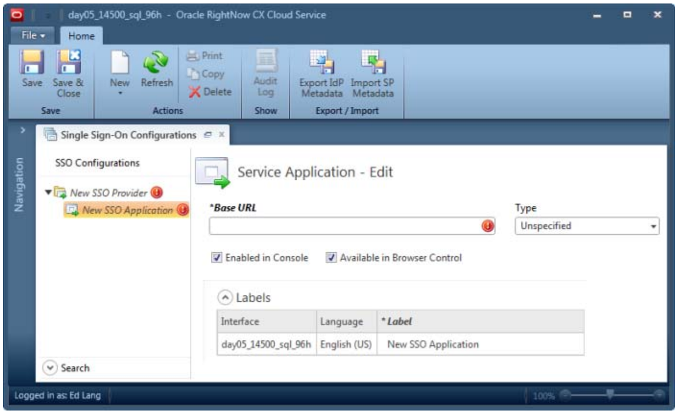
To create a service application

1 Click the Configuration button on the navigation pane.

2 Double-click Single Sign-on Configurations in your configuration list. The Single Sign-On Configuration tree opens.

3 Select the SSO service provider you want the service application associated with.

4 Click the New button on the ribbon and select SSO Service Application.



5 Type the URL that a browser using the application should navigate to in the Base URL field.

6 Click the Type drop-down menu and select the type of application. You can select ATG Web Commerce Service Center, ATG Engagement Engine, Oracle Knowledge, or Unspecified.

7 To prevent the service application from being available on the Service Console, clear the Enabled in Console check box.

8 Type the name you want to use for the service application in the Label field. You can specify different names to use for different interfaces and languages.

9 Click the Save and Close button on the ribbon to save your service application.

To view the audit log

1 Click the Configuration button on the navigation pane.

2 Double-click Single Sign-on Configurations in your configuration list. The Single Sign-On Configuration tree opens.

3 Click the name of the service provider you want to examine.

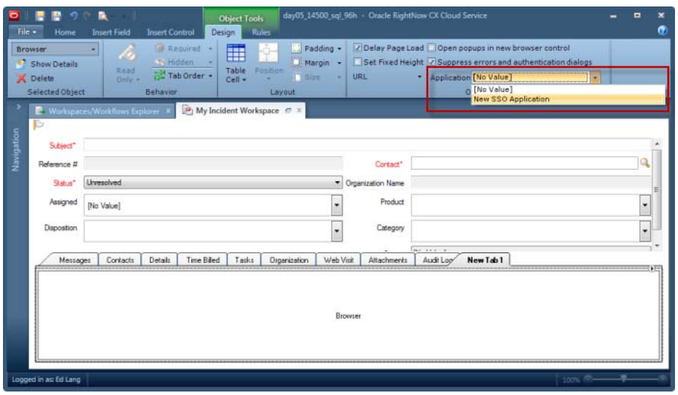
4 Click the Audit Log button on the ribbon to open the Audit Log window. The audit log displays the type of action performed, the staff member who made the change, when the action occurred, and where on the **administration interface** the action was performed.

5 Click X on the top right to close the window.

Adding applications to the agent desktop

After you configure SSO service providers and service applications, you need to add the service applications you want your agents to access to the **agent desktop**. To do so, you create or edit the **workspace** your staff members will use to access the external application.

SSO service applications you have created are available as options in workspace browser controls. After adding the browser control to the workspace, select the service application from the Application drop-down menu on the ribbon's Design tab, as shown here. Refer to [Working with browser controls]().



When your staff members use the workspace, they will be able to access the application and will not be asked for credentials.

Redirecting users to the Oracle Service Cloud login page

After configuring external applications to use Oracle Service Cloud as the identity provider, agents who attempt to directly access the external application's login page will be redirected to a PHP login page where they can enter their Oracle Service Cloud login.

If agents forget their login information, they can click Login Help on the page to recover their information. Using the ACCT_RECOVER_STATUS and ACCT_RECOVER_ALT configuration settings (Site Configuration > Configuration Settings > RightNow User Interface > Tool Bar > General), you can choose what action is taken when staff members forget their user name or password. See Configuring Login Help.

Important Setting ACCT_RECOVER_STATUS to 0 disables login help functionality on the PHP login page, since this value opens the login help procedure in the Oracle Service Cloud online documentation.

Single logout for SSO applications

If your agents use single sign-on (SSO) to log in to other applications using Oracle Service Cloud as the identity provider, they can be automatically logged out of all the service providers they are logged into when they log out of any one of them. The applications can be external or internal to the Oracle cloud (such as Oracle Policy Automation). This enhances the security for all the applications, since users would be forced to reenter their credentials once they log out of any one of them.

Single logout for internal service providers is enabled automatically and requires no configuration other than that described in To create an SSO service provider. However, configuring single logout for an external service provider requires editing the service provider configuration in the Single Sign-On Configurations editor to add logout parameters and certificates. Logout requests by external service providers must be signed using valid certificates to ensure the logout request can be trusted. External service providers can also use alternate certificates to help transition from expiring certificates. Logout requests by service providers internal to the Oracle cloud do not require certificates since they are assumed to be secure.

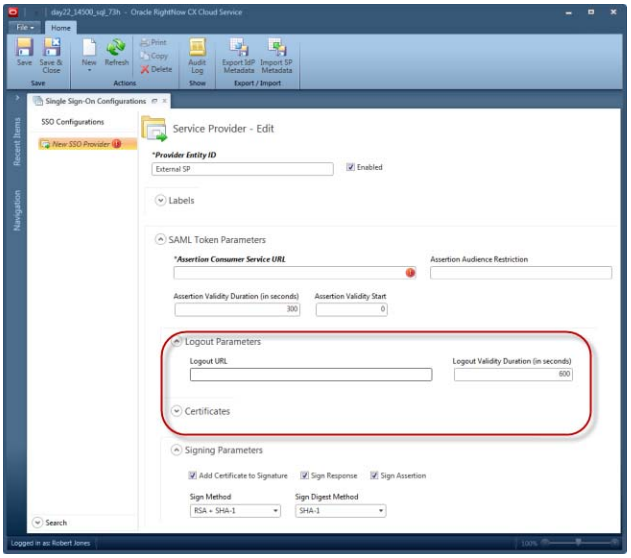
The following procedure assumes that single sign-on is enabled on your site and that you have already added the external service provider to Oracle Service Cloud.

To enable single logout for an external service provider

1 Click the Configuration button on the navigation pane.

2 Double-click Single Sign-on Configurations in your configuration list. The Single Sign-On Configurations tree opens.

3 Select the service provider you want to enable single logout for in the tree.



4 Enter the URL where the identity provider sends the logout request to the service provider in the Logout URL field.

5 Enter the number of seconds the identity provider's logout request is valid in the Logout Validity Duration field. The default value is 600 seconds.

6 Click the arrow next to Certificates to expand the section.

7 Click the folder next to the Import Certificate field to select the location of the certificate you want to use to validate logout requests. Once you select the certificate file, it is displayed in the Certificate field.

8 To use a second certificate to validate logout requests, click the folder next to the Import Alternate Certificate field and select the certificate you want to use. Using an alternate certificate is useful if you are transitioning from an expiring certificate.

9 Click the Save and Close button on the ribbon to save the changes to the service provider.

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Add-Ins

The desktop add-in framework lets application developers add custom components, or add-ins, to Oracle Service Cloud in order to integrate with other applications on staff members' workstations. For information about creating add-ins, refer to *Connect Desktop Add-In Framework (.NET)*.

Installing add-ins

Add-ins are uploaded using the Add-In Manager. From the manager, you can provide or deny access to individual add-ins for each profile and interface. Staff members who are granted access to use add-ins will have the necessary add-in files downloaded to their workstations. For information about managing add-in permissions through profiles, refer to Customizing profiles.

Add-in file conventions

The add-in files you upload must conform to certain conventions to be recognized by the Add-In Manager.

- The files must be either *.dll* files that reference the add-in views or zipped archives.
- Zip files can contain any number of files but must not contain subdirectories. If subdirectories are included in the zipped archive, the subdirectories will be removed.
- Zip files must contain only one *.dll* file that references the add-in views. If more than one add-in is included in the zipped archive, the add-ins will not be properly activated. The *.dll* file in the zipped archive that contains the reference to the add-in views must have the same name as the zipped archive.
- The names of *.dll* files you upload must be unique and the names of the assemblies they contain must match the *.dll* file names. If the name of the assembly does not match the name of the *.dll* file you upload, the assembly will not link correctly with the profiles that should have permission to use it.

Using the Add-In Manager

The Add-In Manager lets you quickly upload files and assign **profile** permissions to use the add-ins. You can also specify custom values for .NET attributes from the Add-In Manager. You can specify different values for each profile and interface and the specified values are stored in the Oracle database. This eliminates the need to store custom values for attributes in client-side XML configuration files. The Add-In Manager is also used to remove add-ins that you no longer use.

Note The Add-In Manager is available to only those staff members with the Configuration permission selected on their profile's Administration tab. Refer to Customizing profiles.

The Add-In Manager also includes an audit log where you can view information about add-in activity.

To add or edit an add-in

1 Click the Configuration button on the navigation pane.

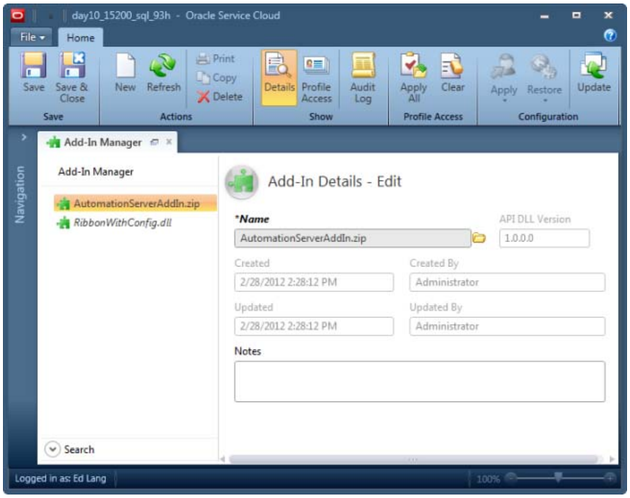
2 Double-click Add-In Manager under Site Configuration. The Add-In Manager opens on the content pane.

3 To open an existing add-in for editing, click the add-in name. If the add-in's *.dll* or *.zip* file has been modified or replaced by a different file, you can update the add-in to reflect the changes. Refer to To install an updated add-in file.

4 To install a new add-in, click the New button on the ribbon.

Important When the Open window initially displays, only *.dll* files appear. To view *.zip* files, click the Files of Type drop down menu and select Compressed Add-In Files.

a Select the add-in's file and click the Open button. The Name and API DLL Version fields on the Add-In Manager are populated.



When you add or edit an add-in, information about the add-in is displayed in the fields described in the following table.

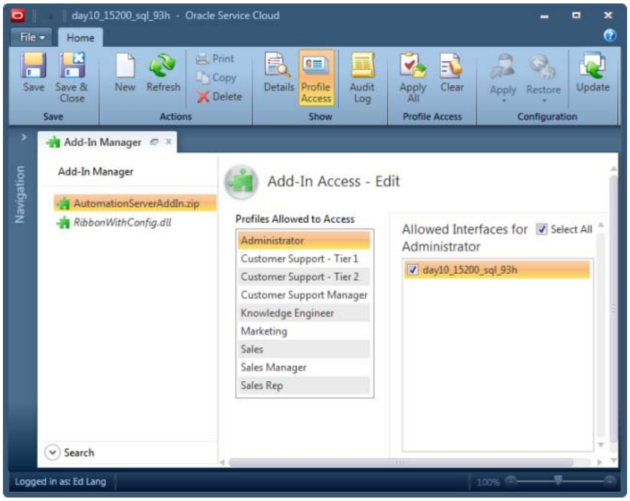
Table 109: Add-In Details Description

Field	**Description**
Name*	The name of the *.dll* or *.zip* file you uploaded.
API DLL Version	The version of the add-in API that the file was built against.
Created	The date and time the add-in was initially uploaded.
Created By	The staff member who uploaded the add-in.
Updated	The date and time the add-in was most recently updated.
Updated By	The staff member who most recently updated the add-in.

5 To select a different file for the add-in, click the Folder button in the Name field, select the file, and click the Open button.

6 To add a note to the add-in, type it in the Notes field.

7 To specify the profiles that can access the add-in, click the Profile Access button on the ribbon.



a Select the profile in the Profiles Allowed to Access section.

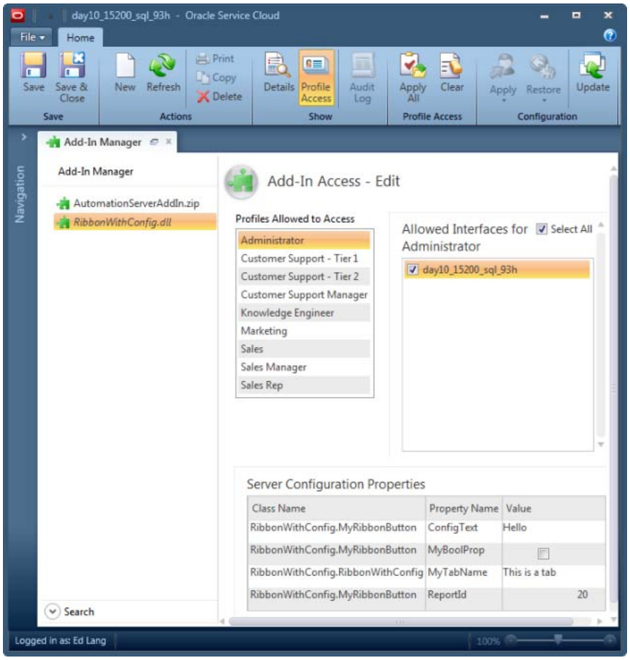
b Select the appropriate interface check boxes in this section. Only **interfaces** that the profile has permission to access are displayed in the Interfaces section.

c To give the selected profile access to the add-in on all interfaces, select the Select All check box.

d To grant add-in access to all profiles on all interfaces, click the Apply All button on the ribbon.

e To remove add-in access from all profiles and interfaces, click the Clear button on the ribbon.

When you enable the add-in for a profile and interface, the class names, property names, and default values for the add-in's configurable properties display.



8 Select the property you want in the Server Configuration Properties section and then double-click the property's Value field.

  a To change the value for a property with a string or numeric type, type the numbers or text you want for the property's value.

  b To change the value for a property with a Boolean (yes/no) type, select or clear the check box that is displayed.

9 To specify different property values for another interface, select the interface and repeat step 8.

10 To specify different property values for another profile, select the profile and repeat step 8.

11 To automatically apply the property values you specified to other profiles and interfaces, click the Apply button on the ribbon and select the appropriate option.

  a To apply the property values to all interfaces for the profile, select Apply this Configuration to All Interfaces for the Selected Profile.

  b To apply the property values to all profiles and interfaces, select Apply this Configuration to All Profiles and Interfaces.

12 To automatically remove customized property values from profiles and interfaces, click the Restore button on the ribbon and select the appropriate option.

   a To reset the values for all profiles and interfaces, select Restore the Default Configuration to All Profiles and Interfaces.

   b To reset the values for all interfaces enabled for the selected profile, select Restore the Default Configuration to All Interfaces for the Selected Profile.

13 Click the Save and Close button on the ribbon to save your changes and close the Add-In Manager.

To install an updated add-in file

1 Click the Configuration button on the navigation pane.

2 Double-click Add-In Manager under Site Configuration. The Add-In Manager opens on the content pane.

3 Click the name of the add-in you want to update.

4 Click the Update button on the ribbon.

Important When the Open window initially displays, only *.dll* files appear. To view *.zip* files, click the Files of Type drop down menu and select Compressed Add-In Files.

   a Select the add-in's updated file and click the Open button. The display is updated to reflect any changes from the updated add-in file.

5 Make any edits to the add-in that you need. Refer to To add or edit an add-in.

6 Click the Save and Close button on the ribbon to save the change and close the Add-In Manager.

To remove an add-in

1 Click the Configuration button on the navigation pane.

2 Double-click Add-In Manager under Site Configuration. The Add-In Manager opens on the content pane.

3 Click the name of the add-in you want to remove.

4 Click the Delete button on the ribbon.

Important You cannot delete add-ins when an upgrade test site exists. Refer to the [HMS Guide] for information about upgrading your site.

5 Click the Save and Close button on the ribbon to save the change and close the Add-In Manager.

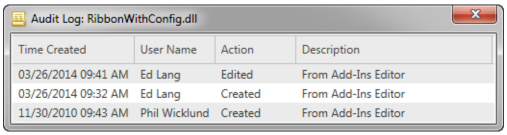
To view the audit log for an add-in

1 Click the Configuration button on the navigation pane.

2 Double-click Add-In Manager under Site Configuration. The Add-In Manager opens on the content pane.

3 Click the name of the add-in you want to examine.

4 Click the Audit Log button on the ribbon. The Audit Log window opens.



The audit log displays the type of action performed on the add-in, the staff member who made the change, when the action occurred, and where on the administration interface the action was performed.

5 Click X on the top right to close the window.

Add-ins in scripts and workspaces

Once you upload an add-in, you can place it on **scripts** and **workspaces** in the same way you add controls, such as report or browser controls.

The add-in can be displayed anywhere you want on the script or workspace or you can hide it using functionality in the script and workspace designers. You can also configure script branches and **script** and **workspace rules** to communicate with the add-in. Refer to Creating custom workspaces and Creating and editing scripts.

Add-ins in rules and branches

Once you place an add-in on a script or workspace, you can configure script branches and script and workspace rules to send information to the add-in and perform actions based on the add-in's response. For instance, if your organization handles customers whose products are still under warranty differently than customers with expired warranties, you could create a script branch that opens one script page if a customer's product is still under warranty and another page if it is not.

Important To interact with rules and branches, add-ins must include a function designed to accept information from branch and rule conditions.

This functionality could be added to your script in several ways, depending on how the add-in is written. One method would be to add a custom field to your script where customers enter their product's serial number and place an add-in on the script that compares the value entered in the custom field to a list of serial numbers that are under warranty. You would then create two script branches with the following configuration to branch to different pages on the script.

- Configure the branches to fire when a button is clicked or another action is taken on the script. For example, they could be triggered when the Next Page button on the script's navigation panel is clicked.
- Create one If condition for each branch that is checked when an add-in's control condition returns a certain value.
- When you edit the conditions, you can type the information you want to send to the add-in in the Add-In Parameter field. In this example, you could send the custom field's ID number to the add-in. The add-in would then find the value entered in the custom field on the script and compare it to an external database that contains serial numbers that are under warranty.
- Set different operators and values for the conditions in each branch. For instance, if you want the add-in to send back a response, such as "true" when it finds the serial number in the external database, set the operator to "equals" and the value to "true." Set the other branch's operator and value to "equals false."

Using this configuration, one branch would be triggered when the add-in finds that a serial number is under warranty and another branch would be triggered when the add-in finds it is not under warranty. Using script or workspace rules, you could further expand this example to update the external database with the serial number entered on the script when other conditions are met.

For details about creating script branches, refer to Adding branches. For information about script and workspace rules, refer to Workspace rules.

Safe mode

In severe cases, a malfunctioning add-in can prevent the **Service Console** from functioning properly and can even prevent **administrators** from logging in to remove the malfunctioning add-in. If this occurs and you are required to exit the **administration interface** without completing the normal logout process, the system notifies you the next time you log in that Oracle Service Cloud did not exit properly the last time, and asks if you want to log in using safe mode. Safe mode temporarily disables your add-ins, allowing you to log in and remove the malfunctioning add-in.

Analyzing add-in events and usage

Once add-ins are installed, you can view log files of the activity related to your add-ins. You can also view the add-ins that are enabled for your profile which may impact the behavior of the **Service Console**.

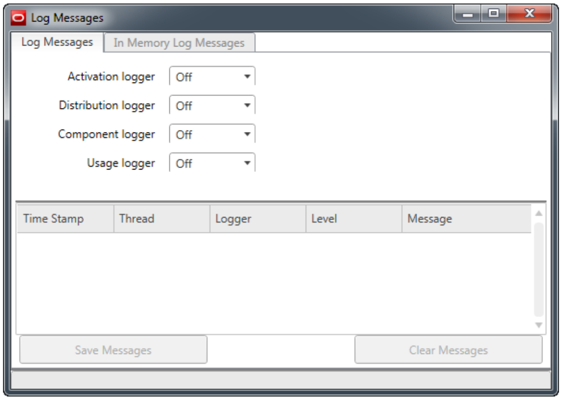
Logging add-in activity

The activity related to the add-ins that you use, or that you add or delete from the Add-In Manager, is automatically logged on the Log Messages window. Add-in logging is particularly useful for add-in developers or **administrators** who need to test or troubleshoot add-ins.

Important The entries on the Log Messages window are deleted when you log out of the **administration interface**. In addition, the messages are unique to your session and do not include messages related to other staff members' sessions. However, you can save the messages to text files for later viewing. Refer to Saving and removing log messages.

To open the add-in Log Messages window

Click **File**, select Add-In Logging, and then select View Current Log File.



Two tabs are available on the Log Messages window. The Log Messages tab shows only messages you choose to see, and the In Memory Log Messages tab displays all messages related to your add-in activity during your current session. Each message is associated with one of the message types described in the following table.

Table 110: Add-In Logging Message Types

Message Type	Description
Error	Error messages describe problems add-ins encounter that prevent them from working correctly.
Warning	Warning messages describe possible issues that may prevent add-ins from working as expected.
Information	Information messages describe events that happen to add-ins, such as when they are activated or deleted on the Add-In Manager.
Verbose	Verbose messages describe the flow of add-in actions, such as when an add-in executes an action. **Note:** Verbose messages are not displayed on the In Memory Log Messages tab.
Activity Tracing	Activity Tracing messages provide additional details about add-in activity, such as the amount of time it takes to execute an add-in action. **Note:** These messages are not displayed on the In Memory Log Messages tab.

If you want to view only certain types of messages or messages pertaining to certain activities, click the Log Messages tab and then select which message types you want to view from the drop-down menus described in the following table.

Table 111: Add-in Logging Drop-Down Menus

Drop-Down Menu	Description
Activation Logger	Message types in this drop-down menu are written to the log file when add-ins are activated or initialized. Entries will also be written when initialization fails or an exception occurs during activation or initialization.
Distribution Logger	Message types in this drop-down menu are written to the log file when add-in files are uploaded, updated, or removed.
Component Logger	Message types in this drop-down menu are written to the log file by active add-ins that use the IGlobalContext.LogMessage API.
Usage Logger	Message types in this drop-down menu are written to the log file when add-ins are used. The specific entries written to the log vary depending on the add-ins' functions.

Saving and removing log messages

All messages on the Log Messages window are removed when you log out of Oracle Service Cloud. However, you can save the messages for later viewing or remove the messages without logging out of the application. These options apply only to the messages displayed on the window's active tab.

Note You can open the log files using any text editor, or you can open them from the **Service Console** by clicking **File**, selecting Add-In Logging, and then selecting View Previous Log File.

To save log messages

1 Click File, select Add-In Logging, and then select View Current Log File to open the Log Messages window.

2 Select the tab with the messages you want to save and then click the Save Messages button. A window opens where you select the location and name of the text file containing the log messages.

To remove log messages

1 Click File, select Add-In Logging, and then select View Current Log File to open the Log Messages window.

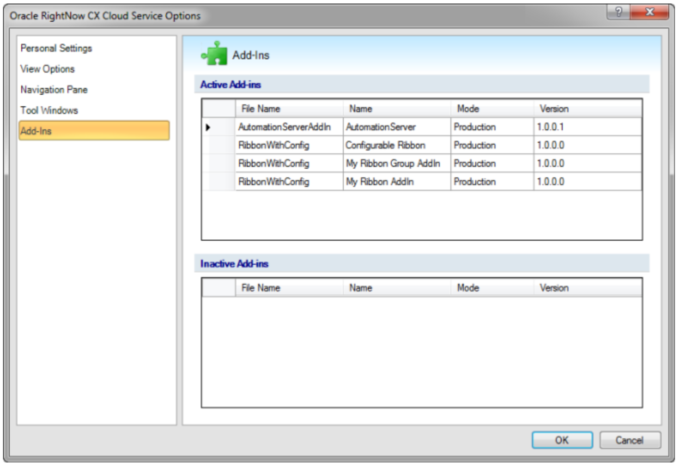
2 Select the tab with the messages you want to remove and then click the Clear Messages button.

Viewing available add-ins for your profile

The add-ins that are enabled for your **profile** can impact the behavior of the **Service Console**. Therefore, you will want to view lists of the enabled add-ins to see which ones you can access on the interface you are logged in to and add-ins that are not applicable to the current interface.

To view add-ins for your profile

1 Click **File** and select Options > Add-Ins. The list showing the add-ins enabled for your profile displays on the right.



The list displays four columns of information showing the file name, display name, mode, and version number of each installed add-in. The mode can be either production or development. Add-ins in production mode were installed using the Add-In Manager. Add-ins in development mode were manually added to the workstation, generally for testing purposes.

2 Click the OK button to close the list.

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Multiple Interfaces

Each installation of Oracle Service Cloud initially contains one knowledge base and one interface. The knowledge base contains all the data needed to run Oracle Service Cloud and organizes it in a meaningful way by connecting the related components, such as products, answers, and staff accounts. The interface, on the other hand, is designed solely to display the data stored in the knowledge base. When you use multiple interfaces, each interface can be a unique configuration of the data in your installation's single knowledge base.

For example, you might want an interface for your retail customers that is different from the one for your corporate customers. You may need Spanish- and French-language sites in addition to your primary English-language site to serve all your North American customers. Or perhaps your company produces different product lines and you want to create an interface for your medical electronics customers that is different from the one you use for your computer system customers.

In addition to offering multiple customer sites, you can also control how information is displayed on the **agent desktop**. Using visibility settings for specific fields in each interface, you choose what can be viewed by your staff members.

Overview of multiple interfaces

Additional interfaces are **cloned** from the original, or primary interface. The new interface is then configured separately from the primary interface. The process is the same regardless of the number of interfaces that have already been created.

Important When you create customer portal pages for multiple interfaces, you must set up each one separately. See Configuring Oracle Service Cloud for the Customer Portal.

Alternatives to multiple interfaces

Before configuring multiple interfaces, you should consider whether that solution best addresses your organization's needs since other options may be more appropriate.

- **Multiple knowledge bases**—If your organization has sensitive information that you do not want to share across interfaces, you might want to consider using separate **knowledge bases** rather than multiple interfaces. When using multiple interfaces, many records on the agent desktop can be viewed by all staff members, including those with access to just one interface. For example, agents with permission to view contacts can view all contacts, regardless of the interface. Using separate knowledge bases lets you offer different support sites, just as you can with multiple interfaces, but the installations are completely separate and each site has a unique set of data.

Note Contact your Oracle account manager for information about multiple knowledge bases.

- **Privileged Access**—If you want only to grant varying levels of information to different groups of customers but do not have sensitive information and do not require a unique configuration for each interface, consider using privileged access rather than multiple interfaces. See Enabling privileged access to answers.

Interface options and settings

When you **clone** an existing interface, the new interface is initially identical to the original interface. You must make changes to the cloned interface so that it presents the information you want in the format you want it to display.

It is important to understand how all interfaces are affected by changes you make to a single interface. Some changes appear on all interfaces regardless of the interface where you created or changed them. Some changes appear only on the interface where you make them. And still other types of changes appear only on the interfaces you select. See Common items and settings, Interface-specific items and settings, and Options with interface visibility settings.

Note The configuration and analytics items in the following lists are displayed beneath their default locations on the navigation pane. However, they may display in different locations or not at all depending on your navigation set configuration. The lists also display common and interface-specific record types.

Common items and settings

Certain items and settings are shared across all interfaces and are not interface-specific. Therefore, when you add or change one of the items on one interface, it automatically appears on the other interfaces. For example, staff accounts added while logged in to one interface can be viewed and edited from any interface.

The following items are common across all interfaces.

Configuration

- Staff Management
  - ▷ Accounts
  - ▷ Profiles
  - ▷ Password Configuration
- Application Appearance
  - ▷ Client Workflow Images
  - ▷ Customizable Menus (Answer Statuses, Asset Statuses, Billable Tasks, Chat Agent Statuses, Chat Session Queues, Contact Roles, Contact Types, Incident Queues, Incident Severities, Incident Statuses, Opportunity Statuses, and Organization Address Types)
- Site Configuration
  - ▷ Distribution Lists
  - ▷ Rules
  - ▷ Site-specific configuration settings
  - ▷ Site-specific message bases
  - ▷ Process Designer
- Internationalization
  - ▷ Countries
- Service
  - ▷ Answer Stopwords
  - ▷ Service Level Agreements (SLAs appear on all interfaces. However, you must set the response requirements separately for each interface.)
  - ▷ Guided Assistance
  - ▷ Social Monitor
- Opportunity Tracking
  - ▷ Product Catalog

- ▷ Strategies
- ▷ Sales Periods
- Outreach
    - ▷ External Suppression List
- Database
    - ▷ Data Dictionary
    - ▷ Object Designer
    - ▷ Incident Thread Type Correction
    - ▷ Data Import Template
    - ▷ Data Import Wizard
    - ▷ Email Address Sharing

Analytics

- Report Styles
- Chart Styles
- Color Schemes
- Report Images
- Text Fields

Record types

- Contacts
- Organizations
- Tasks
- Standard reports
- Incidents
- Answers
- Opportunities

Interface-specific items and settings

In contrast to common items and settings, others are unique to an interface and impact only the interface they are configured on. For example, to configure a Service mailbox, you must log in to the interface the mailbox will be used with. These items are indicated in the following list.

Other items and settings, such as message bases, are interface specific, but can be configured from any interface. Before configuring the item or setting, you select the interface you want to configure.

Configuration

- Application Appearance
  - ▷ Workspaces/Workflows—Can be configured only for the logged-in interface
  - ▷ Navigation Sets—Can be configured only for the logged-in interface
  - ▷ Scripts—Can be configured only for the logged-in interface
- Site Configuration
  - ▷ Interfaces
  - ▷ Message Templates
  - ▷ Customer Portal
  - ▷ Mailboxes—Can be configured only for the logged-in interface
  - ▷ Interface-level configuration settings
  - ▷ Interface-level message bases
  - ▷ File Manager
- Service
  - ▷ External Search Configuration—Can be configured only for the logged-in interface
  - ▷ Search Priority Words—Can be configured only for the logged-in interface
  - ▷ Incident Stopwords—Can be configured only for the logged-in interface
  - ▷ Topic Browse
  - ▷ Response Requirements
  - ▷ Variables
- Opportunity Tracking
  - ▷ Promotions—Can be configured only for the logged-in interface

Record types

- Custom reports—These are configured from the interface they display on, but can display data from multiple interfaces. See Exporting report definitions to learn about copying reports from one interface to another.
- Audiences
  - ▷ Contact Lists
  - ▷ Segments

- Campaigns
- Content Library
  - ▷ Documents
  - ▷ Templates
  - ▷ Snippets
  - ▷ File Attachments
- Mailings
- Questions
- Surveys
- Tracked Links

Options with interface visibility settings

There is another set of options that may be shared across interfaces, but only if you set the visibility setting of the option to appear on the selected interfaces. The following list includes those options that can be visible on other interfaces if you set them to appear on the specific interfaces. See Editing visibility in configuration items.

Configuration

- Application Appearance
  - ▷ Customizable Menus (Answer Access Levels, Competitors, Industry Types, Lead Rejection Types, and Win/Loss Reasons)
- Site Configuration
  - ▷ Add-in Manager
  - ▷ Logs
- Internationalization
  - ▷ Currencies/Exchange Rates
- Service
  - ▷ Holidays
  - ▷ Products/Categories/Dispositions
  - ▷ Standard Text
- Opportunity Tracking
  - ▷ Product Catalog
  - ▷ Price Schedules
  - ▷ Quote Templates
  - ▷ Territories

- ▷ Strategies
- Outreach and Feedback
  - ▷ Tracked Link Categories
- Database
  - ▷ Custom Fields

Configuring multiple interfaces

The following steps summarize the procedures involved in creating and configuring an additional interface. After you have completed the first two steps, you need to decide which of the remaining steps in this section you need to implement. Your decision depends on what you want to accomplish using your interface, but it is likely that you will want to implement many, if not all of them.

1. Determining your interface needs—Decide how your staff and customers are going to use the new interface to determine how it must be configured. Your Oracle account manager can assist you in defining your objectives.

2. Defining interface properties—Change the interface name that appears on the agent desktop.

3. Managing staff member accessibility—Use navigation sets, workspaces, and profiles to establish the interfaces staff members have permission to access and work on.

4. Editing visibility in configuration items—Customize configuration items with specific visibility settings such as custom fields and products.

5. Configuring and customizing the interface—Customize the interface-specific configuration settings for each new interface through the Configuration Settings editor.

6. Creating business rules to manage multiple interfaces—Define rules to automatically assign incidents and opportunities to the proper interface and queue or staff member.

7. Configuring mailboxes—Customize your Service and Outreach mailboxes in each interface.

8. Customizing message templates—Customize the notifications and emails that can be sent to your staff members and your customers from each interface.

9. Adding answers—Determine the content you want to provide to your customers through the customer portal and create your answers.

Determining your interface needs

When you clone an interface, the new interface is a duplicate of the original interface and has the same customized configuration. For this reason, we recommend waiting to clone your interface until you complete configuring the original interface. This can help reduce the amount of customization you need to do on the cloned interface, particularly if you want the interfaces to be similarly configured.

Before you clone interfaces, you should consider how your staff members and customers will use the new interface and what changes you need to make to accomplish the intended purpose. As a starting point, consider whether the language will change, whether the new interface needs to send and receive email, what **custom fields** and customizable items you want to appear on the new interface, which configuration settings (site or interface specific) and message bases need to change, and whether you can use **business rules** to manage the new interface.

Important Because configuration settings and message bases are categorized as site or interface specific, it's critical to know which settings will affect all interfaces (site specific) and which ones will affect only one interface (interface specific). Since there are fewer site-specific settings, it is easier to identify those by searching for all site specific settings on the Configuration Settings editor. Using this search criteria, you can easily see which settings are applied across all interfaces and decide what is best for your situation. See Searching configuration settings and Searching message bases.

Also consider what level of access your staff members and customers should have to the new interface to determine if you need to modify profiles or reconfigure customer portal pages. You should also identify who, if any staff members besides you, will have administration permissions on all interfaces. Ideally, a limited number of administrators have access to all interfaces. If you have a large number of administrators, it can be challenging to prevent unwanted additions or deletions of fields or items that affect the incorrect interface.

Tip While performing this step, start thinking about naming conventions for your staff accounts, profiles, customizable menus, and custom fields. For example, the names you select for profiles configured for an internal interface could begin with "internal" to make it easier to identify the profiles that belong to the interface.

❖ Site Configuration

Defining interface properties

After your new interface is cloned, you may want to change the name of the interface as it displays for staff members. Changing the interface name affects only the display of the interface name as it appears to staff members on the agent desktop. URLs to your interfaces will continue to use the original interface name. You can also change the answers report customers will use on the interface. This is helpful if you want your customers to use a custom report you have created instead of the standard report.

Important For information about administrator notifications, administrator emails, and contact emails that you can customize for each interface, see Customizing message templates.

For information about the Chat Hours editor, see Setting chat hours.

To change the interface display name and answers report

1 Click the Configuration button on the navigation pane.

2 Double-click Interfaces under Site Configuration. The content pane displays the Interfaces tree and editor.

3 Select the interface name you want to edit.

4 Type the new interface name in the Display Name text box.

5 To change the answers report, click the Contact Visible Answers Report drop-down menu and select a report from the menu options. See Changing the answers report.

6 Click the Save and Close button on the ribbon to save the new display name.

Managing staff member accessibility

There are three components that affect how your staff members can access your interfaces: navigation sets, workspaces, and profiles. In order to present the appropriate information to staff members, and allow access to only those interfaces and features required by your organization, it is important to understand how the components work together.

Navigation sets

Navigation sets define what appears to staff members on the agent desktop. In addition to the buttons on the navigation pane, you can determine which reports staff members can access and which appear by default when the console opens or a navigation button is clicked.

By selecting proper reports for each navigation set, you can limit the results for staff members to the interface they primarily work from. For example, you may want to set the incidents reports that display in the navigation list to only those reports that filter by a particular interface. See Creating navigation sets.

Once your navigation sets are configured, you can assign them to profiles. See Customizing profiles.

Workspaces

Workspaces can help define how staff members use your interfaces. Since each profile uses separate workspaces for each interface, you can create different workspaces to accommodate staff members who use different interfaces. For example, staff members who log in to an interface used by external customers may use a contact workspace that includes the contact first name and last name fields. Staff members who log in to an internal interface may use a contact workspace that shows only the contact email address field. By using different workspaces on each interface, you can display only those fields staff members need to view or fill in on that particular interface. After your workspaces are created, you can assign them to the necessary profile. See Custom workspaces.

Profiles

Each staff member is assigned a profile that determines which interfaces the staff member can access. Profiles also determine the queues staff members can pull incidents from, so you must ensure that the profile can access the appropriate interfaces.

In addition, you can specify the navigation set and the workspaces staff members use through their profile. For each profile, you can specify the navigation set used on each interface, as well as the workspaces used for each record type on each interface.

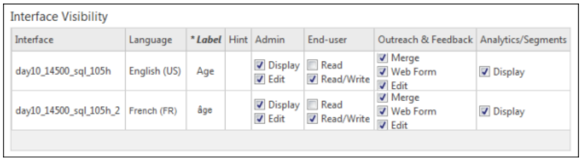
When you clone an interface, all profiles with permission to access that interface automatically have permission to access the new interface. If you do not want certain profiles accessing the cloned interface, you must edit the profile settings to remove that permission. See Customizing profiles.

Editing visibility in configuration items

You can specify the interfaces where certain configuration items appear, while others are visible across all interfaces. Those items visible on all interfaces are listed in Common items and settings. When you add one of these items to your interface, it appears on all interfaces. For example, if you add a custom **incident status**, staff members working on incidents from any interface can set an incident to that status.

Other configuration items, such as custom fields, contain visibility settings for selecting the interfaces on which they appear. These items are listed in Options with interface visibility settings. Some of these let you select the interfaces and others let you specify not only the interface, but also whether the item is visible on the customer portal or the agent desktop. If you have separate customer portal pages for different product lines, for example, you will likely want to restrict sales products to unique interfaces so that they appear only on the appropriate site.

To specify the interfaces where you want the configuration item to appear, simply select the check boxes for each interface. The following figure shows the interface visibility settings for a contact custom field.



In a multiple language installation, you can specify that configuration items appear on all interfaces but change the name for each interface to show the translated version of the item. You do this by logging in to the proper interface and typing the foreign language word in the Label field.

Configuring and customizing the interface

Each interface has its own configuration settings. When you cloned your interface, any customized configuration settings were copied to the new interface. You must manually adjust any configuration settings that should be changed for the new interface. For example, you may choose to let customers ask a question on one interface but not the other. Select the interface on the left side of the Configuration Editor to change the configuration for that interface. See Customizing configuration settings.

Note For configuration settings specific to the customer portal, see Defining configuration settings.

❖ Site Configuration

Creating business rules to manage multiple interfaces

When you create rules for multiple interfaces, you must be aware of the visibility settings for your custom fields and customizable menu items. The rules engine can access all custom fields and customizable menu items regardless of their visibility settings, so all conditions and actions that use those fields and items are available to you, even if they cannot be displayed on the interface. See Options with interface visibility settings for a complete list of options with visibility settings.

Because the rules engine does not filter fields and menu items based on their visibility on the interface, you run the risk of setting a field or menu option that is not visible. To prevent meaningless actions and ensure that the rules engine sets the field or menu item you want it to, you can specify the interface as one of the rule's conditions when you create incident, chat session routing, opportunity, and target rules. And, if the object meets certain conditions, you can use a rule action to set the interface to a different one for rule processing.

It is important that an object be processed on the correct interface because the rules engine uses the **message bases** and configuration settings of the interface associated with the object. For example, if you try to use an English-language interface to process an incident that was sent in German, any message bases used to respond to the incident will be in English. For that reason, it is important that objects be processed on the correct interface. Fortunately, rule actions let you set the interface when the rule's conditions are met.

And although you cannot set the language or mailbox in a rule's action, you can use them as conditions to set the interface in the rule. Assume, for example, you have two interfaces: one English-language interface and one German. Also assume that **Techmail** is scheduled to run only on the English interface. While you cannot change an incident's language to German in a rule, you can change its interface. And, since the interface uses the message bases of the interface processing the rule, changing the interface accomplishes the same results.

The following rule demonstrates this.

If Incident.Language equals German

Then Set Interface Name to german_interface

See Business Rules Management. For examples of commonly used business rules, see Business rules examples.

Configuring mailboxes

If you have Oracle RightNow Cloud Service (Service) enabled, you must create at least one Service mailbox for the new interface in order to send and receive email. If Oracle RightNow Outreach Cloud Service (Outreach) or Oracle RightNow Feedback Cloud Service (Feedback) is enabled, you must create at least one Outreach mailbox so you can create and send mailings and surveys. If you have multiple mailboxes for the interface, you must specify a default Service mailbox and a default Outreach mailbox. Even though you can configure your interface to send email from a single address, if you have multiple mailboxes, you must configure each mailbox separately. See Adding and editing mailboxes.

Important To ensure accurate processing of replies, inbound messages, and bounces, Outreach mailboxes cannot be shared with either type of Service mailbox (**Oracle-managed Service** or general Service). **Techmail** handles messages in Service mailboxes differently from how it handles them in Outreach mailboxes. For this reason, you must set up one mailbox for Service and a separate mailbox for Outreach and Feedback.

Note Distribution lists are not interface specific so any distribution list you add on one interface is available on all other interfaces. See Managing distribution lists.

Customizing message templates

You may want to change the notifications, emails, and print templates that can be sent to your staff members and your customers from each interface. You may also want to change the content that is sent by interface. Message templates lets you define the format of your messages and disable certain messages if they do not pertain to an particular interface. You can also customize your logo, your headers and footers, and your message content.

For example, if you have a parent company with multiple subsidiaries, each with a unique brand, the look and feel of each interface can be defined using the global template. The global template is then applied across every single message that is enabled on that interface. See Working with the Message Templates editor.

Adding answers

When you create answers to populate your knowledge base, you need to think about which interfaces you want them to appear on and then associate them with the proper answer access level. For example, you could create two custom answer access levels, Internal and External, each with visibility on different interfaces. Answers with the Internal access level would display on only the interface used by your organization’s employees. Answers with the External access level would display on only the interface used by your external customers. To have the answer appear on both interfaces, select the access level Everyone.

Although we recommend that you use answer access levels as the key element for determining answer visibility, there are other ways to control where answers are displayed and who can view them. The following table lists the other methods you can use to control the display of answers.

Table 112: Controlling the Display of Answers

Item	Method
Answer Access Levels	Select the interface you want the access level to display on.
Products and Categories	Select the interfaces where each of your products and categories are visible.
Answer Statuses	Select the Public answer status type to display answers on the customer portal. All other types restrict the display so customers cannot see them.
Languages	Create the answer on a language interface to restrict the answer display to that language.
Conditional Sections	Insert a section with certain visibility restrictions within an answer. **Note:** If a section of the answer is assigned an access level that is not visible to customers on a particular interface, but the answer is visible, then customers can view the answer but not the conditional section. See Inserting conditional sections.

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Common Functionality

Oracle Service Cloud is designed for efficiency. One way it accomplishes this is by making procedures as similar as possible. Once you know how to attach files to an incident, for example, you can use that knowledge to attach files to any kind of record. By understanding common functionality, you improve your confidence and efficiency when working in Oracle Service Cloud.

Common functionality applies to searching, opening, forwarding, copying, printing, assigning, **flagging**, and attaching files to different types of records. Also common to Oracle Service Cloud are standard **workspaces**, audit logs, spell checking, workgroups, Outlook appointments, and notifications. Because the majority of common functions are performed using the **ribbon**, it is important that you first become familiar with it.

Working with the ribbon

All items that appear on the **content pane**—reports, explorers, and records—display a ribbon at the top of page, just below the red button at the top left of the console. The ribbon has tabs and buttons that let you work with a report, an individual record in the report, or an item in the explorer tree. Buttons are organized into groups, and each tab may include several groups.

Click any ribbon tab to display that tab's buttons. Or, with your mouse or other pointing device positioned anywhere in the ribbon, scroll down to move one tab to the right. Scroll up to move one tab to the left. The following figure shows the ribbon for an incidents report.

Notice the buttons on the Home tab. Some contain an arrow, including Open, New, Print, Copy, Assign, and Delete. Clicking the arrow rather than the button displays a list of associated records you can take the action on instead of the incident, which is the default record that the action applies to. For example, if you click the Open button, the incident that you have selected on the content pane opens. If you click the arrow on the Open button, a menu displays the records you can open (incident, contact, organization, or mailing) that are associated with the selected incident.

Some tabs, buttons, and groups always appear on the ribbon no matter what is displayed on the content pane. Others are content dependent. That is, they change to reflect what appears on the content pane and the allowable actions for that report, explorer item, or record.

Note If nothing opens on the content pane when you log in, the ribbon is empty except for the Home tab. Refer to Changing navigation pane settings to see how to define what opens on the content pane when you log in.

When you want to display a larger section of a report and do not need access to the ribbon, you can easily minimize it. You will still have access to the tabs and buttons you need.

- To minimize the ribbon, double-click any tab with focus or press **Ctrl+F1**.
- To restore the ribbon, double-click any tab or press **Ctrl+F1**.
- To display and select buttons on a tab without maximizing the ribbon, just click that tab.

❖ Changing navigation pane settings

Customizing the Quick Access toolbar

The Quick Access toolbar, which appears next to the red button at the top left of the console by default, provides shortcuts to commands on the **ribbon**. The initial set of buttons on the Quick Access toolbar is specified by what is displayed on the **content pane**, but you can customize the toolbar to add buttons you frequently use. (The customized toolbar is stored in local settings on your workstation. Refer to Changing your personal settings.)

Tip Some ribbon content cannot be added to the Quick Access toolbar, including check boxes, combination boxes, text fields, and some other input fields.

The following figure shows the default Quick Access toolbar that appears when you add or edit an incident.

To customize the Quick Access toolbar

1 To add a button to the Quick Access toolbar, right-click the button on the ribbon and select Add to Quick Access Toolbar.

2 To add a content-dependent or global option on the file menu to the Quick Access toolbar, click File, right-click the option on the left panel of the file menu, and select Add to Quick Access Toolbar.

3 To remove a button from the Quick Access toolbar, right-click the button on the toolbar and select Remove from Quick Access Toolbar.

4 To move the Quick Access toolbar from above the ribbon to below the ribbon, click the drop-down button on the Quick Access Toolbar and select Place Quick Access Toolbar Below the Ribbon.

5 To reset the Quick Access toolbar to its default settings, click the drop-down button on the Quick Access Toolbar and select Reset Quick Access Toolbar to default.

❖ Changing your personal settings

Displaying shortcut keys on the ribbon

Shortcut keys are available for all **ribbon** buttons so you can type a key combination to perform an action rather than clicking a button on the ribbon.

To display shortcut keys on the ribbon

1 While editing a record or working in an explorer, press **Alt** plus the first letter of the ribbon tab that you want to display shortcut keys for. For example, press **Alt+h** to display the shortcut keys on the Home tab of the ribbon.

2 Type the keys associated with a particular button to perform the button's action. After using this method to perform an action, the shortcut keys no longer display.

❖ Shortcut Keys

Searching for records

One way to find a specific record when a report is open is by scanning the list of displayed records to see if you can spot it. However, Oracle Service Cloud offers other much more efficient methods of searching for records. Besides simply looking in a report for a record, you have the following search options.

- Searching for records from a report—If you do not immediately see the record you want in the report, you can search for it. The filters that appear when you click the Search button depend on the report and which filters have been defined for it.
- Searching for records with Quick Search—With the Quick Search component, you can search for a specific record by entering as much or as little information about the record as you have. The list of records that match the information you enter is displayed, and you can select the one you want.
- Searching from open records—You can search for contacts and tasks from any open record that has a contact or task associated with it. You can also search for organizations from some types of open records.

❖ Searching for records from a report
❖ Searching for records with Quick Search
❖ Searching from open records

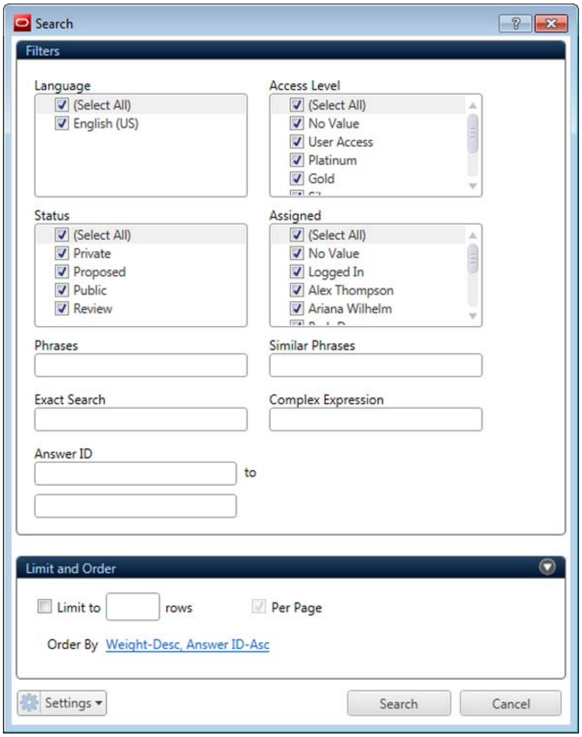
Searching for records from a report

Double-click any report in a navigation list to display a list of records in the report on the content pane. (The reports in your navigation lists are determined by the **navigation set** assigned to your profile.) The information displayed on the content pane depends on the report you selected and which fields were defined when the report was created.

When you search for records using a report's Search function, you can identify records that meet the criteria you specify. For example, you can search for incidents assigned to a certain staff member, answers that contain particular words or phrases, or tasks that are due this week. You can then sort your search results in ascending or descending order based on any of the filters you used for searching.

To search for a record from a report

1 With a report displayed, click the Search button on the Home tab of the ribbon. A Search window opens, displaying the search filters that are available for that report. (Each report uses the filters specified in the report definition.) The following figure displays the Search window for an answers report.



Tip You can resize the Search window to display all of the filters available for a given report. The size of the Search window is retained until you resize it again or reset the workstation local settings. Refer to Changing your personal settings.

2 To specify a filter that has a check box, select the check box next to each filter you want to use in your search or clear the check box for those you do not want to use.

3 To specify a date filter, click the calendar button in the field to display the current month's calendar. Then select the date. (Use the arrows at the top of the calendar to change the month if necessary before selecting the date.)

4 To specify a text filter, type text in the field. You can use an asterisk (*) as a wildcard in your search term.

a When you are searching for answers, you can use the search text type fields Phrases, Similar Phrases, Exact Search, Complex Expression, or Answer ID. Enter field information described in the following table to search on text fields.

Note All search types look for different word forms such as singular, plural, or different verb tenses. For example, searching for *reflect* will find answers that contain *reflection, reflections, reflected, reflecting,* or *reflects.*

All search types use the logical operators + (AND) and – (NOT). Insert + before a word to find answers that must include the word. Insert – before a word to exclude answers containing that word. For a list of special characters that can be used for searching, refer to Using special characters when searching.

The answer's Summary, Question, Answer, and Keywords fields are searched for matching terms.

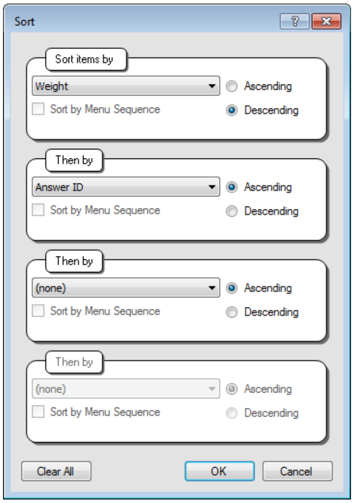
Table 113: Answer Text Field Search Options

Field	Description
Phrases	Select this search technique to search for answers containing the words in the phrase or question you type. Multi-word phrases usually produce better search results.
Similar Phrases	Select this search technique to search for answers that contain the words or phrase you type as well as answers containing synonyms for the words you enter.
Exact Search	Select this search technique to search for answers with the same pattern of words as the words you type. Only answers containing an identical pattern of words are matched, although the words in the matching answers may be separated by stopwords such as *a, an,* or *the.*
Complex Expression	Select this search technique to search for answers containing the complex expression you type. This technique allows wildcard searching using an asterisk (*) at the end of a word or partial word and a tilde (~) before a word to perform a similar phrases search on that word only. Refer to Using special characters when searching.
Answer ID	Type a range of answer IDs to search for answers with answer IDs within the specified range. Wildcard characters are not supported in Answer ID searching.

5 To limit the number of records returned in the search, select the Limit To check box and type a number in the Rows field. The total number of search results is restricted to this value. If the Limit To check box is cleared, the search results are unlimited.

6 To limit the number of records returned per page to the number specified in the Rows field, select the Per Page check box. Instead of the total number of search results being limited to the value in the Rows field, every page will return that number of results.

7 To establish the order for sorting search results, click the text in the Order By field. The Sort window opens.



a Select the primary field you want to sort by from the Sort Items By drop-down menu.
b To sort by the selected field in ascending order, select the Ascending radio button. To sort in descending order, select the Descending radio button.
c To sort on additional fields, select the fields to sort on from the Then By drop-down menus. When you define multiple sort fields, the records are initially sorted by the first sort field. If any of the records have the same value for the first sort field, those records will then be sorted by the subsequent sort fields.
d To remove all sort options, click the Clear All button.
e Click the OK button to close the Sort window.

8 To save your selections as default search filters for the report, click Settings and select Save as Default Values.

9 To restore the filters to the default settings for the report, click Settings and select Restore Default Values. You can also restore the defaults from the Personal Settings option. Refer to Changing your personal settings.

10 To reset the current selection criteria to their default values that were populated when the report was opened, click Settings and select Reset Values.

Tip You can customize the Search window layout in the report you are using, and save it to your local workstation so you will see the same filter positions, sizes, and ordering when you next open the report. Refer to Customizing the Search window.

11 Click the Search button to close the Search window and display the records that match your search criteria.

❖ Using special characters when searching

Using special characters when searching

Oracle Service Cloud supports wildcard searching and also allows other characters to produce more accurate results. The following table contains a list of the characters you can use, including how the characters are interpreted as well as the importance of the placement of the characters in the text string. Also included is a list of invalid search characters.

Tip All of these guidelines apply when you are searching using a complex expression. When you are searching using phrases, similar phrases, and exact search, only the following characters apply: + - _ / @ : <> & and white space. Other punctuation is ignored and also acts as a word separator.

Table 114: Special Characters Allowed When Searching

Character	Description
+	Always considered the logical operator meaning "must include."
-	May appear in the middle of a word or number, but when it is placed at the beginning of a word or number, it is always taken to mean "must not include."
.	May appear in the middle of a word or number, but is otherwise considered punctuation.
_	May appear in the middle of a word, but is otherwise unrecognized.

Table 114: Special Characters Allowed When Searching (Continued)

Character	Description
/	May appear in the middle of a capitalized word or a number, but is otherwise considered punctuation. **Note:** And/or uses the / as punctuation to separate the word “and” from “or,” but I/O is recognized as a single word.
@	May appear in the middle of a word, but is otherwise unrecognized.
*	Allowed only at the end of a word or number. It will act as a word separator otherwise. One exception is that it is specifically recognized as a leading character when directly preceding the @ to allow regular expression searching of the sort: *@example.com.
:	Allowed within a number only. Otherwise, it is considered punctuation.
< >	Text enclosed within the angle brackets “<” and “>” is ignored. Otherwise, the angle brackets are treated as punctuation.
&	Allowed as part of an embedded word, but is otherwise considered punctuation.
Whitespace (tab, return, space)	Ignored and acts as a word separator.
~	Allowed after a word to specify a broader search on the following word by using synonym expression and spelling correction.

Searching for records with Quick Search

Quick Search functionality lets you access any record or file when you have only limited information about the item. Quick Search is an ideal way to search the **knowledge base** no matter what **navigation list** is displayed or what is open on the content pane.

For instance, you could be working on a contact record and want to view an answer without changing navigation lists. Using the Answer Quick Search report, which you can access from a drop-down menu on the Quick Search **tool window**, just enter the answer ID and click the Search button. The answer opens on the content pane, and you can take any action you need.

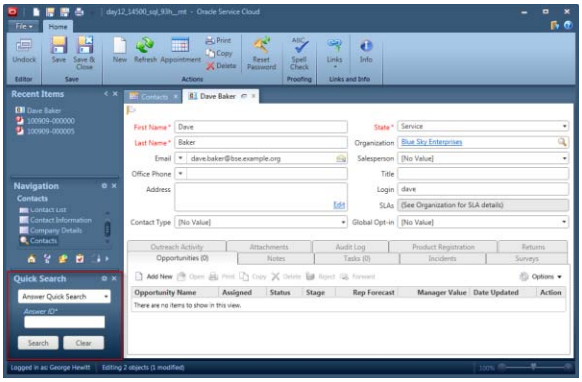
All Quick Search reports access data in the operational database instead of the report database to ensure that the most current data is always returned. Refer to Report databases.

Important Oracle Service Cloud contains a number of predefined Quick Search reports. The reports that appear in the Quick Search drop-down menu depend on what reports were added to the Quick Search button in your **navigation set**. Additionally, if you have permission to customize your navigation set, you can add and remove Quick Search reports as necessary. You cannot, however, add folders or other items to the list of Quick Search reports. See Customizing navigation and configuration lists.

- Report databases
- Customizing navigation and configuration lists

To search for an answer with Quick Search

1 Click the Quick Search drop-down menu on the Quick Search **tool window** and select Answer Quick Search.



Tip You can also press **F3** to make the Quick Search tool window active. If Quick Search is closed, pressing **F3** will open it in an undocked window.

2 Type the answer ID and click the Search button. The answer opens on the **content pane**.

Note Since the answer ID must match exactly, only one answer can match the answer ID you type. However, other quick search types allow you to enter just the first few characters of the search term, returning all records that match your partial search criteria on the content pane, where you can select the record you want.

3 To perform another search, click the Clear button to clear the Answer ID field.

Predefined Quick Search reports

The fields that display when you change Quick Search reports are unique to the type of record or file you are searching for. The following table lists the available fields in each predefined Quick Search report. Keep in mind that your list of Quick Search reports may be different from the reports described here.

Table 115: Search Fields for Predefined Quick Search Reports

Predefined Quick Search Reports	Description
Answer Quick Search	Type the answer ID.
Asset Search	Type the asset name, serial number, organization name, or contact name or select a service product from the Product drop-down list.
Campaign Search	Type the campaign name.
Contact Quick Search	Type the contact's last name, first name, or email address.
Incident Search	Type the incident reference number.
Mailing Search	Type the mailing name.
Opportunity Search	Type the opportunity name.
Opportunity Tracking Task Search	Type the task name.
Organization Quick Search	Type the organization name.

Table 115: Search Fields for Predefined Quick Search Reports (Continued)

Predefined Quick Search Reports	**Description**
Outreach Task Search	Type the task name.
Quick Search Dashboard	Type the incident reference number, contact name, organization name, or opportunity name.
Service Task Search	Type the task name.

Searching from open records

You can search for contacts, organizations, or tasks from many types of open records. For example, when you are working on an incident, you might need to search for a contact to associate with the incident. The following lists the types of searches you can do from various open records.

- Search for a **contact** from an open incident, opportunity, organization, task, asset, or contact list.
- Search for an **organization** from an open contact, incident, opportunity, task, or asset.
- Search for a **task** from an open answer, contact, incident, opportunity, or organization.

Checking recent items before searching

Make a practice of checking your recent items before searching. Just click the link in the field next to the Search button to view a list of the records you've recently worked on, if any are available. If you find the record you're looking for, select it. This is a quick way to associate a record, such as a contact, with an open record without having to conduct a search. If you don't find the record you're looking for, or if no records are available, then conduct a search using one of the following procedures.

This functionality applies only to incident, contact, organization, task, chat, asset, and custom object workspace types.

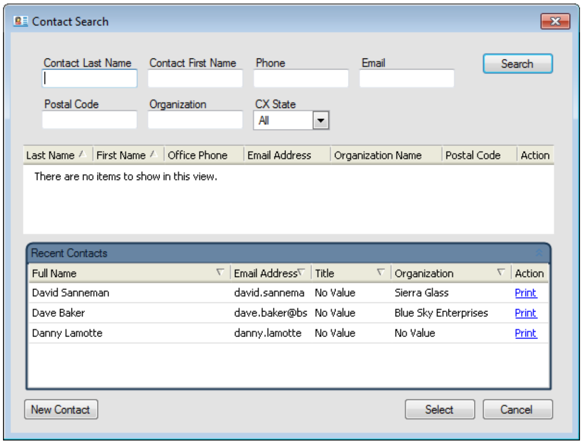
To search for a contact from an open record

1 Open the Contact Search window using one of the following methods.

If you are working on an incident, opportunity, organization, or contact list, click the Contacts tab. Then click the Add Existing button (or, for contacts lists, click the Add Contact button and select Add Existing).

Or

If you are working on an incident, opportunity, task, or asset, click the Search button to the right of the Contact field.



2 Type an entry in any of the available fields.

Tip You can use an asterisk (*) as a wildcard in your search term.

The Recent Contacts section of the Contact Search window also displays a list of recently opened contacts you can select.

3 Click the CX State drop-down menu and select from the following options (by default, all **states** are selected).

- ▷ Select All
- ▷ Service State
- ▷ Outreach State
- ▷ Opportunities State

4 Click the Search button. The contacts that match the search criteria are returned on the Contact Search window.

Note If only one contact matches the search criteria, that contact is automatically selected and the Contact Search window closes.

5 Select the contact you want to associate with the open record and click the Select button. The Contact Search window closes and the contact appears on the Contacts tab of the record (for organizations and contact lists), in the Contact field (for tasks and assets), or both (for incidents or opportunities).

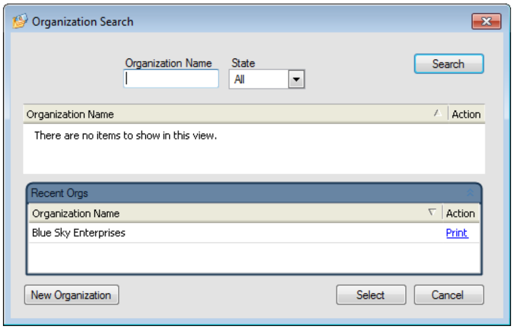
Or

If the contact does not appear in the list, click the New Contact button at the bottom left of the window to open a new contact sub-tab. Complete the fields and click the OK button. Refer to step 2 of To add a contact.

Note When the new contact sub-tab opens, it is populated with any search terms you entered in the First Name, Last Name, Email, Phone, and Postal Code fields in the Search window. If you are adding a secondary contact to the record, the address and organization name fields (including Postal Code) are populated from the primary contact's organization.

To search for an organization from an open record

1 On an open contact, opportunity, task, or asset, click the Search button to the right of the Organization field. The Organization Search window opens.



2 Type the first few characters of the organization's name in the Organization Name field. An implied wildcard is used, so all organizations that begin with the letters you type are returned in the search results.

Tip The Recent Orgs section of the Organization Search window also displays a list of recently opened organizations you can select.

3 Click the State drop-down menu and select from the following options (by default, all **states** are selected).

- Select All
- Service State
- Outreach State
- Opportunities State

4 Click the Search button. The organizations that match the search criteria are returned on the Organization Search window.

Note If only one organization matches the search criteria, that organization is automatically selected and the Organization Search window closes.

5 Select the organization you want to associate with the open record and click the Select button. The Organization Search window closes and the organization appears in the Organization field.

Or

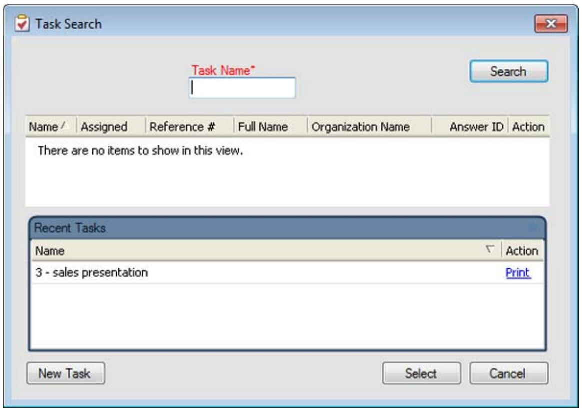
If the organization does not appear in the list, click the New Organization button to open a new organization sub-tab. Complete the fields and click the OK button. Refer to step 2 in To add an organization.

Note This procedure also applies when you want to search for and associate an organization on a new contact sub-tab opened from the Contacts tab of an incident, opportunity, organization, or contact list.

To search for a task from an open record

1 On an open answer, contact, incident, opportunity, or organization, click the Tasks tab.

2 Click the Add button and select Add Existing. The Task Search window opens.



3 Type the first few characters of the task name in the Task Name field. An implied wildcard is used so all task names that begin with the letters you type are returned.

Tip The Recent Tasks section of the Task Search window also displays a list of recently opened tasks you can select.

4 Click the Search button. The tasks that match your entry are returned on the Task Search window.

Note If only one task matches the search criteria, that task is automatically selected and the Task Search window closes.

5 Select the task you want to associate with the open record and click the Select button. The Task Search window closes and the task appears in the list of tasks on the Tasks tab.

Or

If the task does not appear in the list, click the New Task button to open a new task sub-tab. Complete the fields and click the OK button. Refer to step 2 in To add a task.

Working with records

You can work with different records when you are not actually changing the information in them. By understanding standard **workspaces** and how to open, forward, copy, and print records, you will become more efficient while working in the product suite.

Standard workspaces

Oracle Service Cloud provides a standard workspace for each record type (answers, assets, contacts, incidents, opportunities, organizations, and tasks), plus a standard workspace for quotes, quote products, and service opportunities on their respective windows. Oracle Service Cloud also contains standard chat workspaces for staff members working in Oracle Right-Now Chat Cloud Service (Chat) and standard mobile contact and mobile incident workspaces when Mobile Agent App is enabled. Each workspace defines the buttons and tabs on the ribbon, the buttons on the Quick Access toolbar, which fields are available, what toolbars and buttons are displayed on record tabs, and how the information is organized on the **content pane**.

Oracle Service Cloud also provides standard multi-edit workspaces for each record type. Each multi-edit workspace defines fields for updating more than one record in a single operation instead of performing the same action on each individual record.

Your organization may use the standard workspaces, or your administrator may have created one or more custom workspaces. No matter which workspaces your organization uses, your profile contains a workspace for each record type you have permission to access (and quotes, service opportunities, and chat workspaces, if applicable). Keep in mind that the workspace your profile uses may display a different **ribbon**, different buttons on the Quick Access toolbar, a different combination of fields, or a different location for fields on the content pane.

Tip You can drag and drop record tabs to rearrange their order on each workspace. If you rearrange tabs, the tab order for that workspace is stored in the local settings on your workstation until you reset the local settings. Refer to Changing your personal settings.

For information about working with specific records and a description of their standard workspaces, refer to any of the following references.

- **Organizations**—Refer to Organizations.
- **Contacts**—Refer to Contacts.
- **Tasks**—Refer to Tasks.
- **Incidents**—Refer to Incidents.
- **Answers**—Refer to Answers.
- **Opportunities**—Refer to Opportunities.
- **Assets**—Refer to Asset and Product Registration.

Opening records

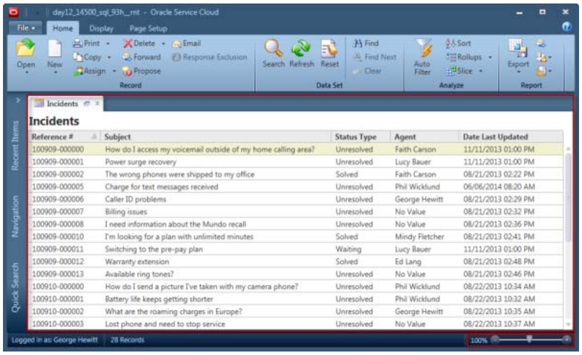
If your duties include responding to customers, publishing answers to your website, working with opportunities and sending quotes to customers, or keeping customer information up-to-date, you can easily access information and take the actions you need. The procedure to open records is the same for all record types (incidents, answers, contacts, opportunities, organizations, tasks, and assets).

To open an incident for editing

1 Click the Incidents button on the **navigation pane**.

2 Double-click an incidents report. The report opens on the **content pane**.

Tip The default setting requires that you double-click an item to open it. However, you can change the default so that items open with a single click. Refer to [Changing navigation pane settings](#).



You can zoom in and out of a report using the slider on the bottom right of the content pane. Click the plus sign to zoom in on specific details or click the minus sign to zoom out to see more of the report. You can also drag the slider left or right to decrease or increase magnification.

3 Right-click an incident and select Open > Incident. The content pane populates with the incident's information.

Additional ways to open a record include the following options.

- Selecting the record and clicking the Open button on the **ribbon**
- Clicking Open in the Action column

- Double-clicking the record

Forwarding records

There might be times when you need to forward an incident, opportunity, task, or asset. For example, you might need information from another staff member before you can reply to a customer's incident. Or maybe you need to forward an opportunity for review and approval. When you forward a record, you can forward any files that are attached to the record, send response files, and add comments. You can also customize how the forwarded information is displayed. See Customizing messages.

Note If you are adding a record instead of editing an existing one, you must first save the record before you can forward it.

To forward a record

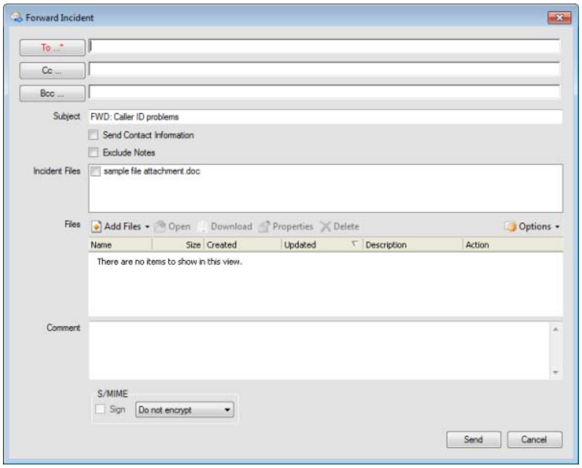
1 Right-click a record in a report and select Forward. The Forward window opens.

Or

With a record selected in a report, click the Forward button on the ribbon.

Or

With a record open, click the Forward button on the ribbon.



2 Enter the following field information.

Table 116: Forward Window Description

Field/Button	Description
To ...*	Click this button to open the Select Names window. Select the name of the recipient and click the To button to insert the name in the field. (To select additional recipients, press **Ctrl** while making your selections.) After selecting the recipient, click the OK button on the Select Names window. Refer to Selecting recipients. **Note:** You can also type the email address of the recipient in the text field.
Cc ...	Click this button to open the Select Names window, select the recipient's name, and click the Cc button. **Note:** All recipients are able to see the email addresses in the Cc field.
Bcc ...	Click this button to open the Select Names window, select the recipient's name, and click the Bcc button. **Note:** No recipients are able to see the email addresses in the Bcc field.
Subject	The subject for the incident, opportunity, task, or asset appears in this field.
Send Contact Information	Select this check box to send the primary contact information with the record. The information that is sent includes the contact's email address, first and last names, contact type, title, any phone numbers that have been entered, and any custom field information. **Note:** This check box appears only if you are forwarding an incident.
Exclude Notes	Select this check box to exclude any notes in the incident thread from being forwarded with the incident. **Note:** This check box appears only if you are forwarding an incident. If this check box is selected, the changes are retained when forwarding other incidents.
Incident Files	Files that are attached to an incident you are forwarding are listed in this field. Select the check box next to any file you want to forward with the incident. **Note:** This field is not visible when forwarding opportunities, tasks, or assets or if no files are attached to the incident.

Table 116: Forward Window Description (Continued)

Field/Button	Description
Opportunity Files	Files that are attached to the opportunity are listed in this field. Select the check box next to any file you want to forward with the opportunity. **Note:** This field is not visible when forwarding incidents, tasks, or assets or if no files are attached to the opportunity.
Task Files	Files that are attached to the task are listed in this field. Select the check box next to any file you want to forward with the task. **Note:** This field is not visible when forwarding incidents, opportunities, or assets or if no files are attached to the task.
Files	Click the Add Files button and select Browse or Search to attach files to the e-mail containing the forwarded record. See To browse for a file to attach to a record or To search for a file to attach to a record. **Note:** Files added in this field are not added to the record.
Comment	Type any comments you want to forward with the record in this field. **Note:** Text entered in the Comment field will display as the body of the email that is sent to recipients.
S/MIME	Select one or both of the security options under S/MIME.
Sign	Select this check box to sign the email with the mailbox's signature. **Note:** The Sign check box is enabled only if the outgoing email is sent from a mailbox that has a private key and certificate associated with it. Refer to Configuring S/MIME security.
Do not encrypt	Click this drop-down menu and select one of the encryption options. • Do Not Encrypt • Encrypt When Possible • Always Encrypt. **Note:** Encryption is supported if a destination email address has a public key associated with it.

3 Click the Send button to forward the record and any selected files.

❖ Message Templates

❖ Selecting recipients

- ❖ To browse for a file to attach to a record
- ❖ To search for a file to attach to a record

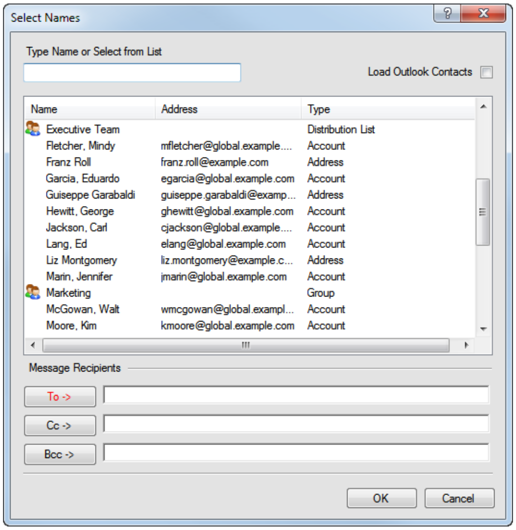
Selecting recipients

When you forward records, you can open the Select Names window from the To, Cc, and Bcc fields. From this window, you can select from folders containing all currently enabled staff accounts, staff account groups, **distribution lists**, and email addresses from all distribution lists.

Note If your administrator has not added distribution lists, the Distribution Lists and Addresses folders will not display. Refer to Managing distribution lists.

To select a recipient

1 Click the To, Cc, or Bcc buttons to open the Select Names window.



2 To import your contacts from the default Contacts folder in Outlook, select the Load Outlook Contacts check box. This is useful for displaying contacts that are not included in Oracle Service Cloud.

3 Select the name of the recipient and click the To, Cc, or Bcc button to insert the name in the field. To select multiple recipients, press **Ctrl** while making these selections.

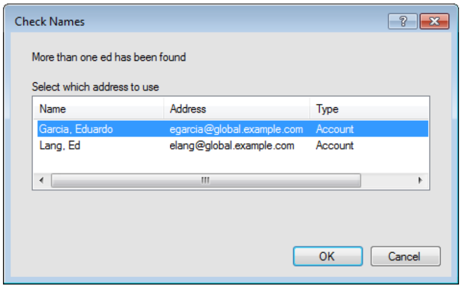
Tip You can type the first few letters of the name in the field at the top of the Select Names window. The first name in the list that matches the letters you typed is highlighted. Notice that this name may be an individual's name, an email address, or a group or distribution list.

4 Click the OK button to close the Select Names window and return to the Forward window.

5 Click the Send button to forward the record to the recipients you selected and close the Forward window.

Checking names

When forwarding records, if you type a name, a partial name, or an email address that is not found in the **knowledge base**, and then tab to the next field or click the Send button, the Check Names window opens.



This window displays suggestions for staff accounts, staff account groups, distribution lists, and email addresses based on what you entered in the To, Cc, or Bcc fields. (In this example, the name John was entered.) From this window, you can double-click a list item to select a recipient or click the Cancel button to return to the previous window and re-enter the name.

Copying records

You might want to copy a record to use as a starting point for creating another record. For example, assume you have a contact record that is associated with an organization. When you add another contact from the same organization, you might want to copy the original contact and edit the names to avoid having to re-enter organization information.

To copy a record

1 With a report open on the **content pane**, right-click the record you want to copy and select Copy. The Copy window opens.

Or

With the record open, click the Copy button on the **ribbon**.

2 Select the check box for each of the data items you want copied with the record. The following table shows the available options for each type of record. The answer items that are not check boxes are noted in the table.

Table 117: Copy Options for Each Type of Record

Record Type	Copy Options
Answer	• Access Level—Select from drop-down menu. • Language • Status—Select from drop-down menu. • Copy File Attachments • Copy Notes • Create Sibling Relationship—Select this check box to create a sibling relationship between the answer and the copy. • Save and Close Copies—Select this check box to automatically save and close copies of answers.
Asset	No copy options are displayed when copying an asset record.
Contact	• Notes • File Attachments • Contact Lists
Incident	• Threads • Incident Contacts • File Attachments **Note:** When copying an incident, the original reference number is prepended to the incident subject of the copied incident for identification purposes. When copying an incident that is associated with a social **channel**, the thread type is automatically set to Email.

Table 117: Copy Options for Each Type of Record (Continued)

Record Type	Copy Options
Opportunity	• Notes • Opportunity Contacts • Opportunity Competitors • File Attachments • Quotes • Quote Products
Organization	• Notes • Organization Addresses • File Attachments
Task	• File Attachments • Notes

3 Edit the copied record as necessary.

4 Click the Save and Close button on the ribbon to save your edits to the copied record.

Printing records

When you want a hard copy of a record, you can print it from the open record or from a report that includes the record.

To print a record

1 Right-click the record on a report and select Print. The Print Dialog window opens.

Or

With the record open, click the Print button on the **ribbon**.

2 Click File and select Print. The Print window opens.

3 Click the Print button to close the Print window and print the record.

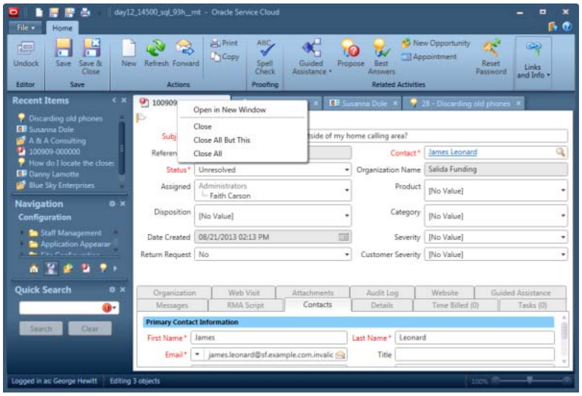
Tip When you print incidents, contacts, tasks, opportunities, answers, organizations, assets, or quotes, the format is defined by print pages in message templates. You can customize these templates from the Message Templates editor. See Print templates.

Closing multiple records simultaneously

You can close multiple open records at the same time using the right-click menu.

To close multiple records simultaneously

With multiple records open on the content pane, right-click an individual tab and select one of the following options.



- **Open in New Window**—Opens the active tab in a separate window.
- **Close**—Closes the active tab. You can also press **Ctrl+w** or **Ctrl+F4** to close the active tab.
- **Close All But This**—Closes all open tabs except the active one.
- **Close All**—Closes all tabs.

Note Right-click options differ for workgroups. For example, when you right-click the tab of the primary record in a workgroup, your only option is to close all associated records in the workgroup. Refer to [Creating and using workgroups](#).

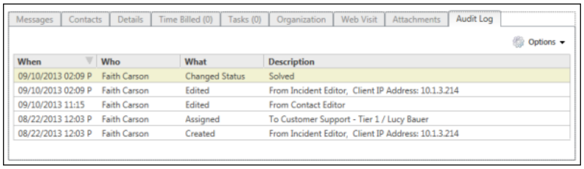
Audit logs

Tip You can click a column heading to sort the list by the column you select. Click the column heading again to reverse the list.

When you click the Audit Log tab on a record, you can see if other staff members have worked on the record. You can view each action taken on the record, when it was updated, by whom, the action performed, and a description of the action (for example, sending a response). This information is valuable for keeping track of interactions with customers, especially if more than one staff member has worked on the same record. The audit log shows any automatic changes that resulted from the application of business rules or through configuration settings. The audit log for incidents and contacts also shows any actions taken by the customer on the **customer portal**. Refer to Your Account Pages.

In addition to records (answers, assets, contacts, incidents, opportunities, organizations, and tasks), Oracle Service Cloud provides an audit log for campaigns, contact lists, documents, mailings, segments, surveys, and quotes.

Note The Audit Log tab for quotes contains additional information. Refer to Viewing the quote audit log.



Columns in the audit log are described in the following table.

Table 118: Audit Log Description

Column	Description
When	Displays the time and date the action was performed on the record or other item. By default, the most recent action is listed first.
Who	Displays the staff member who performed the action. If Administrator is listed in this column, the action was the result of a business rule or an automatic update by Oracle Service Cloud.
What	Displays the type of action performed.
Description	Displays a brief description of the action performed or provides additional information about the action.

Tip You can click a column heading to sort the list by the column you select. Click the column heading again to reverse the list.

Updating records

There are several operations that are similar for different kinds of records. Among those operations are assigning staff members and adding **flags** to records, checking the spelling, attaching files, including browsing and searching for files to attach, and working with multiple records.

Assigning records

Sometimes you might need to assign a record to another staff member. For example, a task might have been incorrectly assigned to you or you need a colleague to complete part of an incident before you can respond to a customer. Or maybe you are creating contact and organization records and need to assign a salesperson to the account based on their location.

Note The staff member you assign the record to will receive a notification. Refer to Opening your notifications.

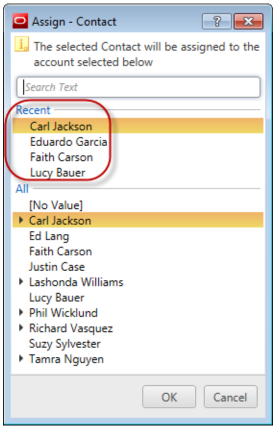
To assign a record from a report

1 With a report displayed on the **content pane** and a record selected in the report, click the Assign button on the **ribbon**. The Assign [Record] window opens to display a list of staff members who can be assigned the record. (The list shows only those staff members who have permission in their profile to work on that type of record.)

Or

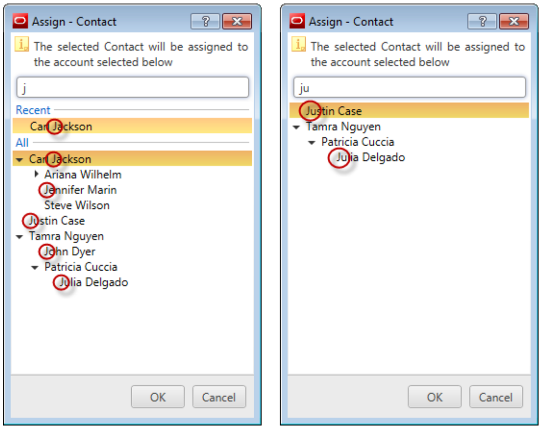
Right-click the record in the report and select Assign or Assign > [Type of record].

2 Select a staff member from the Recent list, if any appear. Up to ten of the most recent selections are shown.



Or

Use the auto-complete function to quickly find a name in the list of staff members. Begin typing the staff member or group name you want to assign the record to in the search field above the list. As you type, the list of names is filtered to show only names that contain the sequence of letters you typed, and the focus is on the first name on the filtered list. Type additional letters of the name to narrow the list further.



Note For hierarchical menus, matching names will have all of their ancestors shown in the list, and they will be expanded. The children will also be in the list, but they are collapsed.

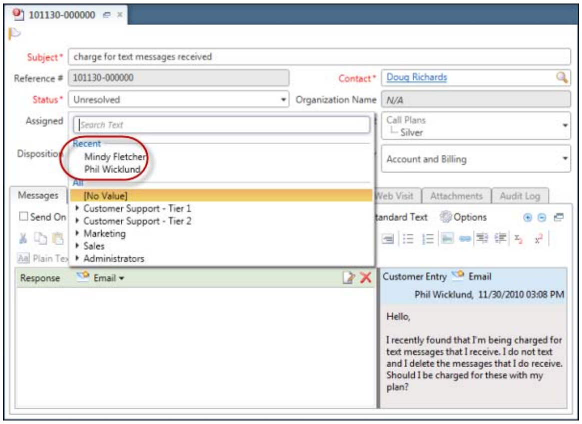
To manually search for a name in the list, click the right arrow next to a group or manager name to display the names below it.

3 With the staff member you want to assign the record to highlighted, press the **Enter** key or click the OK button. When you open the record, the staff member or group you selected will appear in the Assigned field (for answers, incidents, opportunities, and tasks) or the Salesperson field (for contacts and organizations).

To assign an open record

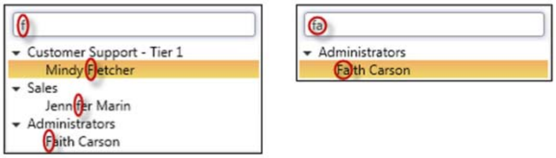
1 Click the Assigned field drop-down menu. (For a contact or organization, click the Salesperson field drop-down menu.)

2 Select a staff member from the Recent list, if any appear. Up to ten of the most recent selections are shown.



Or

If you are assigning an open contact, incident, organization, or task, use the auto-complete function to quickly find a name in the list of staff members. Begin typing the staff member or group name you want to assign the record to in the search field above the list. As you type, the list of names is filtered to show only names that contain the sequence of letters you typed, and the focus is on the first name on the filtered list. Type additional letters of the name to narrow the list further.

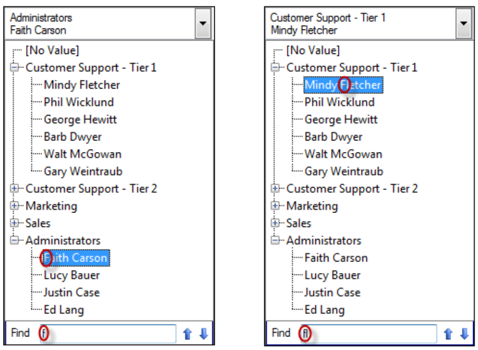


Note For hierarchical menus, matching names will have all of their ancestors shown in the list, and they will be expanded. The children will also be in the list, but they are collapsed.

To manually search for a name in the list, click the right arrow next to a group or manager name to display the names below it.

3 If you are assigning an open answer or opportunity, begin typing the name of the staff member or group you want to assign the record to in the Find field below the list. As you type, the focus moves to the first name on the list that contains the sequence of letters you typed. Type additional letters of the name to narrow the list further.

Note List hierarchy is used in determining match precedence.



a To find the next name that matches in the list, click the down arrow next to the Find field.

b To find a previous matching name, click the up arrow.

4 With the staff member you want to assign the record to highlighted, press the **Enter** key to select it.

Or

Click a staff member or group name from the list to select it.

The menu closes and your selection appears in the field.

Flagging records

The standard workspace for answer, incident, opportunity, contact, and organization records includes a flag that allows you to define the record's priority and type a message regarding the record. When other staff members open the record, the flag and text you added appear on the record.

To add a flag to a record

1 Click the area next to the white flag at the top of the **content pane**. A menu displays options for selecting the importance of the flag and editing text in the banner.

2 To change the importance of the flag from No Importance, select red (High), blue (Medium), or green (Low).

3 To add text to the flag, select Edit Flag Text and type text in the Edit Flag window that opens. Click the OK button to close the Edit Flag window.

Spell checking

Oracle Service Cloud uses three methods of spell checking. The first is an inline spell checker that automatically identifies misspelled words on various tabs and fields as you type. The second method is manual and checks any fields for which the spell check property has been selected. The third method automatically checks your spelling when you save the record.

The spell checking methods in use depend on the selections your administrator used to configure the **workspaces** for adding and editing records. On any workspace, it is possible that none of the fields have spell check enabled, that some fields are spell checked automatically, or that fields are spell checked only when you click the Spell Check button on the **ribbon**.

Important If the language of an incident is different from the language of the **interface** from which the incident response is created, the spell checker uses the dictionary that is associated with the language specified in the incident's Language field. If this value is changed during an edit of the incident, the dictionary for the newly selected language is used to check the spelling. In addition, if an incident is being edited on an interface that supports spell checking, but the incident has a language that does not support spell checking, then the Spell Check button is disabled.

❖ Creating custom workspaces

Inline spell checking

If your administrator has configured inline spell checking for fields in the **workspaces** you use, any text you type in those fields is checked in real time. Oracle Service Cloud automatically corrects any misspelled words you have added to your dictionary as well as any misspelling that has only one alternate spelling suggestion. The spell checker identifies misspelled words by underlining them with a wavy red line.

Note Words added during a spell check session are saved to your local dictionary. Future spell checking is performed using the user dictionary on the server as well as the local dictionary on your workstation.

Inline spell checking can occur when you type information on the **incident thread**, on the Notes tab for contacts, organizations, answers, opportunities, tasks, and in survey questions. When you move the cursor out of a field that contains a misspelling, the indicator for misspelling (the wavy red line) no longer appears. But it reappears when you move the cursor back to the field containing the misspelling.

To correct an inline misspelling

Right-click the misspelled word and select one of the following options.

Table 119: Spell Check Options Description

Option	Description
Suggested alternate words	Select one of the five suggestions for alternate spellings. The misspelled word is replaced with the one you selected.
AutoCorrect	Select AutoCorrect and a suggested alternate word. Whenever Oracle Service Cloud encounters this particular misspelling, it automatically replaces it with the word you selected.
Ignore All	Select this option to ignore all occurrences of this spelling in the record you are editing.
Add to Dictionary	Select this option to add the word to your personal dictionary. It will no longer be flagged as misspelled.

Manual spell checking

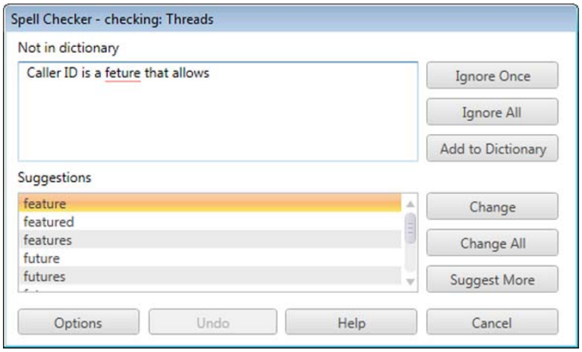
Rather than correcting each misspelled word individually as you work, you may prefer to wait until you are done typing all information for the record before you check the spelling.

Important Only the fields that are designated for spell checking are checked. Misspelled words in other fields will not be identified. If no fields have spell check properties, a message will let you know there are no fields marked for spell check.

In order to check spelling manually, the **workspace** ribbon must contain the Spell Check button. **Ribbons** are defined when your administrator creates workspaces, which are then assigned to your **profile**.

To check spelling manually

1 Click the Spell Check button. The Spell Checker window opens, and the first misspelled word is highlighted in the Not in Dictionary field.



2 Select one of the following options.

Table 120: Spell Checker Window Options Description

Option	Description
Ignore Once	Click this button to ignore this occurrence of the misspelled word.
Ignore All	Click this button to ignore all occurrences of the misspelled word during your current session.
Add to Dictionary	Click this button to add the word to your local dictionary.
Change	Click this button to replace this occurrence of the misspelling with the suggestion you select from the options in the Suggestions field.
Change All	Click this button to replace all occurrences of the misspelling with the suggestion you select from the options in the Suggestions field.
Suggest More	Click this button to find additional suggested replacements for the misspelled word.
Options	Click this button to select the spelling options you want the spell checker to use when it checks your spelling.
Undo	Click this button to undo the most recent change to a word. Additional button clicks undo one change at a time, in reverse order of the original changes. **Note:** Only the changes that have been made since the Spell Checker window was opened can be undone.
Help	Click this button to open help information for the spell checker.

Table 120: Spell Checker Window Options Description (Continued)

Option	Description
Cancel	Click this button to cancel the spell check.

3 Click the OK button at the “Spell check complete” message.

To set spell check options

1 Click the Spell Check button. The Spell Checker window opens.

2 Click the Options button. The Spell Checker Options window opens.

3 Select any spelling options you want used during the spell check and clear any you do not want used.

Note You must select either Phonetic Suggestions or Typographical Suggestions (or both) in order for the spell checker to return suggestions for misspelled words.

4 Select an option to specify speed and accuracy of the spell check.

5 Click the OK button to save your changes and close the Spell Checker window.

Automatic spell checking

Your administrator may have configured your **workspace** to automatically check spelling when you save a record. If this applies to your workspace and no spelling errors are found, you will not see any evidence of the spell checking process when you save the record. If the record contains misspellings, the Spell Checker window opens and you can make corrections as described in Manual spell checking. If you click the Cancel button to stop checking the record’s spelling, a message notifies you and asks if you still want to save the record. Click the Yes button to cancel the spell checking and save the record.

Note Your administrator may have disabled your ability to cancel an automatic spell check.

Attaching files to records

Using the Attachments tab, you can attach files to records—answers, contacts, incidents, opportunities, organizations, and tasks—as well as to campaigns, surveys, mailings, and documents. The Attachments tab lets you add files containing information that may not fit neatly into a record. For example, you might want to attach a file that contains graphic elements to an incident.

Note When one or more files are attached to a record, the Attachments tab displays a paper clip icon.

The Attachments tab contains an attachments report, which is a list of all files attached to the record. For each attached file, the report contains the file name, size, dates the file was created and updated, and a description of the file.

Tip You can drag file attachments located on your workstation and drop them onto any incident, answer, opportunity, contact, organization, or task if the Attachments tab is active.

Answer file attachments

Files that are attached to answers are not the same as file attachment answers. A file that is attached to an answer on the Attachments tab appears as an attachment within the answer on the Answers page, and is used to provide additional information. A file attachment answer appears as a clickable attachment on the Answers page, and displays the full answer content when clicked. Refer to Adding file attachment answers.

Sibling answer attachments with access levels that are at or below the contact's SLA are visible to the contact. Refer to Sibling answers.

Incident file attachments

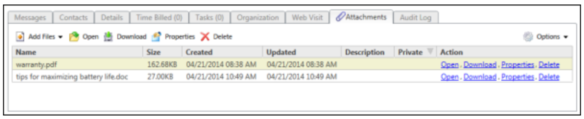
Files that are attached to incidents are not the same as files attached to incident responses. When you attach a file to an incident on the Attachments tab, that file becomes permanently attached to the incident. Likewise, if a customer attaches a file to an incident when submitting a question, that attachment also becomes permanently attached to the incident. You and other staff members can access the files from the Attachments tab of the incident, while the customer can access them from the Your Account page on the **customer portal**. In addition, some incident file attachments may be accessed from the Messages tab. Refer to Attaching files to incidents.

Note HTML email updates that are larger than the maximum description size are attached to the incident as an HTML file instead of as a text file.

In contrast to incident file attachments, files that you attach to an incident response are attached to that message only and are not stored permanently with the incident. Attaching a file to an email response lets the customer open the file directly from the email client instead of having to log in to the customer portal to view it, but there will be no record in the knowledge base or the audit log that a file was sent to the customer. See To attach files to an incident response.

Viewing the attachments report

The attachments report on the Attachments tab contains columns that provide the following information about each file attachment: file name, file size, date and time the file was created, date and time the file was updated, description, file visibility (Private column), and links for opening, downloading, and deleting the attachment. The Private column appears only for incidents and answers and displays the visibility of the attachment on the **customer portal**. Refer to Viewing attachment properties.



Attachments tab toolbar

The Attachments tab contains a toolbar for working with attachments associated with a record. The following table describes the buttons on the toolbar of the Attachments tab.

Table 121: Attachments Tab Toolbar Description

Button	Description
Add Files	Click this button and select Browse or Search to find and attach a file.

Table 121: Attachments Tab Toolbar Description (Continued)

Button	Description
Browse	Select this option to view the files and folders on your workstation and select one or more to upload and attach to the record. See To browse for a file to attach to a record.
Search	Select this option to specify a directory, all or part of a file name, and type of file. The files that match these criteria are displayed so you can select the ones you want to upload and attach to the record. See To search for a file to attach to a record.
Open	Click this button to open the file for viewing.
Download	Click this button to download the file attachment and save the file to the location you specify on your workstation.
Properties	Click this button to view or edit the properties of a file attachment. See Viewing attachment properties.
Delete	Click this button to remove the selected file attachment from the record.

Browsing and searching for files to attach to a record

When you want to attach a file to a record, you can locate the file by browsing or searching. The following procedures describe each method.

Note You can attach an unlimited number of files to a record, but each file can be no larger than 20 MB by default. Contact your administrator to learn if additional file size limitations exist on your system.

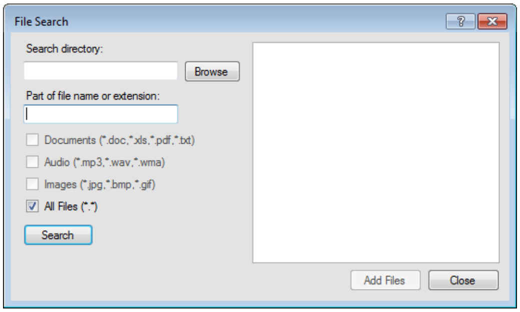
To browse for a file to attach to a record

1. Click the Attachments tab.
2. Click the Add Files button and select Browse. A window opens and displays the files and folders on your workstation.
3. Select the file to attach.
4. To attach additional files, press **Ctrl** while selecting the files.
5. Click the Open button to attach the file to the record.

To search for a file to attach to a record

1 Click the Attachments tab.

2 Click the Add Files button and select Search to open the File Search window.



3 Enter any or all of the following field information.

Table 122: File Search Window Description

Field	Description
Search directory	Type the name of the directory where you want to search for the file, or click the Browse button.
Browse	Click the Browse button to display the file structure and make a selection from the list of available directories.
Part of file name or extension	Type all or part of the file name in this field. **Note:** This field uses an implicit wildcard at the end of the entry.
Filters	To select a filtering option for narrowing the search, clear the check box for All Files (*.*), which is selected by default.
Documents (*.doc, *.xls, *.pdf, *.txt)	Select this check box to search for document files.
Audio (*.mp3, *.wav, *.wma)	Select this check box to search for audio files.
Images (*.jpg, *.bmp, *.gif)	Select this check box to search for graphics files.

Table 122: File Search Window Description (Continued)

Field	Description
All Files (*.*)	Select this check box if you do not want to restrict the search by file type.

4 Click the Search button to display a list of files that meet the search criteria.

5 Click a file to select it for uploading.

6 To attach additional files to the record, press **Ctrl** while selecting the files.

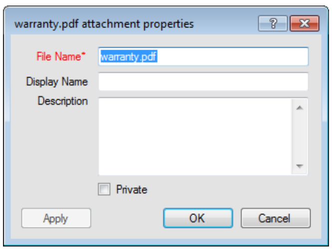
7 Click the Add Files button to upload the selected file, attach it to the record, and close the File Search window.

Viewing attachment properties

You can view properties for file attachments. You can also add file information and designate whether to **index** the file for answer file attachments.

To view attachment properties

1 Select a file attachment from the list and click the Properties button on the Attachments tab toolbar. The following figure displays the attachment properties for a file that is attached to an answer.



2 Enter the following field information.

Table 123: Attachment Properties Window Description

Field	Description
*File Name	This field displays the file name. You can change the name of the file.
Display Name	Type the name you want the file to display as on the **customer portal**.
Description	Type a description of the file to provide more information about it.
Private	Select this check box to make the attachment private. **Note:** The Private check box appears only for files that are attached to answers and incidents. Customers do not see private attachments on the customer portal.
Indexed	Select this check box to index the file. Text contained in the attachment is searched when customers perform a search on the customer portal. **Note:** The Indexed check box appears only for files that are attached to answers.

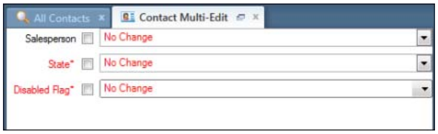
3 Click the OK button to close the Attachment Properties window.

Updating multiple records

Multi-editing allows you to update more than one record in a single operation instead of performing the same action on each individual record. This feature saves time when you need to make the same change to several records. For example, you might want to add the same **flag** to several records.

Note In addition to opening a multi-edit **workspace** that lets you make the same change to multiple records simultaneously, you can also open multiple records in a single operation by right-clicking the selected records, selecting Open Separately, and selecting the type of record you want to open. Rather than opening a multi-edit workspace, as described in To edit multiple records, this procedure opens each record separately. You can then edit each record independently of the others.

The changes you can make to multiple records depend on the workspace defined by your administrator. The following figure, for example, shows the standard workspace for multi-editing contacts.



The following table lists the fields you can edit for each record type when working on that record's standard workspace. If you are working on custom workspaces, the fields that are editable depend on the workspace your administrator configured and may include more or fewer fields than those available on the standard workspace for that type of record.

Table 124: Available Fields on the Standard Workspaces

Standard Multi-Edit Workspace	Fields Available for Multi-Editing
Answer	• Status • Assigned • Review On • Publish On • Notes • Products/Categories
Asset	• Organization • Contact • Product • Status • Date Purchased • Date Installed • Date Retired • Price • Description
Contact	• Salesperson • State • Disabled Flag

Table 124: Available Fields on the Standard Workspaces (Continued)

Standard Multi-Edit Workspace	Fields Available for Multi-Editing
Incident	• Assigned • Product • Status • Category • Queue • Disposition • Messages tab **Note:** S/MIME signing and encryption of responses are disabled when you edit multiple incidents simultaneously.
Opportunity	• Organization • Status • Strategy • Stage • Manager Forecast • Rep Forecast • Forecast Close • Assigned • Date of Initial Contact • Recall • Date Closed • Closed Value • Summary
Organization	• Salesperson • State
Task	• Assigned • Due Date • Planned Completion • Date Completed • Status • Priority • Percent Complete • Task Type (Opportunity, Incident, Answer, Campaign, Mailing, Survey, Document)

To edit multiple records

1 Double-click a report to display a list of records.

Note Remember, you can specify unique criteria to search for all records you want to update. Refer to Searching for records from a report.

2 Press **Ctrl** while selecting each record you want to edit.

3 Click the Open button on the **ribbon**. The fields that you can edit for the type of record you are working with display on the **content pane**.

4 Edit the records. Depending on the type of field, you can accomplish this in one of several ways.

Note The drop-down menus for all fields default to No Change. To remove the prior field entries for multiple records, select the check box next to the field you want to change.

a To change a field associated with a drop-down menu, click the drop-down menu and select an option.

Tip A shortcut is available for re-assigning multiple answers, contacts, incidents, opportunities, organizations, or tasks. Select the records from a report, click the Assign button on the ribbon, and select a staff member or group from the Assign window. Refer to steps through 3 in To assign a record from a report.

b To change a date field, click the drop-down menu associated with the field to open the current month's calendar and select a date. If necessary, use the arrows at the top to change the month before clicking a day.

c To change a search field, click the Search button (the magnifying glass to the right of the field), enter the search criteria in the window that opens, click the Search button, and select an option from the list of displayed results.

d To change a text field (such as the Response field on the Messages tab of the incident workspace), type the new entry for the field.

Important If a field is required when editing a record, it is also required for editing multiple records of the same type. It is possible, however, to select a value of "No Value" as a valid entry on the multi-edit workspace. The next time you edit one of the records separately, you are required to select a value for the field.

5 Click the Save and Close button to save your changes.

To delete multiple records

1 Double-click a report to display a list of records.

Caution Deleting records can affect other staff members within your organization. Deleting contacts, for example, permanently removes not only the contacts from the knowledge base, but also all incidents and opportunities for which the contact is the primary contact. Be sure you understand the consequences of deleting records before you do so. Refer to Deleting contacts.

2 Press **Ctrl** while selecting each record on the **content pane** you want to delete.

3 Click the Delete button on the report **ribbon**.

4 Click the Yes button at the Delete message to delete the selected records.

To forward multiple records

1 Double-click a report to display a list of records.

2 Press **Ctrl** while selecting each record on the **content pane** that you want to forward.

3 Click the Forward button on the report **ribbon**.

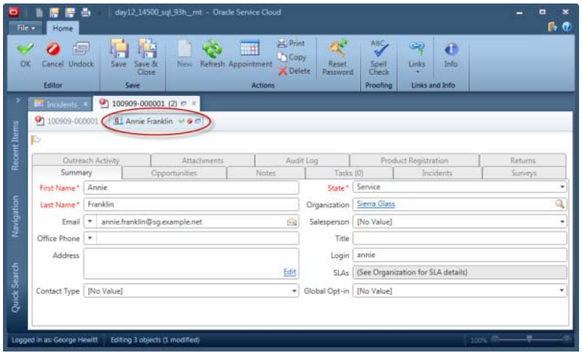
4 Follow the procedure for forwarding single records as described in To forward a record.

Note All of the files attached to all of the incidents you selected appear in Incident Files. Select the check box for every file attachment you want to forward with the associated incident. Recipients receive individual emails for each incident you forward. If an incident has file attachments and you selected the check boxes for those attachments, the forwarded incident contains the attachments.

Creating and using workgroups

Oracle Service Cloud helps you manage multiple open records without confusion by grouping all associated records into a single *workgroup*. Workgroups apply to incidents, answers, campaigns, contacts, contact lists, documents, mailings, opportunities, organizations, surveys, and tasks. When you open any type of record and then open other records associated with the initial record, you create a workgroup. The set of records in a workgroup can be saved and closed in a single operation.

For instance, the standard incident **workspace** allows you to add or edit other information associated with the incident, including contacts, organizations, and tasks. When you open a record associated with the open incident (for example, opening the contact record by clicking the contact name and selecting Open), the record opens on a sub-tab below the incident's content pane tab and becomes the active tab. This creates a workgroup consisting of an incident and a contact record.



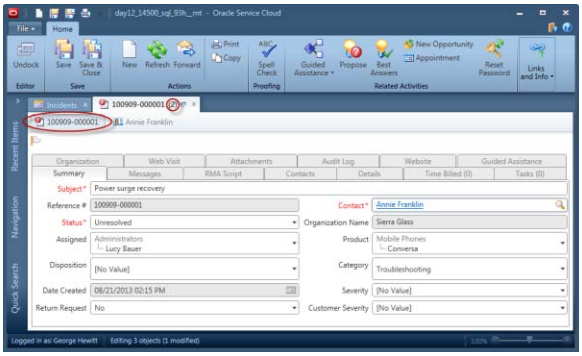
Tip Typically, you will also have an incidents report open, which you will use to open each incident.

Each time you add or edit an additional record associated with the incident, it opens on another sub-tab and becomes part of the workgroup. You can move easily between the records in the workgroup by clicking on the sub-tabs.

A record sub-tab contains buttons that correspond to the buttons on the Editor group of the ribbon: OK, Cancel, and Undock. All sub-tabs, except for the primary record (in this case, the incident), contain these buttons for taking actions on the individual record within the workgroup.

- **OK**—Clicking this button accepts changes made to the record and closes the sub-tab. However, it does not save changes to the database until you click the Save or Save and Close button on the ribbon.
- **Cancel**—Clicking this button closes the sub-tab if you haven't made changes to the record. If you have made changes, a message asks if you want to discard your changes.
- **Undock**—Clicking this button undocks the record from the editor and opens it in a new window. It remains in the workgroup. You can move between working in the window and working with other records in the workgroup without closing the window. (To redock the window to the editor, click the Dock button on the window.).

Continuing the example of the incident workgroup, clicking the incident sub-tab moves the focus to the incident in the workgroup. Since the incident is the primary record in the workgroup, there are no buttons on the sub-tab. Notice that the initial content pane tab for the primary record shows the number of records in the workgroup in parentheses.



Expanded tooltips on Save and Save and Close buttons on the ribbon and Quick Access toolbar let you know which records will be saved by each action.

- **Save**—Clicking this button saves all records in the workgroup and all editors remain open.
- **Save and Close**—Clicking this button saves all records in the workgroup but closes all editors as well.

In addition, the save icon displays on each individual record in the workgroup when you hover over one of the save buttons, another visual indicator of which records will be saved.

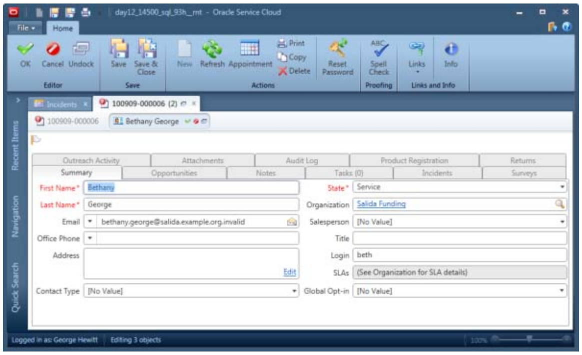
The following procedure is an example of creating an incident workgroup. Keep in mind that you can open any record for the incident, not just the ones identified in this procedure. Also keep in mind that the steps are the same for creating other types of workgroups.

To create an incident workgroup

1 Right-click an incident in an incidents report and select Open > Incident. The incident displays on the **content pane**.

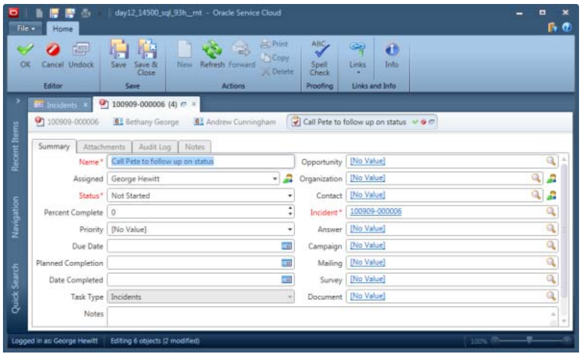
2 Click the Contacts tab.

3 Right-click a contact and select Open. The contact opens on a sub-tab.



4 To open additional records associated with the incident, repeat steps 2 through 3, replacing the references to contact information with information about the type of record you are opening.

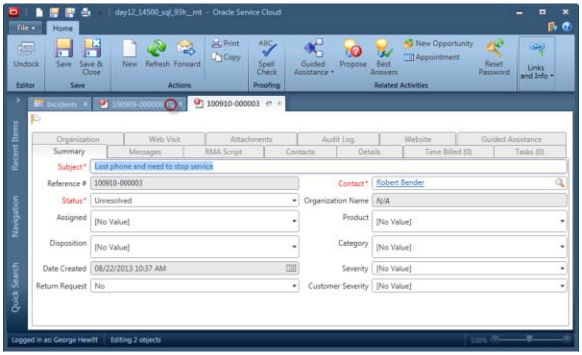
The following figure shows an incident with two contacts and a task in a workgroup.



When you click the Save button on any record in the workgroup, all records in the workgroup are saved. Likewise, when you click the Save and Close button on the **ribbon**, all records are saved and closed.

Note If you close any record in a workgroup without saving it, it does not impact your changes on any of the workgroup's other records.

Now, if you open a second incident, all the records associated with your first incident remain open, grouped on a single tab, with the number of records in the workgroup displayed in parentheses on the tab.



Just as you did with the first workgroup, you can open as many records as necessary for the second incident to create another workgroup. You can also open as many workgroups as necessary. A workgroup is active until you close it. If you reopen the incident, only the incident is opened and not the associated records that were part of the workgroup from the earlier editing session.

Adding Outlook appointments

When you add and edit contacts, incidents, opportunities, organizations, and tasks, you can create an Outlook appointment associated with the record you are working on. By default, the Appointment button is available on the standard workspaces for contacts, incidents, opportunities, and organizations and may be available on workspaces for tasks if your administrator added it.

Depending on the type of record you are creating an appointment for, Oracle Service Cloud automatically adds record information to the Outlook appointment. The following table lists the record information that is transferred to the appointment for each type of record. The table also notes the record information that becomes the subject of the appointment.

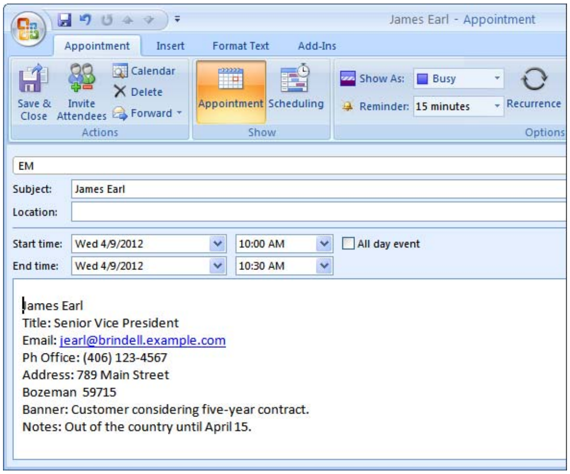
Table 125: Record Information Available in Appointments

Record	Available Information
Contact	• Name (subject of the appointment) • Title • Email • Office phone number • Address (street address, city, and postal code) • Banner text associated with the record's flag • Notes
Incident	• Subject (subject of the appointment) • Customer entry • Response • Banner text associated with the record's flag
Opportunity	• Opportunity name (subject of the appointment) • Manager estimate (Manager Value) • Sales rep estimate (Rep Forecast) • Closed value • Summary • Notes
Organization	• Organization name (subject of the appointment) • Addresses (street, city, and postal code for each available address type) • Banner text associated with the record's flag • Notes
Task	• Task name (subject of the appointment) • Due date • Planned completion date • Completed date • Percentage complete • Notes

To add an Outlook appointment

1 On a list of records, right-click the contact, incident, opportunity, organization, or task that you want to create an appointment for and select Open > [Record Type]. The record opens on the **content pane**.

2 Click the Appointment button to open the Appointment window. The available record information displays in the appointment.



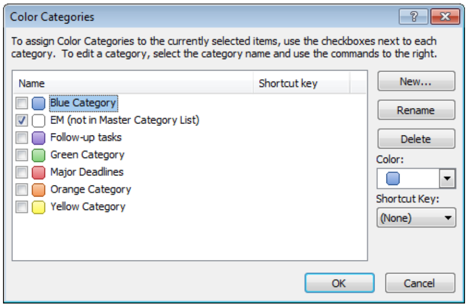
3 To add or edit any of the appointment information, type the information in the appropriate field.

4 To add a color category to the appointment, click the Categorize button and select the category. The first time you assign a default color category to an appointment, you are prompted to rename the category.

Note Oracle Service Cloud automatically adds the category EM (Experience Management) to all new appointments. The appointment category displays above the Subject field.

Or

To add multiple color categories to the appointment, click the Categorize button and select All Categories. The Color Categories window opens.



From this window you can quickly select multiple categories, rename and delete categories, change category colors, and add shortcut keys.

a Make your changes to the appointment's categories and click the OK button.

5 Click the Save and Close button on the **ribbon** to save the appointment. It now appears in your Outlook calendar.

Notifications

The Notifications component lets you view and manage the notifications you receive. If your **profile** gives you permission, you can also send broadcast notifications from this component.

Opening your notifications

Your notifications appear on the the **content pane** when you double-click Notifications from any **navigation list** that contains the Notifications component. You also receive desktop alerts, often referred to as "toast," when you first log in to Oracle Service Cloud and when new notifications are received while you are logged in. Notifications are triggered when:

- An **answer**, **incident**, **opportunity**, or **task** is assigned to you.
- An answer, incident, opportunity, or task that was assigned to you has been reassigned to another staff member.
- An answer, incident, opportunity, or task has been escalated.
- An answer is scheduled for review.
- An incident is updated, closed, or reopened.
- A **mailing** is launched or completed.
- A system error has occurred.

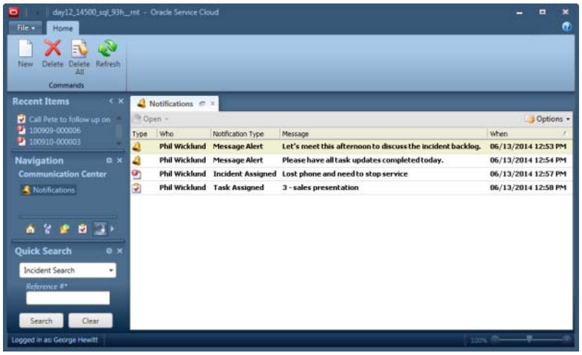
- A broadcast **notification** is sent to you from another staff member.

Important The following procedure assumes you open your notifications from the Communication Center navigation list, which is displayed when you click the Communication Center button on the navigation pane. However, the navigation list in which the Notifications component appears depends on the navigation set assigned to your profile. You can open your notifications from any navigation list that contains Notifications.

To open your notifications

1 Click the Communication Center button on the **navigation pane**.

2 Double-click Notifications. The content pane displays your notifications.



From the list of your notifications, you can send a **message**, delete one or more notifications, and refresh the display. The following table describes the buttons on the Notifications **ribbon**.

Table 126: Notifications Ribbon Description

Button	Description
New	Click this button to open the Send Notification window, where you can type a message and select a recipient. **Note:** This button is enabled only when your profile has permission to send notifications. Refer to <u>Sending broadcast notifications</u>.
Delete	Click this button to delete the selected notification.
Delete All	Click this button to delete all notifications.

Table 126: Notifications Ribbon Description (Continued)

Button	Description
Refresh	Click this button to refresh the list of notifications.

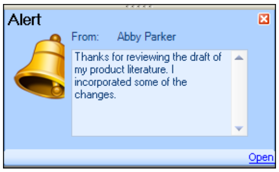
The list of your notifications contains the following column headings.

- **Type**—Displays the icon that is associated with the notification type.
- **Who**—Displays who sent the notification.
- **Notification Type**—Displays the type of notification.
- **Message**—Displays a summary of the notification.
- **When**—Displays the date and time the notification was sent.

❖ Sending broadcast notifications

Desktop alerts

When you log in to Oracle Service Cloud, you will receive a desktop alert, or toast, that lists the notifications you have received. The message is displayed in a window on the lower right section of the display for several seconds until it fades away. These notifications also appear in your list when you double-click Notifications on the navigation pane, and they remain in your list until you delete them.



If you have been sent a notification while you are logged in, the desktop alert appears when the Notifications list is automatically refreshed. The default refresh interval is fifteen minutes, but your administrator may have changed that interval. Alerts also appear if new notifications are available when you manually refresh the list.

Tip If you do not want your system to display a desktop alert when you receive a notification, you can disable alerts by clearing the Display Toast Notifications check box from your personal settings. Refer to Changing your personal settings.

❖ Changing your personal settings

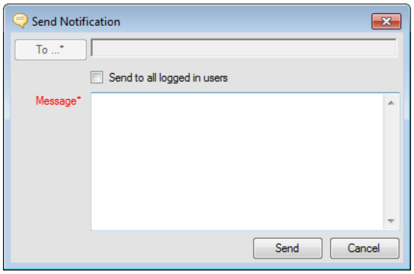
Sending broadcast notifications

Your profile may give you permission to send notifications to other staff members. If so, you can select the recipients manually or send a notification to all logged-in staff members.

To send a broadcast notification

1 Double-click Notifications on the **navigation pane**.

2 Click the New button to open the Send Notification window.

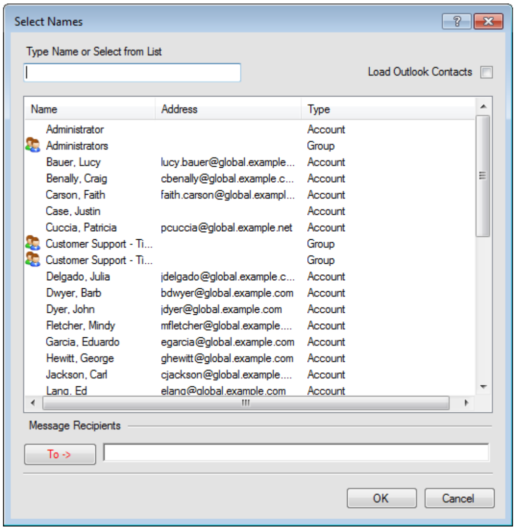


3 To send the notification to all staff members who are logged in, select the Send To All Logged In Users check box.

Note When you select this check box, you cannot select individuals because the To button is grayed out.

4 To send to selected staff members, click the To button to open the Select Names window.

Tip To import your contacts from the default Contacts folder in Outlook, select the Load Outlook Contacts check box. This is useful for displaying contacts that are not included in Oracle Service Cloud.



a Select one or more names from the list.

Tip To select multiple recipients, press **Ctrl** while making your selections.

b Click the To button to add the names to the field.

c Click the OK button to close the Select Names window. The names you selected appear in the To field of the Send Notification window.

5 Type your message in the Message field of the Send Notification window.

6 Click the Send button to send the message.

Tip You can also type the first few letters of the name you want to send the notification to in the To field of the Send Notification window. If only one staff member's name begins with those letters, the field is automatically populated when you move to the Message field. If multiple staff members' names begin with the same letters, you can select the one you want from the Check Names window that opens when you move to the Message field.

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Organizations

Just as Oracle Service Cloud uses contact records to provide you and other staff members with a complete view of all activity for an individual customer, it can also provide you with that level of information for an **organization** and all the contacts, incidents, opportunities, and tasks associated with that organization.

Perhaps you have multiple customers from one organization. For example, a sales representative might have an opportunity that involves engineers, purchasing agents, and support managers from one organization. In those situations, it is vital to have a complete overview of all activity within the organization.

Organizations overview

An organization is a business entity with an organization record in the **knowledge base**. Organizations can refer to companies, divisions of companies, government agencies, educational institutions, or nonprofit associations.

Organization records are an optional way of consolidating customer information, but if you have several individual customers who belong to one organization, maintaining that information in an organization record is an efficient and effective way to group data.

For example, if you work for a cell phone company that provides products and services only to individual consumers, you do not need organization records in the knowledge base. If, however, you sell to business accounts that distribute cell phones to their employees, it makes sense to group all of those employees (each with an individual contact record) under the organization they are associated with. This links the data associated with each of the contacts to the organization, providing you with a single-source view of all activity within the organization.

By definition, an organization can have an unlimited number of contacts. A contact, on the other hand, can be associated with only one organization. Organizations can be structured in a hierarchy that enables you to add subsidiaries, divisions, or regional offices to accurately reflect all areas of the organization.

The **customer portal** in Oracle RightNow Cloud Service (Service) can be configured so contacts can view all **incidents** associated with their organization. When contacts view other incidents, they can often find answers to their questions, which reduces the number of incidents they submit. Refer to Allowing customers to see all incidents from their organization.

When your knowledge base contains organization records, you can track a specific organization's incidents and see trends or problem areas. You can view all of the incidents for the organization from the organization record without having to select each contact individually. Likewise, you can view all **opportunities**, **tasks**, attachments, and notes associated with the organization, and view all changes that have been made to the organization record using the **audit log**.

Organizations, contacts, and SLAs

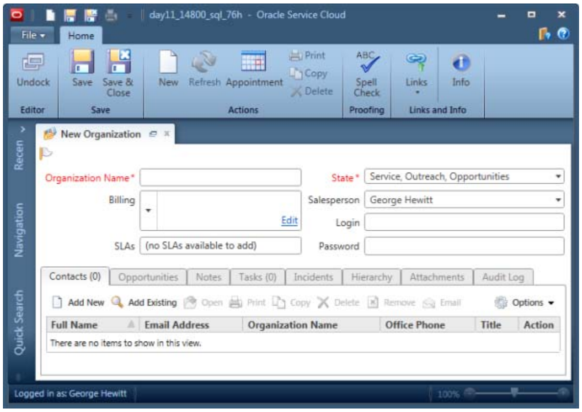
An SLA (service level agreement) is a contract that can be applied to customers, both organizations and contacts, in Service. SLAs allow you to specify and track the level and type of support a customer is eligible to receive. For example, an SLA might include the number of questions that can be submitted through different **channels** and the duration of support. Administrators create generic SLAs (that is, an SLA template) that can then be applied to specific customers. An SLA instance is a copy of the generic SLA applied to a unique customer. SLA instances can be applied automatically through **business rules** or manually by staff members. Familiarize yourself with the following points before adding or editing organizations.

- SLAs can be applied to contacts and organizations. Contacts that are not associated with an organization can have their own SLA instances. However, contacts that are associated with an organization do not have individual SLA instances. Instead, they are covered under the SLAs applied to their organization.
- Customers can view and track their SLAs on the Account Overview page of the customer portal, where SLAs are called contracts. Depending on how your administrator has configured the customer portal, all contacts associated with an organization may be able to view the responses to questions submitted by all contacts within their organization.
- Your administrator can set up business rules to automatically apply SLA instances to organizations or contacts when incidents enter the system (from the Ask a Question page, email, or chat). After applying an SLA instance, business rules can then credit the incident to the specific SLA.

- If your organization uses SLAs and you have SLA permissions set in your profile, part of your duties may be to apply SLA instances to organizations and to contacts that do not have an organization association. Refer to Applying SLAs for specific instructions about applying SLA instances.

Standard organization workspace

Oracle Service Cloud provides a standard workspace for working with organizations. The workspace defines which fields are available, what buttons are displayed on the **ribbon**, and how the information is organized on the **content pane**. The following figure shows the standard organization workspace.



Your organization may use the standard workspace, or your administrator may have created one or more customized workspaces. Your **profile** defines the workspace you see when you work with organizations, whether it is the standard workspace or a customized workspace. Refer to Standard workspaces or Custom workspaces.

Ribbon

The following table describes the buttons on the ribbon of the standard organization workspace. For information about the ribbon in general, refer to Working with the ribbon.

Table 127: Standard Organization Workspace Ribbon Description

Group/Button	Description
Editor	
Undock	Click this button to undock the organization editor from the console and display it in a separate window.
Save	
Save	Click this button to save the changes you have made to the organization and continue working. The organization record remains open. **Note:** When you save an organization, the rules engine evaluates it. If organization rules exist and the organization matches one or more rules, the record may be modified when you save it. For example, a rule can change an organization's state or set a custom field value. Refer to Business rules overview.
Save and Close	Click this button to save the organization and close the record.
Actions **Note:** With the exception of the New and Appointment buttons, the buttons in this group are not enabled until after you have saved an organization you are adding.	
New	Click this button to add an organization.
Refresh	Click this button to refresh the current organizations report.
Appointment	Click this button to add an appointment that is associated with the organization. Refer to Adding Outlook appointments.
Print	Click this button to print the organization record. Refer to Printing records.
Copy	Click this button to copy the organization record. Refer to Copying records.

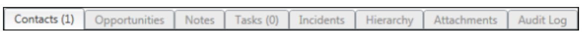
Table 127: Standard Organization Workspace Ribbon Description (Continued)

Group/Button	Description
Delete	**Caution:** Deleting an organization permanently removes all contacts associated with the organization from the knowledge base. It also deletes all incidents for which the contacts are the primary contacts, and it may delete opportunities as well. Refer to Deleting contacts. Click this button to delete the organization record.
Proofing	
Spell Check	Click this button to check the spelling of any fields that have spell checking enabled. Refer to Manual spell checking.
Links and Info	
Links	Click this button to select a URL from the list of links added by your administrator.
Info	Click this button to see details about the organization, including when it was added and last updated and the record ID. If the organization record is in a rules state, that information also appears.

- ❖ Working with the ribbon
- ❖ Displaying shortcut keys on the ribbon

Record tabs

From an open organization record, you can view all contacts, tasks, attachments, notes, incidents, opportunities, and the organization's position in a hierarchy. You can also view the audit log, which lists all actions taken on the organization record by staff members and through automatic system updates.



- **Contacts tab**—Lists all contacts associated with the organization. The number of contacts associated with the organization displays in parentheses next to the tab name. For each contact, the tab displays the name, email address, organization name, office phone number, and title. You can open, print, copy, remove from the organization, send an email, and set the **contact role** from the Contacts tab. Refer to Adding contacts to organizations.

Note Contact roles are used only in Oracle RightNow Opportunity Tracking Cloud Service (Opportunity Tracking).

- **Opportunities tab**—Lists all opportunities associated with the organization. The number of opportunities associated with the organization displays in parentheses next to the tab name. For each opportunity, the tab displays the opportunity name, the staff person it is assigned to, status, stage, the sales representative forecast, the manager forecast, and the date it was last updated. You can open, copy, delete, print, forward, and reject an opportunity from the Opportunities tab. Refer to Working with opportunities.
- **Notes tab**—Contains all notes associated with the organization. Notes can be sorted by date. Remember that customers never see the notes added by staff members. Refer to Adding organizations.
- **Tasks tab**—Lists all tasks associated with the organization. The number of tasks associated with the organization displays in parentheses next to the tab name. For each task, the tab displays the task name, due date, completion date, staff member assigned to the task, and priority. You can open, copy, delete, print, and forward any task and mark tasks complete by clicking a button on the tab's toolbar or by right-clicking the task and making your selection. Refer to Adding tasks.
- **Incidents tab**—Lists all incidents associated with the organization. The number of incidents associated with the organization displays in parentheses next to the tab name. For each incident, the tab displays status, response time, resolution time, source, reference number, and subject. You can open, copy, delete, print, forward, and propose an incident as an answer from the Incidents tab. Refer to Working with incidents.

Note If you change the incident's contact to one that is not associated with the organization, the incident will not appear on the tab.

- **Hierarchy tab**—Contains the hierarchical structure of the organization. Refer to Creating and editing organization hierarchies.
- **Attachments tab**—Lists all attachments associated with the organization. The Attachments tab displays the file name, size, date created, date updated, and a description for each attachment. Refer to Attaching files to records.

- **Audit Log tab**—Lists all actions taken on the organization record by all staff members. Also displayed are automatic changes initiated by Oracle Service Cloud that resulted from the application of business rules. When an action is generated by the system, the Who field contains Administrator. You can also see who worked on the organization, when it was added or updated, the actions taken, and descriptions of the actions. Refer to Audit logs.

Adding organizations

You can add organizations independently of other records, or you can add them when you work on contacts. Because other staff members may have permission to add organizations, the organization you plan to add may already be in the knowledge base. To avoid duplicating organization records, search the knowledge base before adding an organization to be sure it does not already exist. Refer to Searching for records.

To add an organization

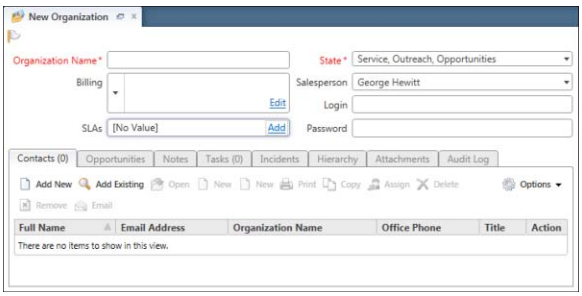
1 Click the New button on the **ribbon**.

Or

If your navigation set is configured to add organizations from the **file menu**, click File and select Organization. See To configure the file menu.

Or

Click the Search button next to the Organization field from a contact record, and then click the New Organization button on the Organization Search window. A new organization opens on a sub-tab.



2 Enter the following field information.

Table 128: Organization Fields Description

Field	Description
*Organization Name	Type the name of the organization in this field.
Billing	Click Edit in the lower right corner of the field to display a window for entering the organization's address. Type information in the Street, City, and Postal Code fields, and make selections on the Country and State/Prov. fields drop-down menus. When you select the country, the associated states or provinces appear in the State/Prov. menu. Press **Enter** when you are finished to close the window and display the address. **Note:** To select another address type, either Shipping or any custom address organization type, click the arrow and select the address type. Then complete the address information.
SLAs	Click Add or Edit in this field to open the SLA Viewer window and add or remove an SLA instance for the organization. (If you have read-only permission in your profile, the field contains View instead of Add or Edit.) Refer to Applying SLAs. **Note:** This field applies only to Service.
*State	Click this drop-down menu and select one or more of the following check boxes. • Service • Outreach • Opportunities **Note:** The State field classifies how the organization was added (whether through Service when working on an incident, Oracle RightNow Outreach Cloud Service (Outreach) when adding contacts, or Oracle RightNow Opportunity Tracking Cloud Service (Opportunity Tracking) when working on an opportunity). The State field may be updated automatically, and you can also update it manually.
Salesperson	Click this drop-down menu to select a salesperson assigned to the organization. This field defaults to your name on the standard organization workspace. Refer to Assigning records.

Table 128: Organization Fields Description (Continued)

Field	Description
Login	Type a name in this field to designate a login for members of the organization to use when logging in to the customer portal. If your customer portal was configured to require an organization login, customers must know the organization login name so their contact record can be associated and authenticated with the organization. Refer to Adding fields on the Create an Account page. This field applies only to Service.
Password	Type a password in this field to assign a login password to the organization. **Note:** This field applies only to Service.

3 To add **contacts** to the organization, click the Contacts tab. Refer to Adding contacts to organizations.

4 To associate the organization with a new **opportunity**, click the Opportunities tab, click the Add New button, and complete the opportunity fields. Refer to Adding opportunities.

5 To add **notes** to the organization record, click the Notes tab, click the Add button, and type your comments in the field.

Note Add notes to the organization when you want to provide information for other staff members. Notes are not visible to customers. Click the Note Channel button (next to Organization Note on the subheading of the Notes tab) to select the channel through which you gained the information you are adding to the note. Besides selecting No Channel, options include Phone, Fax, Post, CSS Web, and Email.

6 To associate **tasks** with the organization, click the Tasks tab, where you can add, edit, print, copy, assign, delete, and forward tasks associated with the organization and mark them complete. Refer to Tasks tab.

7 To associate the organization with a new **incident**, click the Incidents tab, click the Add New button, and complete the incident fields. Refer to Adding incidents.

8 To define the organization in terms of its parent or subsidiary divisions, click the Hierarchy tab. Refer to Creating and editing organization hierarchies.

9 To attach files to the organization record, click the Attachments tab. Refer to Attaching files to records.

10 To view the audit log for the organization, click the Audit Log tab. Refer to Audit logs.

11 To add a flag to the organization, click the area next to the white flag at the top of the content pane. Refer to Flagging records.

12 If the organization you are adding is on a sub-tab (because you are adding the organization to a contact), click the OK button. The sub-tab closes.

Important Closing the new organization sub-tab saves the organization data in memory, but the organization is not added to the knowledge base until you save the contact you added the organization to.

13 Click the Save and Close button on the **ribbon**.

❖ Searching for records

Adding contacts to organizations

You can add new or existing **contacts** to an organization. The existing contacts may or may not already be associated with an organization. All incidents for which the contact was the primary contact are now associated with the organization you add the contact to. Opportunities for which the contact is the primary contact do not change their **organization association** when you add the contact to the organization. For more information about contacts, refer to Contacts overview.

To add new contacts to an organization

1 Right-click the organization you want to add contacts to and select Open. On the standard organization workspace, the organization opens with the Contacts tab as the active record tab.

2 Click the Add New button on the Contacts tab. A new contact opens on a sub-tab.

3 Type the contact's first and last names in the appropriate fields.

4 Select one or more check boxes in the **State** drop-down menu.

5 To enter additional contact information, complete any of the remaining fields on any of the record tabs. Refer to Adding contacts.

6 Click the OK button to close the sub-tab and add the contact to the organization.

Important Clicking the OK button on the new contact sub-tab closes the sub-tab and saves the contact information in memory, but the contact is not added to the knowledge base until you save the organization.

7 To add more contacts to the organization, repeats steps 2 through 6.

8 Click the Save and Close button to save the organization with the newly added contacts.

To add existing contacts to an organization

1 Right-click the organization you want to add contacts to and select Open. On the standard organization workspace, the organization opens with the Contacts tab as the active tab.

2 Click the Add Existing button. The Contact Search window opens.

3 Type an entry in any of the available fields: Contact Last Name, Contact First Name, Phone, Email, Postal Code, or Organization.

Tip You can use an asterisk (*) as a wildcard in your search term.

4 Select one or more check boxes in the **State** drop-down menu.

5 Click the Search button. The contacts that match the search criteria are returned on the Contact Search window.

Note When only one contact matches the search criteria, the Contact Search window closes and that contact appears on the organization's Contacts tab.

6 Select the contact you want to associate with the organization and click the Select button. The window closes and the contact appears on the organization's Contacts tab.

7 Click the Save and Close button to save the organization.

Editing organizations

You may find yourself in the position of needing to view or update organization information. Depending on the permissions set in your **profile**, you can view organization information, edit organizations, copy, print, and delete organizations, and remove contacts from an organization.

The following procedures describe how to edit, delete, and remove contacts from an organization. Refer to Copying records and Printing records.

To edit an organization

1 Right-click the organization and select Open. The organization record opens.

2 Make the necessary changes to any field on any tab.

3 Click the Save and Close button to save the changes to the organization.

To delete an organization

Caution Deleting organization records can affect other staff members within your organization. This action permanently removes not only the organizations from the knowledge base, but also all contacts associated with the organization and the incidents and opportunities for which the contacts are primary contacts. Refer to Deleting contacts.

1 Right-click the organization and select Delete. A message asks you to confirm that you want to delete the organization.

2 Click the Yes button to delete the organization, all associated contacts, and all incidents and opportunities for which the deleted contacts are primary contacts.

To remove contacts from an organization

1 Right-click the organization and select Open. The standard organization workspace displays the organization record with the Contacts tab as the active tab.

2 In the list of contacts, right-click the one you want to remove from the organization and select Remove.

3 Click the Yes button on the message that confirms the removal of the contact.

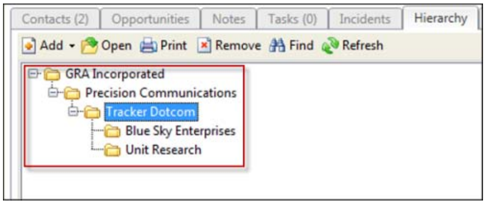
4 To remove additional contacts, repeat steps 2 and 3.

5 Click the Save and Close button. The contacts are removed from the organization but not from the **knowledge base**.

Creating and editing organization hierarchies

The Organization Hierarchy feature in Oracle Service Cloud enables you to create a hierarchy for any organization that has subordinate organizations. For example, if an organization in your knowledge base has several subsidiaries or regional or international offices, each having an organization record in the knowledge base, you can add the subordinate organizations to the parent organization, thereby creating an organization hierarchy. Once you create a hierarchy for an organization, you can easily add and remove organizations and change the order of the hierarchy structure.

An organization can have an unlimited number of subordinates, organized into a maximum of twelve levels per parent organization.



Caution Changing an organization's hierarchy can impact the incidents and opportunities associated with all organizations in the hierarchy. Therefore, make sure you understand the consequences of changing the structure of an organization's hierarchy.

To add a new organization to the hierarchy

1 Right-click the organization and select Open. The **content pane** displays the organization record.

2 Click the Hierarchy tab.

3 Click the Add button and select Add New. A new organization opens on a sub-tab.

4 Type the organization name in the field.

5 Select one or more check boxes in the **State** drop-down menu.

6 To enter additional organization information, complete any of the remaining fields on any of the record tabs. Refer to Adding organizations.

7 Click the OK button to close the new organization sub-tab and add the organization to the hierarchy of the organization you are editing.

8 To change the position of the organization you added, expand the hierarchy and drag and drop the organization.

9 Click the Save and Close button to save the change to the organization hierarchy.

To add an existing organization to the hierarchy

1 Right-click the organization and select Open. The **content pane** displays the organization.

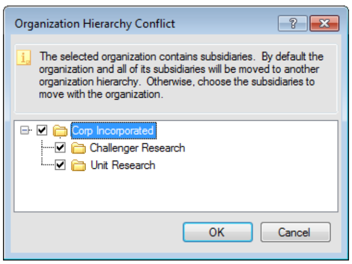
2 Click the Hierarchy tab.

3 Click the Add button and select Add Existing. The Organization Search window opens.

4 Enter search criteria in the fields to filter your organization search and click the Search button. The organizations that match your search criteria display.

5 Select an organization from the list and click the Select button. If the organization you select is not already part of a hierarchy, selecting it closes the Organization Search window and adds the organization to the hierarchy of the original organization.

Note If the organization you are adding is part of another hierarchy, a message notifies you that the selected organization contains subsidiaries. Moving the organization also moves all its subsidiaries unless you select to move only specific subsidiaries.



a To move only some of the selected organization's subsidiaries to the organization hierarchy, clear the check boxes for those you do not want to move.
b Click the OK button to close the window and move the organization and selected subsidiaries to the hierarchy.
c To view the full organization hierarchy, right-click any organization within the hierarchy and select Expand All.

6 Click the Save and Close button to save your changes to the organization hierarchy.

Editing organization hierarchies

On the Hierarchy tab, you can add a new or existing organization, open or print an organization, remove an organization from the hierarchy, find an organization in the hierarchy, and refresh to restore the hierarchy to its previously saved state and discard your edits. The following table describes the buttons on the Hierarchy tab toolbar.

Table 129: Hierarchy Tab Toolbar Description

Button	Description
Add	Click this button and select one of the following options.
Add New	Select this option to open a new organization on a sub-tab and add an organization to the hierarchy.
Add Existing	Select this option to open the Organization Search window and add an existing organization to the hierarchy.
Open	Click this button to open the selected organization and edit it.
Print	Click this button to print the selected organization.
Remove	**Caution:** Removing an organization also removes its subordinate organizations from the hierarchy. Click this button to remove the organization from the hierarchy.
Find	Click this button to open the Find window and search the hierarchy for an organization.
Refresh	Click this button to restore the organization hierarchy and discard any changes you have made.

Caution To delete an organization that is part of an organization hierarchy, first remove the organization from the hierarchy. Then delete the organization from the knowledge base. As always, use caution when deleting organizations. See To delete an organization.

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Contacts

Customer data is the foundation of Oracle Service Cloud. It includes basic information such as a customer's name, email address, and phone number as well as information about customer service issues, opportunities, and marketing mailings opt-in status.

The contact information you add and edit becomes part of your organization's **knowledge base** and is shared with all staff members. If you are a sales representative, for example, you should know if a customer is having support issues before you try to close a sale. If you are a service agent, you can better help customers if you understand their past support questions. And if you work in marketing, you must know whether the customer prefers plain text or HTML email.

When customer information is kept up-to-date, the knowledge base provides complete information to your entire organization. The results make your job easier and provide a superior customer experience.

Contacts overview

Every customer has a contact record in the **knowledge base** that contains information about the customer. But before you can understand contacts, you must first understand how contacts and organizations are associated and also how contacts are associated with incidents and opportunities. Familiarize yourself with the following points before adding or editing contacts.

- An organization is any business entity that has an organization record in the knowledge base. For example, organizations can refer to companies, divisions of companies, government agencies, educational institutions, or nonprofit associations.
- Contacts may or may not belong to an organization. If your customers are other organizations, you might have several contacts associated with an organization record. If, on the other hand, your customers are individuals rather than organizations, every contact record represents a unique customer. It is also possible that you have both organizations and contacts as customers.

- Each contact is associated with only one organization, but an organization can have many contacts. Each contact record displays all incidents, opportunities, tasks, surveys, marketing activity, attachments, and notes for the contact, as well as the audit log, which displays all activity for the contact record.
- Every incident must have a **primary contact**. If your profile gives you the appropriate permissions, you can change contact associations and delete contact records. Because these actions can have far-reaching consequences on incidents as well as opportunities, it is important to understand what happens when you make such changes.

Changing contact associations

Changing a contact's organization association has implications for the incidents and opportunities associated with the contact. If you change the organization for a contact who is the primary contact for an incident, the incident's organization association changes to match that of the contact. Secondary contacts from a different organization remain with the incident even when you change the organization association of the primary contact.

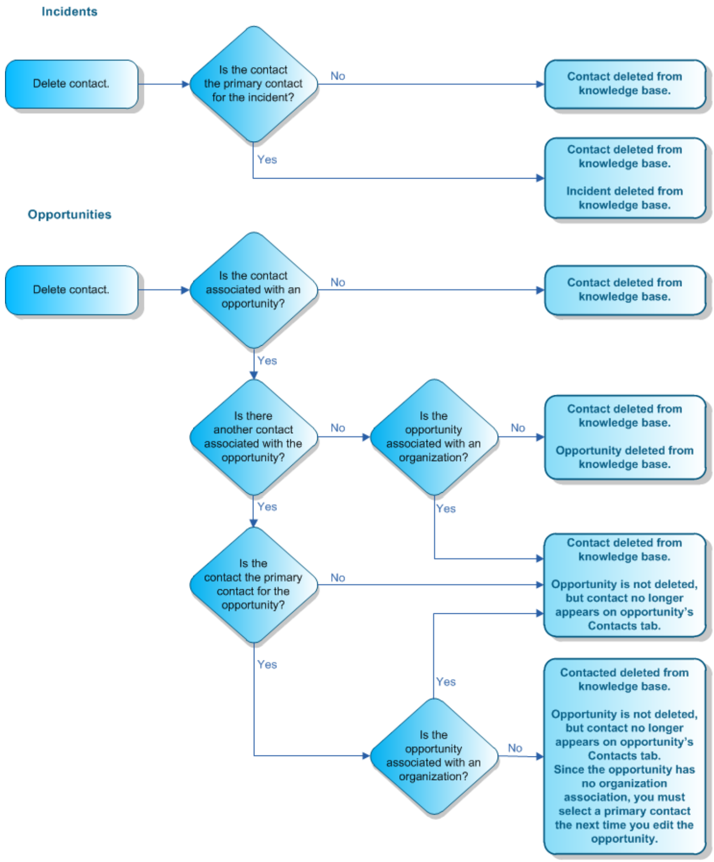
The effect of changing a contact's organization association does not change the opportunity's organization association. The contacts associated with the opportunity remain the same, regardless of the organization they are associated with. Refer to Associating contacts.

Deleting contacts

There are usually consequences when a contact is deleted. If the contact is associated with multiple incidents or multiple opportunities or both, different results may occur with each record, depending on the type of associations and the association of other contacts with the record. In cases where the contact has multiple incidents and opportunities, follow the flowchart for each record the contact is associated with to discover what will happen to the record if you delete the contact.

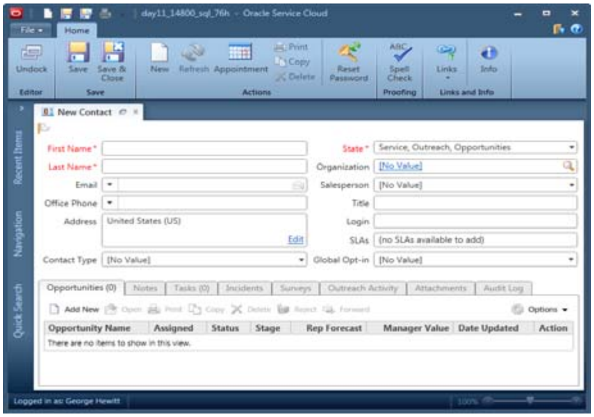
For example, assume a contact is associated with two opportunities. Also assume that the first opportunity does not have an organization association while the second one does, and that neither opportunity has a secondary contact. Deleting the contact removes the contact from the knowledge base and deletes the first opportunity. The second opportunity remains in the knowledge base, although the contact no longer appears on the Contacts tab.

Note When you delete secondary contacts for incidents and opportunities, the incidents and opportunities are not deleted.



Standard contact workspace

Oracle Service Cloud provides a standard workspace for working with contacts. The workspace defines which fields are available, what buttons are displayed on the **ribbon**, and how the information is organized on the **content pane**.



Your organization may use the standard workspace, or your administrator may have created one or more customized workspaces. Your **profile** defines the workspace you see when you work with contacts, whether it is the standard workspace or a customized workspace. Refer to Standard workspaces or Custom workspaces.

Ribbon

The following table describes the buttons on the ribbon of the standard contact workspace. For more information about the ribbon in general and the Quick Access toolbar, refer to Working with the ribbon.

Table 130: Standard Contact Workspace Ribbon Description

Group/Button	Description
Editor	
Undock	Click this button to undock the contact editor from the console and display it in a separate window.

Table 130: Standard Contact Workspace Ribbon Description (Continued)

Group/Button	Description
Save	
Save	Click this button to save the changes you have made to the contact and continue working. The contact record remains open. **Note:** When you save a contact, the rules engine evaluates it. If contact rules exist and the contact matches one or more rules, the record may be modified when you save it. For example, a rule can change a contact's state or set a custom field value.
Save and Close	Click this button to save the contact and close the record.
Actions **Note:** With the exception of the New and Appointment buttons, the buttons in this group are not enabled until after you have saved a contact you are adding.	
New	Click this button to add a contact.
Refresh	Click this button to refresh the current contact record.
Appointment	Click this button to add an appointment that is associated with the contact. Refer to Adding Outlook appointments.
Print	Click this button to print the contact record. Refer to Printing records.
Copy	Click this button to copy the contact record. Refer to Copying records.
Delete	**Caution:** To understand the consequences of this action before you delete a contact, refer to Deleting contacts. Click this button to delete the contact record.
Reset Password	Click this button to invalidate the contact's current password. **Note:** This action sends an email to the contact's primary email address. Included in the email is a link to a page where a new password can be set.
Proofing	
Spell Check	Click this button to check the spelling of any fields that have spell checking enabled. Refer to Spell checking.

Table 130: Standard Contact Workspace Ribbon Description (Continued)

Group/Button	Description
Links and Info	
Links	Click this button to select a URL from the list of links added by your administrator.
Info	Click this button to see details about the contact, including when it was added and last updated and the record ID. If the contact record is in a rules state, that information also appears.

- ❖ Working with the ribbon
- ❖ Displaying shortcut keys on the ribbon

Record tabs

From an open contact record, you can view all opportunities, notes, tasks, incidents, surveys, marketing activity, and attachments associated with the contact. You can also view the audit log, which lists all actions taken on the contact record by the customer, staff members, and through automatic system updates.

If **Oracle RightNow Social Experience communities** are enabled and your administrator has added the community **control** to a custom contact workspace, the Community Profile tab displays. The following figure shows a custom contact workspace with the Community Profile tab.

- **Community Profile tab**—If the contact you are viewing has a profile in one or more communities, information displays on the Community Profile tab for read-only purposes. The Community Profile tab contains the following tab set.
  - ▷ **Profile tab**—Contains profile information returned by the communities, such as name, company, phone, email, address, city, state, and website.
  - ▷ **Groups tab**—Lists the three most recent groups the member has joined.
  - ▷ **Posts tab**—Lists the three most recent posts made by the member. Each post provides a link that directs staff members to additional information about the post.

- ▷ **Comments tab**—Lists the three most recent comments made by the member. Each comment provides a link that directs staff members to additional information about the comment.

Note The Community Profile control can be added to incident workspaces as well.

- **Opportunities tab**—Lists all opportunities associated with the contact. The tab contains the number of opportunities associated with the contact in parentheses next to the tab name. For each opportunity, the tab displays the opportunity name, the staff person it is assigned to, status, stage, the sales representative and manager forecasts, and the date it was last updated. You can open, copy, delete, print, forward, and reject an opportunity by clicking a button on the tab's toolbar or by right-clicking the opportunity and making your selection. Refer to Working with opportunities.
- **Notes tab**—Contains all notes associated with the contact. Notes can be viewed and selected by contact or organization and sorted by date. Remember that customers never see the notes added by staff members. Refer to step 4 in To add a contact.
- **Tasks tab**—Lists all tasks associated with the contact. The tab contains the number of tasks associated with the contact in parentheses next to the tab name. For each task, the tab displays the task name, due date, completion date, the staff member assigned to the task, and priority. You can open, copy, delete, print, and forward any task and mark tasks complete by clicking a button on the tab's toolbar or by right-clicking the task and making your selection. Refer to Tasks.
- **Incidents tab**—Lists all incidents associated with the contact. The tab contains the number of incidents associated with the contact in parentheses next to the tab name. For each incident, the tab displays status, time beyond the response threshold, time beyond the resolution threshold, source, reference number, and subject. You can open, copy, delete, print, forward, and propose an incident as an answer by clicking a button on the tab's toolbar or by right-clicking it and making your selection. Refer to Working with incidents.
- **Surveys tab**—Contains all survey activity associated with the contact. The tab contains the number of surveys associated with the contact in parentheses next to the tab name. For each survey, the tab displays when the customer completed the survey, the survey score, and the type and name of the survey. The Action column lets you view the contact's response. Refer to Creating surveys.
- **Outreach Activity tab**—Contains all outreach activity associated with the contact, such as mailings that were viewed or tracked links that were clicked. The Outreach Activity tab contains the number of mailings associated with the contact in parentheses

next to the tab name. The tab displays when the activity occurred, what the activity was, a description of the activity, the name of the mailing, and any documents for each listed activity. Refer to Creating mailings.

- **Attachments tab**—Lists all attachments associated with the contact. The tab displays the file name, size, date created, date updated, and a description for each attachment. Refer to Attaching files to records.
- **Audit Log tab**—Lists all actions taken on the contact record by you, other staff members, and the customer. It also displays any automatic changes initiated by Oracle Service Cloud that resulted from the application of business rules or through configuration settings. Refer to Audit logs.

Adding contacts

Contacts can be added to the **knowledge base** by customers and staff members. A customer can add a contact record when creating an account on the **customer portal**. Staff members can add contacts using a contact workspace. They can also add them when working on incidents, opportunities, organizations, tasks, assets, and contact lists.

Note Because many staff members can have permission to add contacts, the contact you plan to add may already be in the knowledge base. To avoid duplicating contact records, search the knowledge base before adding a contact to be sure it does not already exist. Refer to Searching for records.

To add a contact

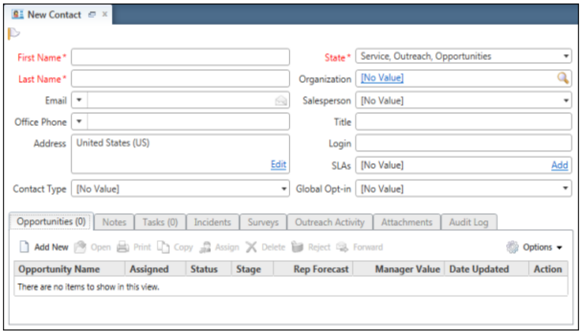
1 Click the New button on the **ribbon**.

Or

If your navigation set is configured to add contacts from the **file menu**, click File and select Contact. See To configure the file menu.

Tip You can also add a contact while working on many types of open records, using one of the following methods:

- Right-click in the Contact field of an open incident, opportunity, task, asset, or contact list, then select Add New. The new contact opens on a sub-tab, which contains the same fields and tabs as the standard contact workspace does.
- Use the Contacts tab of an open incident, opportunity, or organization record to add a new contact. Refer to Adding contacts from other records.



2 Enter the following field information.

Table 131: Contact Fields Description

Field	Description
*First Name	Type the contact's first name in this field.
*Last Name	Type the contact's last name in this field.

Table 131: Contact Fields Description (Continued)

Field	Description
Email	Type the contact's email address in this field. To add alternate email addresses, click the arrow and select Email Alt 1 or Email Alt 2. Then type the alternate email address in the field. **Note:** If you enter an email address that is already in the knowledge base, you will receive an error message and not be able to save the contact. If email address sharing is enabled, meaning multiple contacts can share the same email address, a yellow icon with a black exclamation point displays when you type an email address that is associated with a different contact in the system. If this icon appears, you can save the contact without changing the contact's email address. Email address sharing validation begins when the Email address field receives focus and ends when the field loses focus. Refer to Email address sharing.
Office Phone	Type the contact's phone number in this field. To add other phone numbers, click the arrow, select one of the options, and type the phone number in the field. The options include Mobile, Fax, Assistant, and Home.
Address	Click Edit in the lower right corner of the field to display a window for entering the contact's address. Type information in the Street, City, and Postal Code fields, and make selections on the Country and State/Prov. fields drop-down menus. When you select the country, the associated states or provinces appear in the State/Prov. menu. Press **Enter** when you are finished to close the window and display the address you entered.
Contact Type	Click this drop-down menu and select a contact type. These options are unique to your organization and were added by your administrator. Refer to Adding and editing contact types.

Table 131: Contact Fields Description (Continued)

Field	Description
Channel Usernames	Click Add in this field to open the Channel Usernames window where you can add Facebook, Twitter, and YouTube user names for contacts. Refer to Storing social media user names. **Note:** This field does not display unless your administrator has configured a custom contact workspace for the Channel Usernames field. Refer to Creating custom workspaces. In addition, contacts can provide their own Facebook, Twitter, and YouTube user names through the ChannelAllInput and ChannelAllDisplay widgets on the customer portal. Refer to Input and output widgets.
*State	Click this drop-down menu and select one or more of the following check boxes: Service, Outreach, or Opportunities. The State field classifies how the contact was added, whether through Oracle RightNow Cloud Service (Service) when working on an incident, Oracle RightNow Outreach Cloud Service (Outreach) when adding contacts, or Oracle RightNow Opportunity Tracking Cloud Service (Opportunity Tracking) when working on an opportunity, and what areas of Oracle Service Cloud the contact has since had activity in. The State field may be updated automatically, and you can also update it manually.
Organization	Click the Search button to the right of the Organization field to open the Organization Search window and search for an organization to associate with the contact. Refer to Associating contacts with organizations.
Salesperson	Click this drop-down menu and select the salesperson assigned to the contact. This field defaults to No Value. Refer to Assigning records.
Title	Type the contact's title in this field.

Table 131: Contact Fields Description (Continued)

Field	Description
Login	Type a name in this field to designate a login for the customer to use when logging in to the customer portal. If the customer added the contact record on the customer portal, this field displays the login the customer entered. This field applies only to Service. A login must be unique for each contact if Email Address Sharing is enabled. Refer to Email address sharing. **Note:** The login may not contain a space, single quote, double quote, less than, or greater than character. We recommend that you use ASCII characters when creating a customer login.
SLAs	An SLA is a service level agreement. Click Add or Edit in this field to add, edit, or remove an SLA instance for the contact. (If you have read-only permission in your profile, the field contains View instead of Add or Edit.) Refer to Applying SLAs. **Note:** This field applies only to Service and only for contacts that do not have an organization association. If the contact is associated with an organization, you must apply SLA instances to the organization, not the contact.
Global Opt-in	Click this drop-down menu and select Yes if the customer has opted to receive marketing mailings and No if the customer does not want to receive them.

3 To associate the contact with a new **opportunity**, click the Opportunities tab. (This tab is on top by default on the standard contact workspace.) Click the Add New button to open a new opportunity on a sub-tab, and then complete the fields. Refer to Adding opportunities.

4 To add **notes** to the contact record, click the Notes tab, click the Add button, and type your comments in the field.

Note Add notes to the contact when you want to provide information for other staff members. Notes are not visible to customers. Click the Contact Note drop-down menu to select the channel through which you gained the information you are adding to the note. Besides selecting No Channel, options include Phone, Fax, Post, CSS Web, and Email.

5 To associate **tasks** with the contact, click the Tasks tab where you can add, open, print, copy, assign, delete, and forward tasks associated with the contact and mark them complete. Refer to Tasks tab.

6 To associate the contact with a new **incident**, click the Incidents tab. Click the Add New button to open a new incident on a sub-tab, and then complete the fields. Refer to Adding incidents.

7 To view **surveys** the contact has participated in, click the Surveys tab.

8 To view **mailings** the contact has received, click the Outreach Activity tab.

9 To attach files to the contact record, click the Attachments tab. Refer to Attaching files to records.

10 To view the audit log for the contact record, click the Audit Log tab. Refer to Audit logs.

11 To add a **flag** to the contact, click the area next to the white flag at the top of the content pane. Refer to Flagging records.

12 If the contact you are adding is on a sub-tab (because you are adding the contact to a contact list, incident, opportunity, or task), click the OK button. The sub-tab closes.

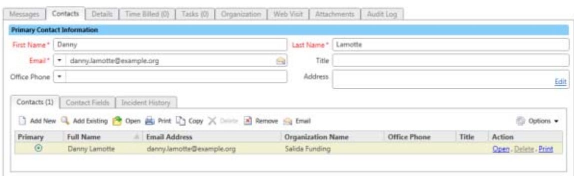
Important Closing the New Contact sub-tab saves the contact data in memory, but the contact record is not added to the knowledge base until you save the record you have added the contact to.

13 Click the Save and Close button on the ribbon.

❖ Searching for records

Adding contacts from other records

You can add or edit a contact from the Contacts tab when you work with incidents, opportunities, and organizations. The following figure shows the Contacts tab on an incident.



The following table describes the toolbar buttons on the Contacts tab. The same options are available by right-clicking any contact.

Table 132: Contacts Tab Toolbar Description

Button	Description
Add New	Click this button to add a new contact to the record. Refer to Adding contacts.
Add Existing	Click this button to search for and add an existing contact to the record. Refer to Searching for records.
Open	Click this button to open the contact record. See To edit a contact.
Print	Click this button to print the contact record. See To print a record.
Copy	Click this button to copy the contact record. See To copy a record.
Delete	Click this button to delete the contact record. Refer to Deleting contacts.
Remove	Click this button to remove the contact association from the incident, opportunity, or organization.
Email	Click this button to open your email client with an untitled message to the contact. **Note:** This button is enabled only if your profile includes permission to email contacts.
Set Contact Role	Click this button to assign a contact role to the contact. See To set a contact role. **Note:** This button is available only when editing opportunities.
Options	Click this button to display a drop-down menu of options that include actions you can take, such as printing, forwarding, publishing, or exporting the contact data.

The following columns are available on the Contacts tab.

- Primary (for incidents and opportunities)
- Full Name
- Email Address
- Organization Name
- Office Phone

- Title
- Contact Role (for opportunities)
- Action

The Action column contains Open, Delete (secondary contacts only for incidents), and Print options for the contact. You can also access these options by right-clicking the contact. Other right-click options include Copy, Remove, Email, Set Contact Role (opportunities only), and Copy Cell to Clipboard. (The right-click options are the same as those offered by the buttons on the Contacts tab toolbar.)

❖ Adding contacts
❖ Searching for records

Associating contacts

It is possible to add contacts and not associate them with any other type of record in the knowledge base. But the real value of Oracle Service Cloud comes from being able to associate contact records with organizations, incidents, opportunities, tasks, and contact lists. All staff members with permissions in their **profile**, whether they work in Service, Opportunity Tracking, Outreach, or Oracle RightNow Feedback Cloud Service (Feedback), can open and update contact records, ensuring that every staff member has the most current information about all contacts.

Associating contacts with organizations

When you know that a contact you are adding belongs to an organization that is already in the **knowledge base**, you should associate the contact with the organization. If the organization is not yet in the knowledge base, you can enter organization information for the contact to create an association between the two types of records.

You can associate a contact with an organization at any time. For example, you can associate a contact with an organization when you add the contact. Or you can edit the contact later to add the organization association. The procedure for associating a contact with an organization is the same whether or not the contact is currently associated with another organization.

Important If you change a contact's **organization association**, you also change the organization association for all incidents for which the contact is the primary contact. However, the organization association for the contact's opportunities do not change when you change the contact's organization association.

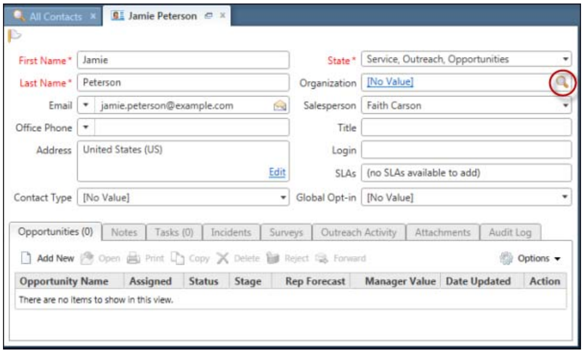
To associate a contact with an organization

1 Right-click a contact on the **content pane** and select Open > Contact. The contact record opens. If the contact is associated with an organization, the organization name appears in the record.

Or

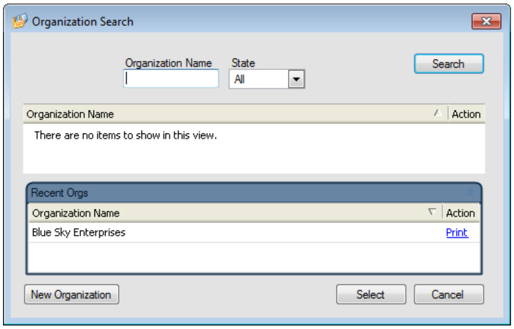
If your navigation set is configured to add contacts from the file menu, click File and select Contact. See To configure the file menu.

2 Click the Search button to the right of the Organization field.



Note You can also click the link in the Organization field, then select an organization from the list of recently viewed organizations. Refer to Checking recent items before searching.

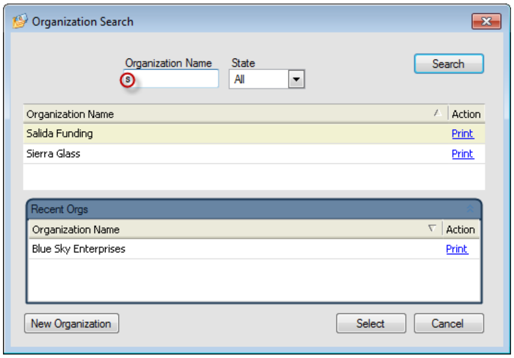
The Organization Search window opens.



3 To search by organization name, type the first few characters in the Organization Name field. An implied wildcard is used so all organizations that begin with the letters you type are returned.

4 To search by State, select any or all of the Select All, Service State, Outreach State, or Opportunities State check boxes in the drop-down menu.

5 Click the Search button. The list of organizations that match the search criteria appears.



6 Select the organization you want to associate the contact with and click the Select button or press **Enter**. The Organization Search window closes and the organization appears in the contact record.

Or

If the organization does not appear in the list, click the New Organization button to open a new organization on a sub-tab and complete the fields. (The search term you typed in the Organization Name field on the search window appears in the Organization Name field on the new organization sub-tab.) Refer to Adding organizations.

7 Click the Save and Close button to save the contact and organization.

Associating contacts with incidents

When you work on an **incident** in Oracle RightNow Cloud Service (Service) and add a new or existing contact to the incident, that contact-incident association is automatically created when you save the incident. A contact-incident association is also created when you add an incident to a contact by clicking the Incidents tab and clicking the Add New button. Refer to Adding incidents.

Associating contacts with opportunities

When you work on an **opportunity** in Opportunity Tracking and add a new or existing contact to the opportunity, the contact-opportunity association is automatically created when you save the opportunity. A contact-opportunity association is also created when you add an opportunity to a contact by clicking the Opportunities tab and clicking the Add New button. Refer to Adding opportunities.

Removing contact associations

There might be times when you want to remove a contact from a record but do not want to delete the contact from the **knowledge base**. In those instances, you can remove the contact from the incident, opportunity, organization, or contact list.

Note To remove a contact from an open task, right-click the name in the Contact field and select Clear.

To remove a contact from a record

1 On the Contacts tab of the record, select the contact you want to remove and click the Remove button on the toolbar. A message asks you to confirm that you want to remove the contact.

Or

Right-click the contact and select Remove.

2 Click the Yes button to confirm removal of the contact. The contact remains in the knowledge base but is no longer associated with the record.

3 Click the Save and Close button to save the change to the record.

Editing contacts

It is highly likely you will encounter situations where you need to update contact information for contacts that are already in the **knowledge base**. Depending on the permissions set in your **profile**, you can edit a contact record whenever you need to add or change customer information. You can also copy, print, and delete contacts and set a contact role. The following procedures assume a contacts report is displayed on the **content pane**.

Tip If you want to delete a contact but do not want to delete the incidents and opportunities associated with that contact, you can specify different contacts for the incidents and opportunities before you delete the original contact. Refer to Reassociating incidents with a different contact or Reassociating opportunities with a different contact.

To edit a contact

1 Right-click the contact and select Open > Contact. The contact record opens.

2 Make the necessary changes to any field on any tab.

3 Click the Save and Close button to save the changes to the contact.

To delete a contact

Caution Deleting contact records can affect other staff members within your organization. This action permanently removes not only the contacts from the knowledge base, but also all incidents for which the contact is the primary contact. Opportunities may also be deleted, so you must understand the consequences of deleting contacts before doing so. Refer to Deleting contacts for specific results of deleting contacts.

1 Right-click a contact and select Delete. A message asks you to confirm that you want to delete the contact.

2 Click the Yes button to delete the selected contact.

To set a contact role

1 Open an opportunities report.

2 Right-click an opportunity and select Open > Opportunity.

3 Click the Contacts tab.

4 Right-click the contact and select Set Contact Role. The Set Contact Role window opens.

5 Click the Contact Role drop-down menu and select a contact role for the opportunity's contact.

6 Click the OK button to close the Set Contact Role window.

7 Click the Save and Close button to save the contact's role for the opportunity.

Note The contact's role may be different for different opportunities, which is why it is set from the opportunity, not from the contact. For example, a contact might serve as a decision maker in one opportunity and a referral in another.

Reassociating incidents with a different contact

Deleting a contact also deletes the **incidents** for which the contact is the primary contact. If the contact is associated with incidents but is not the primary contact, those incidents will not be deleted.

If you do not want to delete the incidents for which the contact is the primary contact, you can reassociate the incidents with a different contact before you delete the original contact.

To reassociate the contact for an incident

1 Right-click the contact you want to delete and select Open > Contact.

2 Click the Incidents tab. The tab displays all incidents for which the contact is the primary.

3 Right-click the first incident and select Open. The incident opens on a sub-tab.

4 Click the incident's Contacts tab.

5 Click the Add Existing button on the toolbar. The Contact Search window opens.

6 Search for a contact on the Contact Search window using the procedure described in To search for a contact from an open record. The contact you select appears on the Contacts tab of the incident.

Important If a contact is added to an incident using the Search button next to the Contact field of the incident, the existing primary contact is automatically removed from the incident and replaced with the new primary contact. This logic also applies when clicking the contact's name in the Contact field and selecting Change or Add New.

If a contact is added to an incident using the Add New or Add Existing functionality from the Contacts tab on the incident, the primary contact remains and the new contact is added as a secondary contact.

7 Select the radio button under the Primary column for the contact you added. This makes the new contact the primary contact for the incident.

8 Click the OK button to close the incident.

9 Repeat steps 3 through 8 for every incident you want to associate with a different contact.

10 Click the Save and Close button to save the changes. The incidents you reassociated no longer appear on the Incidents tab of the contact.

Now you can delete the contact that was originally the primary contact. Refer to Deleting contacts.

Reassociating opportunities with a different contact

Clicking the Opportunities tab on an open contact displays the opportunities associated with the contact. If no opportunities are listed, you can safely delete the contact without deleting any opportunities. If the contact is associated with other opportunities but is not the primary contact, those opportunities will not be deleted when the contact is deleted.

If you want to delete the contact but not the opportunities associated with the contact, you can reassociate the opportunities with a different contact.

To reassociate the contact for an opportunity

1 Right-click the contact you want to delete and select Open > Contact.

2 Click the Opportunities tab. The tab displays all opportunities for which this contact is the primary contact.

3 Right-click the first opportunity and select Open. The opportunity opens on a sub-tab.

4 On the opportunity's Contacts tab, click the Add button and select Add Existing. The Contact Search window opens.

5 Search for a contact on the Contact Search window using the procedure described in To search for a contact from an open record. The contact you select appears on the Contacts tab of the opportunity.

Important If a contact is added to an opportunity using the Search button next to the Contact field of the opportunity, the existing primary contact is automatically removed from the opportunity and replaced with the new primary contact. This logic also applies when clicking the contact's name in the Contact field and selecting Change or Add New.

If a contact is added to an opportunity using the Add New or Add Existing functionality from the Contacts tab on the opportunity, the primary contact remains and the new contact is added as a secondary contact.

6 Select the radio button under the Primary column for the contact you added. This makes the new contact the primary contact for the opportunity.

7 Click the OK button to close the opportunity.

8 Repeat steps 3 through 7 for every opportunity you want to reassociate.

9 Click the Save and Close button to save the changes. The opportunities you reassociated no longer appear on the Opportunities tab of the contact.

Now you can delete the contact that was originally the primary contact. If the contact you deleted belonged to an organization, the opportunity remains with the organization, although the reassociated contact appears on the opportunity as well. Refer to Deleting contacts.

Email address sharing

Email address sharing gives you the ability to associate a single email address with multiple contact records, which allows a group of related contacts (such as a family or a team) to maintain individual contact records while sharing an email address.

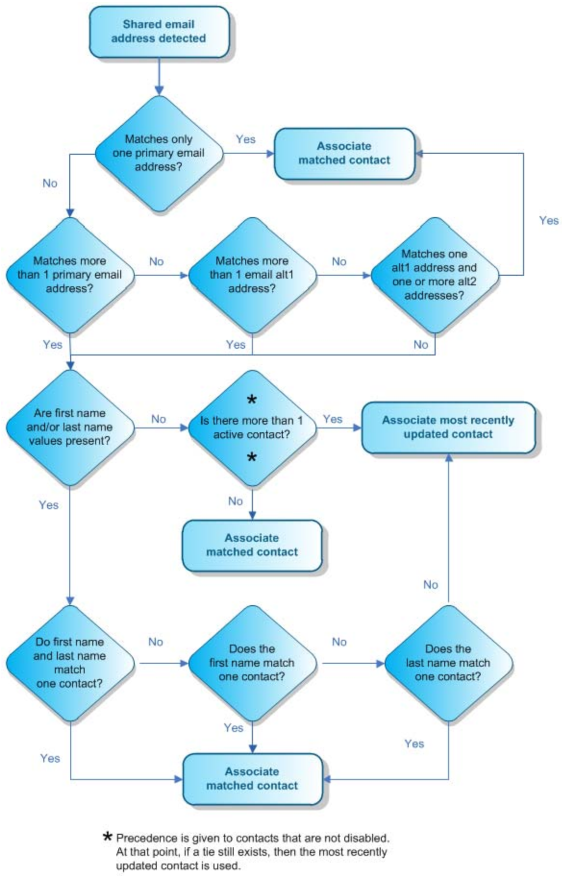
Note Contact records that share the same email address must have a unique login, or, for contacts without a login, they must include a unique combination of first name and last name, as duplicate contact records cannot exist in the knowledge base.

For example, Bill Short and Bill Short can share the same email address as long as they have different logins.

If multiple contacts' logins are left blank, their first or last name must be unique. In this case, Bill Short and William Short can share the same email address, since each name is unique.

Email addresses associated with a single contact record must be unique—that is, for a single contact, the values of *contacts.email, contacts.email_alt1,* and *contacts.email_alt2* cannot contain the same address.

Once email address sharing is enabled, records and transactions initiated by a shared email address are associated with the contact considered to be the best fit. The contact-matching process used to determine the best fit is shown in the following figure.



When shared contact addresses are in different fields (for example, *contacts.email_alt1* and *contacts.email_alt2)*, the system selects the contact whose address is in the field of highest precedence *(contacts.email_alt1)*. However, if the shared addresses are in the same field (for example, both are in *contacts.email_alt1),* the system attempts to match the values in the First Name and Last Name fields if available. If no match is found based on field precedence or name values, the system selects the contact record last updated in the database.

❖ Areas affected by email address sharing

Areas affected by email address sharing

The contact-matching process applies to areas of the product suite that associate contacts by email address, including chats, mailings, surveys, web forms, site feedback, email transactions, and Create an Account and Ask a Question requests on the **customer portal**. Contact-matching logic is used only in cases in which the contact is not explicitly identified by a cookie.

The following table lists the areas in Oracle Service Cloud that are affected when email address sharing is enabled and where you can find additional information.

Table 133: Areas in Oracle Service Cloud Affected by Email Address Sharing

Area in Oracle Service Cloud	Where to Find Information
Common	
Email management	Refer to Email handling in Service or Email bounce handling.
Data import	Refer to Importing data.
Contact workspaces	Refer to Contact Fields Description.
Outlook integration	Refer to Email address sharing in contact integration or Email address sharing in email integration.
Service	
Customer Portal	Refer to Allowing duplicate email addresses.
Oracle RightNow Chat Cloud Service (Chat)	Refer to Email address sharing in Chat.

Table 133: Areas in Oracle Service Cloud Affected by Email Address Sharing (Continued)

Area in Oracle Service Cloud	Where to Find Information
Outreach	
Mailings	When defining an audience for broadcast and transactional mailings, you can allow delivery of messages to multiple contacts who share the same email address. Audience count and web form identification are also affected when email address sharing is enabled. Refer to the following links. • Broadcast mailings—Click here to view the option for the delivery of messages to multiple contacts that are sharing the same email address. • Transactional mailings—Click here to view the option for delivery of messages to multiple contacts that are sharing the same email address. • Audience count—Click here to view the description of the Duplicate Email column on the Audience Count Details window. • Web form identification—Refer to Inserting web forms.
Feedback	
Surveys	When defining an audience for broadcast and transactional surveys, you can allow delivery of messages to multiple contacts who share the same email address. Audience count and web form identification are also affected when email address sharing is enabled. Refer to the following links. • Broadcast surveys—Click here to view the option for the delivery of messages to multiple contacts that are sharing the same email address. • Transactional surveys—Click here to view the option for the delivery of messages to multiple contacts that are sharing the same email address. • Audience count—Click here to view the description of the Duplicate Email column on the Audience Count Details window. • Web form identification—Refer to Inserting web forms.

Enabling email address sharing

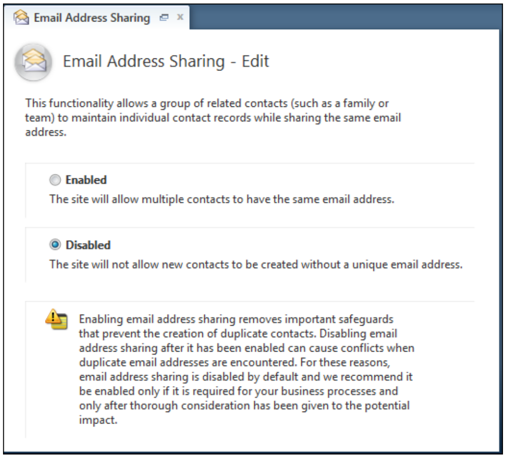
To make email address sharing available, it must first be enabled. The following procedure describes how to enable and disable email address sharing on your site.

Caution Enabling email address sharing removes important safeguards that prevent the creation of duplicate contacts and protect your reputation for sending mailings and surveys. Also, disabling email address sharing after it has been enabled can cause conflicts when duplicate email addresses are encountered. For these reasons, email address sharing is disabled by default and we recommend it be enabled only if it is required for your business processes and only after thorough consideration has been given to the potential impact.

To enable email address sharing

1 Click the Configuration button on the **navigation pane**.

2 Double-click Email Address Sharing under Database. The Email Address Sharing editor displays on the **content pane**.



3 Select the Enabled radio button.

4 Click the Save and Close button on the **ribbon**. A message warns you that duplicate email address safeguards will be removed.

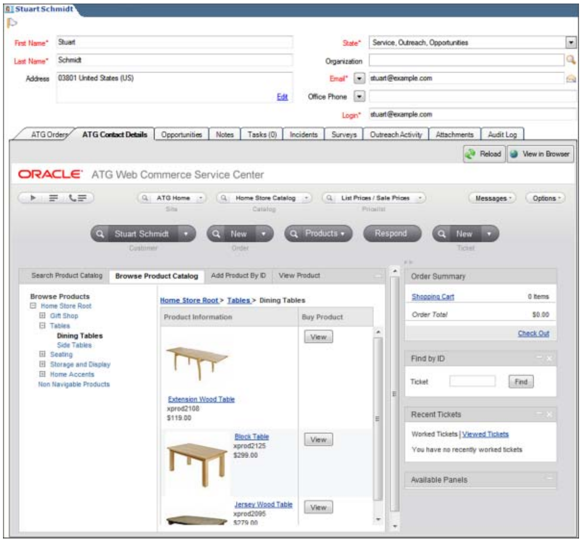
5 Click the OK button.

Note Once email address sharing is enabled, staff members who are currently logged in to Oracle Service Cloud must log out and log back in for the change to take effect.

Oracle Commerce Service Center integration

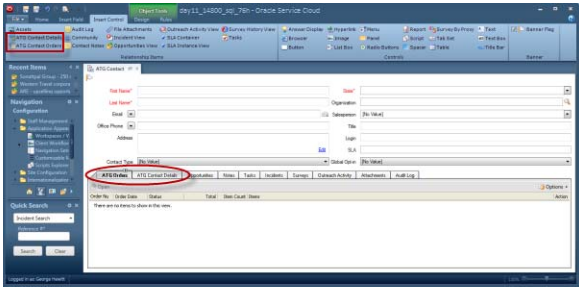
With the integration of Oracle Commerce Service Center (CSC), you can respond quickly to commerce support questions from the agent desktop. You will no longer have to switch back and forth between applications. Contacts are synchronized between CSC and Oracle Service Cloud, letting you view CSC contact information and order details on the Service Console. From there, you can take action on an existing CSC order or place a new order in CSC on behalf of the customer.

Important CSC must be enabled. Contact your Oracle account manager.



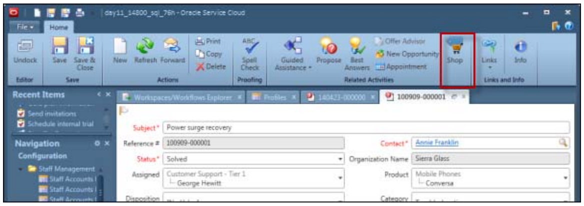
Adding CSC controls to contact workspace

You can add two controls, ATG Contact Details and ATG Contact Orders, to a custom contact workspace that give you quick access to CSC information, including contact information and order details. Refer to [Adding controls to workspaces and scripts](#).



Adding the CSC Shop button to the ribbon

You can add the CSC Shop button to the contact or incident ribbon for easy access to the CSC. The Shop button opens CSC in a new browser window. Refer to [To customize the ribbon](#).



22

Tasks

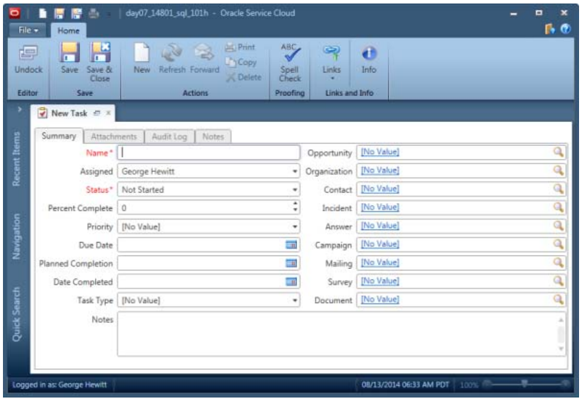
With task functionality, you can add tasks to records you are working on. In addition, you can add standalone tasks that are not related to specific records. By keeping track of all tasks in Oracle Service Cloud, you can monitor everything you must do from a single location, all but eliminating the possibility of forgetting a critical task.

Tasks overview

You can add tasks from the **file menu** or the Tasks tab on records. By familiarizing yourself with the standard **workspace** for tasks, you will know how to add and edit tasks during your workday.

Standard task workspace

The standard workspace for tasks defines which fields are available, which **ribbon** buttons are displayed, and how the information is organized on the **content pane**.



Your organization might use this standard workspace, or your administrator might have created one or more customized workspaces. Your **profile** defines the workspace you see when you work with tasks, whether it is the standard workspace or a customized workspace. Refer to Standard workspaces or Custom workspaces.

Ribbon

The following table describes the buttons on the **ribbon** of the standard task workspace.

Table 134: Task Ribbon Description

Group/Button	Description
Editor	
Undock	Click this button to undock the task workspace editor from the console and display it in a separate window.
Save	
Save	Click this button to save the task and keep it open for editing. **Note:** When you save a task, the rules engine evaluates it. If task rules exist and the task matches one or more rules, the task may be modified when you save it. For example, a rule can change a task's status or assign it to a different staff member.
Save and Close	Click this button to save the task and close it.
Actions **Note:** With the exception of the New button, the buttons in this group are not enabled until after you have saved a task you are adding.	
New	Click this button to add a task.
Refresh	Click this button to refresh the current tasks report.
Forward	Click this button to forward the task. Refer to Forwarding records.
Print	Click this button to print the task. Refer to Printing records.
Copy	Click this button to create a copy of the task that you can modify to create another task. Refer to Copying records.
Delete	**Caution:** This action cannot be undone. Click this button to delete the task.

Table 134: Task Ribbon Description (Continued)

Group/Button	Description
Proofing	
Spell Check	Click this button to check the spelling of any task fields that have spell checking enabled. Refer to Manual spell checking.
Links and Info	
Links	Click this button to select a URL from the list of links added by your administrator. Refer to Adding URL links to the Links button.
Info	Click this button to display information about the open task, including the task ID, the dates the task was added, last updated, and completed, its escalation level, and any rule state it might be in.

❖ Working with the ribbon
❖ Displaying shortcut keys on the ribbon

Record tabs

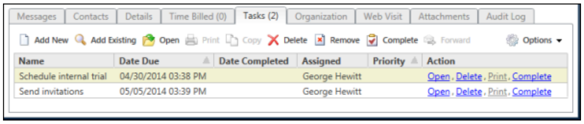
The standard workspace for tasks includes the following tabs.

- **Summary tab**—Contains all key fields for the task. You can also select a record with which you want to associate the task. Refer to Adding tasks.

  Depending on the height of the Service Console on your screen, the key fields might be displayed on the content pane, rather than on a separate Summary tab.
- **Attachments tab**—Contains the attachments associated with the task. The tab displays the file name, size, date created, date updated, and a description for each attachment. Refer to Attaching files to records.
- **Audit Log tab**—Lists the actions taken on the task, including the time the action was taken, who carried out the action, what the action was, and a description of the action. Refer to Audit logs.
- **Notes tab**—Contains task notes that can be sorted by date. Remember that customers never see the task notes added by staff members. Refer to Adding tasks.

Tasks tab

Besides adding and editing tasks on the task workspace, you can add or edit them from the Tasks tab when you are working on an answer, campaign, contact, document, incident, mailing, opportunity, organization, or survey.



The following table describes the toolbar buttons on the Tasks tab. The same options are available by right-clicking a task.

Table 135: Tasks Tab Toolbar Description

Button	Description
Add New	Click this button to open a new task on a sub-tab. Refer to Adding tasks for the procedure to complete the task fields.
Add Existing	Click this button to display the Task Search window. After finding and selecting a task, the task is added to the task list for the record. See To search for a task from an open record.
Open	Click this button to open the selected task for editing.
Print	Click this button to print the task.
Copy	Click this button to copy the task.
Delete	Click this button to delete the task.
Remove	Click this button to remove the task association. **Note:** The task is disassociated, but the task record remains in the knowledge base.
Complete	Click this button to mark the task complete. See To complete a task.
Forward	Click this button to forward the task to the selected recipients. Refer to Forwarding records.

Table 135: Tasks Tab Toolbar Description (Continued)

Button	Description
Options	Click this button to display a drop-down menu of options that include actions you can take, such as printing, previewing, forwarding, publishing, or exporting the task data.

The following columns are available on the Tasks tab.

- Name
- Date Due (date due for incident tasks)
- Date Completed (date completed for incident tasks)
- Assigned
- Priority
- Action

The Action column contains Open, Delete, Print, and Complete options for the task. You can also access these options by right-clicking the task. Other right-click options include Add, Copy, Forward, and Options. (The right-click options are the same as those offered on the Tasks tab toolbar.)

Adding tasks

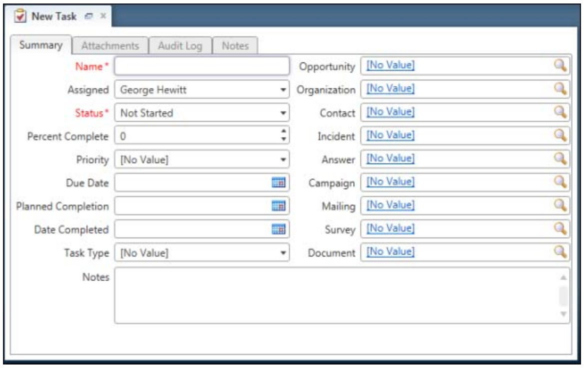
You can add a standalone task to serve as a reminder to yourself, or you can add a task to a specific record when you are working on the record. When you add a task, you not only define its name, the staff member it is assigned to, relevant dates, and other task information, but you can also associate it with existing records. Refer to Searching for records.

To add a task

1 Click the New button on the **ribbon**.

Or

If your navigation set is configured to add tasks from the **file menu**, click File and select Task. See To configure the file menu.



Note You can also add a new task from:

- **Open records**—For example, from the Tasks tab of an open incident, click the Add New button. The new task opens on a sub-tab, creating a workgroup. Refer to Creating and using workgroups.
- **Items such as mailings and campaigns**—For example, from the Tasks tab of an open mailing, click the Add New button. The new task opens in a separate window.

2 Enter the following field information.

Table 136: Task Fields Description

Field	Description
*Name	Type the name of the task.
Assigned	This field defaults to your name in the standard tasks workspace, but you can click the drop-down menu to assign the task to a different staff member if you have permission.
*Status	Click this drop-down menu and select a status. The status options include Not Started, In Progress, Completed, Waiting, and Deferred.
Percent Complete	Type a value for the percentage of the task that is complete.
Priority	Click this drop-down menu and select Low, Normal, or High as the task's priority.

Table 136: Task Fields Description (Continued)

Field	Description
Due Date	Click this drop-down menu to open the current month's calendar and select the date the task is due. Use the arrows at the top to change the month if necessary.
Planned Completion	Click this drop-down menu to open the current month's calendar and select the task's planned completion date.
Date Completed	Click this drop-down menu to open the current month's calendar and select a completion date for the task.
Task Type	Click this drop-down menu to select a task type. When you select a task type, the associated record on the right side of the content pane is highlighted to indicate that it is a required field. In other words, if you define a task as having an Opportunities task type, you must select an opportunity for the task. Refer to Using the Inherit property for task fields for a discussion about setting task fields equal to the value of the associated record's fields. It is not necessary to select a task type if you do not want to associate the task with a specific record. **Note:** If you are adding the task from an open record, the task type selection defaults to the type of record being edited.
Notes	Type any notes about the task in this field.

3 To associate the task with a record, click the Search button to the right of the field for the type of record, enter information in the search fields, and select the record you want to associate with the task.

Note If you have selected a task type, you must make a selection for the associated record (opportunity, organization, contact, incident, answer, campaign, mailing, survey, or document).

4 To set the inherit property for the Assigned, Contact, or Organization fields, refer to Using the Inherit property for task fields.

5 To attach files to the task, click the Attachments tab. Refer to Attaching files to records.

6 To view the audit log for the task, click the Audit Log tab. Refer to Audit logs.

7 To add notes to the task, click the Notes tab, click the Add button, and type your comments in the field.

Tip Add notes to the task when you want to provide information for other staff members. Notes are not visible to customers. Click the Task Note drop-down menu to select the channel through which you gained the information you are adding to the note. Besides selecting No Channel, options include Phone, Fax, Post, CSS Web, and Email.

8 Click the Save and Close button on the ribbon to save the task. If you added the task on a sub-tab of a workgroup, all records in the workgroup will be saved.

Important When adding a task in a workgroup, clicking the OK button accepts changes made to the record and closes the sub-tab. However, it does not save changes to the database until you click the Save or Save and Close button on the ribbon.

❖ Searching for records
❖ Using the Inherit property for task fields

Using the Inherit property for task fields

When a task is associated with a record, some values for that task can be “inherited” from the associated record. For example, you might add a task and define it as an opportunity task by setting the Task Type field to Opportunities. Once you have selected the opportunity you want to associate with the task, you can choose to set the assigned staff member, organization, and contact for the task to the same ones that are associated with the opportunity. Then, if you should later change the opportunity’s assigned staff member, organization, or contact, the same change will occur on the associated task.

Task type

The concept of inheritance hinges on the task type. If you do not select an option from the Task Type drop-down menu, the task field values cannot be inherited from a record associated with the task. For instance, you can use the Inherit property to make the task’s assigned staff member, organization, and contact the same as the opportunity’s values. If, however, you leave the task type unspecified, you cannot use the Inherit property for those fields.

Inheriting the Assigned field value

All of the task types—opportunities, organizations, contacts, incidents, answers, campaigns, mailings, surveys, and documents—allow the Assigned field to be inherited from the associated record. Use the Inherit property when you want the task to always be assigned to the staff member who is assigned to the record, even when the staff member assigned to the record changes. If you want a particular staff member to be assigned to the task, regardless of who is assigned to the actual record, do not use Inherit.

For example, assume you set the Assigned field of a Mailings task to Inherit. If you change the staff member assigned to the mailing, the staff member assigned to the associated task also changes to the new staff member. If you want the task to always be assigned to the same person assigned to the mailing, even if that staff member changes, select Inherit. If, on the other hand, you want a particular staff member to be assigned to the mailing task, regardless of who is assigned to the actual mailing, do not use Inherit.

Although the following procedures use the Answer task type as an example, the procedure is the same for all task types.

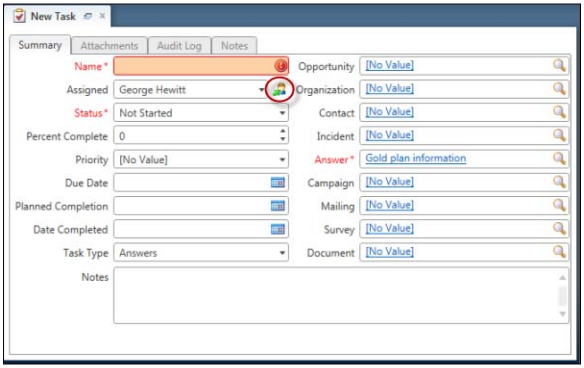
To set the Assigned field to Inherit

1 From an open task, click the Task Type drop-down menu and select Answers. The Answer field label turns red and includes an asterisk, indicating that it is now a required field, and an Inherit button appears to the right of the Assigned field.

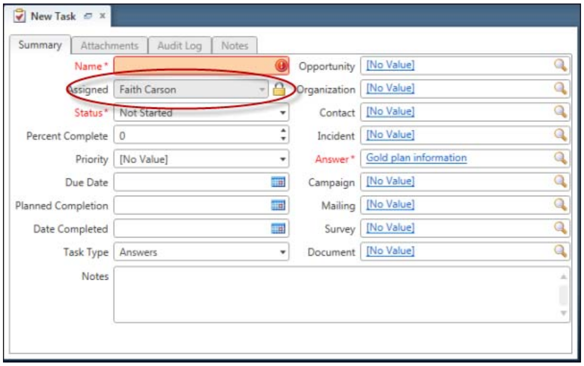
2 Select the answer you want to associate with the task.

- **a** Click the Search button to the right of the Answer field, enter information in the search fields, and click the Search button.
- **b** Select the answer you want from the list of search results and click the Select button. The Answer Search window closes and the answer appears in the Answer field of the task.

Tip If only one answer matches the search criteria, the Answer field is automatically populated.



3 Click the Inherit button to the right of the Assigned field. The Inherit button changes to Assigned Locked (with a lock symbol) indicating the field's Inherit property is active, the value in the Assigned field changes to the staff member assigned to the answer, and the field is grayed out (disabled).



To change the Assigned field from Inherit

Click the Locked button to the right of the Assigned field. The staff member name in the field remains the same, but the field is enabled and you can change the value now that the Inherit property is no longer active.

Inheriting the organization and contact values

With certain task types, you can set the organization field, the contact field, or both to inherit those field values from the associated record. For example, when you add or edit an opportunities or incidents task type, you can set the organization and contact fields to inherit those fields from the opportunity or incident. And when you add or edit a contacts task type, you can set the organization field to inherit the contact's organization.

When the task's contact, organization, or both are tied to the associated record through the Inherit property, you can ensure that the fields are the same for both the task and the record. An additional benefit is the simplicity of completing those task fields.

Although the following procedures set contact and organization fields to Inherit for an incidents task type, the procedure is the same for opportunity and contact task types.

To set contact and organization fields to Inherit

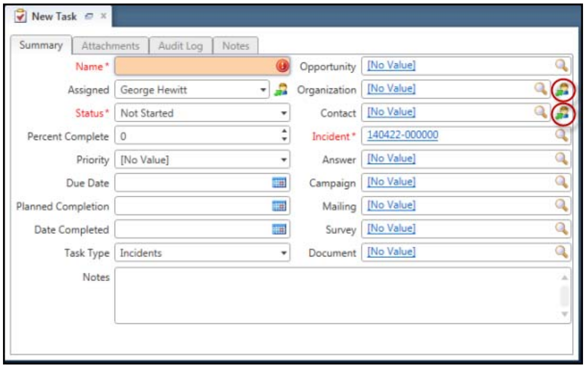
1 From an open task, click the Task Type drop-down menu and select Incidents. The Incident field label turns red and includes an asterisk, indicating that it is now a required field, and an Inherit button appears to the right of the Organization and Contact fields.

2 Select the incident you want to associate with the task.

  a Click the Search button for the Incident field, enter your search criteria in the search fields, and click the Search button.

  b Select the incident you want from the list of search results and click the Select button. The Incident Search window closes and the incident appears in the Incident field of the task.

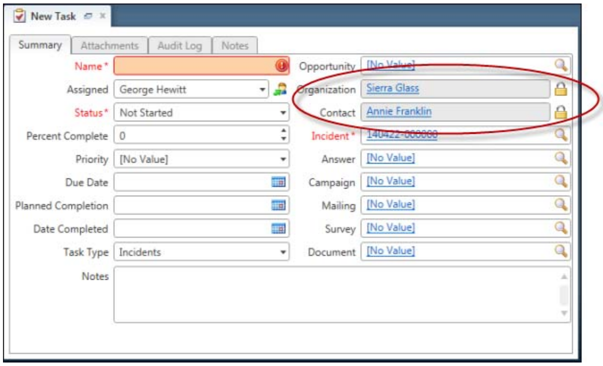
Tip If only one incident matches the search criteria, the Incident field is automatically populated.



3 Click the Inherit button to the right of the Contact field. The Inherit button changes to Contact Locked (with a lock symbol) indicating the field's Inherit property is active, the value in the Contact field changes to the contact for the incident, and the field is grayed out (disabled).

4 Click the Inherit button to the right of the Organization field. The Inherit button changes to Organization Locked (with a lock symbol) indicating the field's Inherit property is active, the value in the Organization field changes to the organization for the incident, and the field is grayed out (disabled).

Note If the incident does not have an organization, the field is locked anyway. If you later add an organization to the incident, the task's Organization field contains the same organization value as the incident.



To change the Contact or Organization field from Inherit

Click the Locked button to the right of the Contact or Organization field. The value in the field remains the same, but the field is enabled and you can change the value now that the Inherit property is no longer active.

Editing tasks

You may find yourself editing a task to update information such as the due date or completion percentage. Depending on the permissions set in your profile, you can edit, copy, and delete individual and multiple tasks, forward tasks, and mark them complete.

For information about copying and forwarding tasks, refer to Copying records and Forwarding records. To edit multiple tasks simultaneously, refer to Updating multiple records.

The following procedures assume a tasks report is displayed on the **content pane**.

To edit a task

1 Right-click the task and select Open > Task. The task opens.

2 Make the necessary changes.

3 Click the Save and Close button to save the changes to the task.

To complete a task

Right-click the task and select Complete Task.

Or

Select the task and click the Complete Task button on the report **ribbon**.

Or

Select the task and click Complete in the Action column.

In all options, you are asked to confirm that you want to set the task to complete. To set multiple tasks to complete, press **Ctrl** while selecting each task in the tasks report and then right-click and select Complete Task or click the Complete Task button on the ribbon. (If you click Complete in the Action column when you have selected multiple tasks, only the task in the row where you click Complete is updated.)

To delete a task

Caution Deleting a task removes it permanently from the **knowledge base**. When you delete answers, campaigns, contacts, documents, incidents, mailings, opportunities, organizations, or surveys that have associated tasks, any tasks associated with the records are also deleted. The type of record that a task is associated with is determined by the value of the Task Type field.

1 Right-click a task in a report and select Delete > Task.

Or

With the task open, click the Delete button on the ribbon. A Task Delete confirmation window appears.

2 Click the Yes button to delete the task.

❖ Copying records

❖ Forwarding records

❖ Updating multiple records

23

Outlook Integration

Microsoft Outlook can be integrated with Oracle Service Cloud, enabling you to share your **contacts** and **tasks** and synchronize your email. Using Outlook integration, your data will be more complete and up-to-date, and you'll no longer need to switch back and forth between applications. You can also create contacts and incidents when syncing Outlook email with Oracle Service Cloud.

Outlook integration comprises the following components:

- **Contact synchronization**—Enter contact information one time, in either Oracle Service Cloud or Outlook, and have that information shared in both applications.
- **Task synchronization**—Enter task information one time in either application and have that information shared in both applications.
- **Email integration**—Append Outlook email, including attachments, to existing contacts, organizations, opportunities, and incidents in Oracle Service Cloud.

Besides synchronizing contacts, tasks, and email between Outlook and Oracle Service Cloud, you can also implement a Microsoft smart tag in Outlook to open incidents directly from an email.

Configuring Outlook integration

To use Outlook integration, it must be enabled on your site. In addition, you or your administrator must add Outlook integration permissions to your profile and install Outlook integration software on your workstation.

The following actions must be taken to use Outlook integration.

- Enable Outlook integration. Contact your Oracle account manager.
- Add or update profiles to include Outlook integration permission. Refer to Adding Outlook integration permissions to profiles.
- Install Outlook integration software on agent workstations. Refer to Installing Outlook integration.

Adding Outlook integration permissions to profiles

You can be assigned full Outlook integration permissions (contact synchronization, task synchronization, and email integration) or any combination of the three permissions. Updating your **profile** is a necessary first step as Oracle Service Cloud will check your permissions before installing the appropriate Outlook integration components.

Important Staff members who are using Outlook 2007 must enable smart tags through Tools > Options > Mail Format > Editor Options > Proofing > AutoCorrect Options > Smart Tags.

Staff members who are using Outlook 2010 or 2013 must enable smart tags through File > Options > Mail > Editor Options > Proofing > AutoCorrect Options > Actions.

To add Outlook integration permissions to a profile

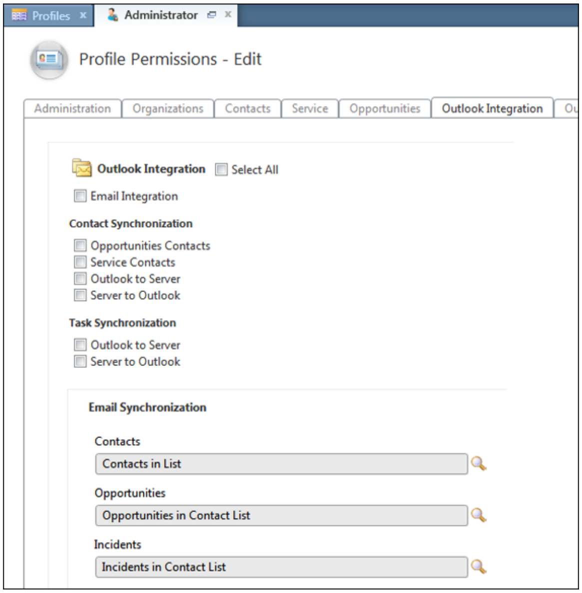
1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management. The report opens on the **content pane**.

3 Double-click the profile you want to edit. The Profiles editor opens.

4 Click the Permissions button on the **ribbon**. The Permissions page opens.

5 Click the Outlook Integration tab.



6 To select all of the check box options on the Outlook Integration tab, select the Select All check box.

7 To allow staff members to append Outlook email to contacts, organizations, opportunities, and incidents in Oracle Service Cloud, select the Email Integration check box.

8 To allow staff members to share contacts between Outlook and Oracle Service Cloud, select one or more of the Contact Synchronization check boxes.

a To share contacts that are in the Opportunities **state**, select the Opportunities Contacts check box.

b To share contacts that are in the Service state, select the Service Contacts check box.

c To share Outlook contacts with Oracle Service Cloud, select the Outlook to Server check box.

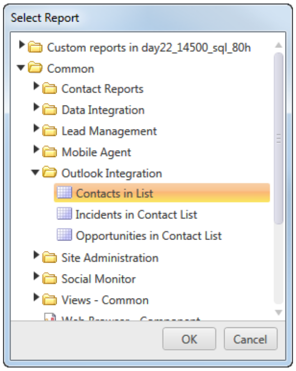
d To share Oracle Service Cloud contacts with Outlook, select the Server to Outlook check box.

9 To allow staff members to share tasks between Outlook and Oracle Service Cloud, select one or both of the Task Synchronization check boxes.

a To share Outlook tasks with Oracle Service Cloud, select the Outlook to Server check box.

b To share Oracle Service Cloud tasks with Outlook, select the Server to Outlook check box.

10 To select different email synchronization reports for determining the contacts, opportunities, and incidents to return during email synchronizations, click the Search button to the right of the report you want to change. The Select Report window opens and the Outlook Integration folder expands by default.



a After selecting a new report, click the OK button to close the Select Report window.

Note All of the Outlook integration reports are read-only standard reports that can be copied and modified. Refer to Creating reports.

11 Click the Save and Close button on the ribbon.

All staff member who will be using Outlook integration must have the profile containing Outlook integration permissions assigned to their staff account. Refer to Adding and editing staff accounts.

- ❖ Customizing profiles
- ❖ Adding and editing staff accounts

Installing Outlook integration

After Outlook integration has been enabled and you have been assigned the correct profile permissions, you must install the necessary components on your workstation. When you install Outlook integration, Oracle Service Cloud checks your profile to see which components (email, contact, and task) you have permission to share and synchronize. The installation process adds Share and Sync buttons to your Outlook toolbar.

To install Outlook integration

1 Close Outlook.

2 From Oracle Service Cloud, click File and select Links > Install Outlook Integration. The Oracle Service Cloud Outlook Sync Setup wizard opens.

3 Click the Next button to open the Select Installation Folder window.

Tip We recommend that you install Outlook integration at the default location of C:\Program Files\Oracle Service Cloud Outlook Sync.

4 To install Outlook integration in a different location, click the Browse button, select the folder where you want to install Outlook integration, and click the OK button.

5 To see a list of the drives where Outlook integration can be installed, click the Disk Cost button. Click the OK button when you are finished.

6 If you are the only staff member who uses your workstation, select the Just Me radio button.

Or

If other staff members have accounts on your workstation and must also use Outlook integration, select the Everyone radio button.

7 Click the Next button to open the Confirm Installation window.

8 Click the Next button to begin the installation. After the installation is complete, the Installation Complete window opens.

9 Click the Close button to complete the installation.

With the proper components installed, you'll want to review and possibly customize your sync options before using Outlook integration.

Selecting contact, task, and email sync options

Outlook integration contains default synchronization options, but you can make any necessary changes to the defaults. To start with, you'll enter server details and your Oracle Service Cloud user name and password. You can then customize contact and task sync options, including preferences for sync direction (such as from Oracle Service Cloud to Outlook, but not vice versa) and the types of actions that can initiate synchronization.

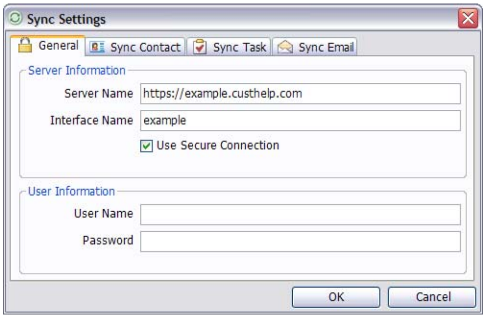
For email integration, you can choose which types of records (contact, organization, incident, and opportunity) you want Outlook email appended to. (Email integration occurs only from Outlook to Oracle Service Cloud.)

Note You must have administrative permissions on your workstation to change sync options. If you do not have administrative permissions, contact your administrator.

To select Sync Settings options

1 Open Outlook.

2 Click the arrow next to the Sync Email button and select Sync Settings. The Sync Settings window opens.



3 Enter field information described in the following table.

Table 137: Sync Settings Window General Tab Description

Field	Description
Server Information	This section contains fields for entering server information. Contact your administrator for information. These fields may already be populated with your server and interface names.
Server Name	Type the server name of the Oracle Service Cloud application.
Interface Name	Type the interface name.

Table 137: Sync Settings Window General Tab Description (Continued)

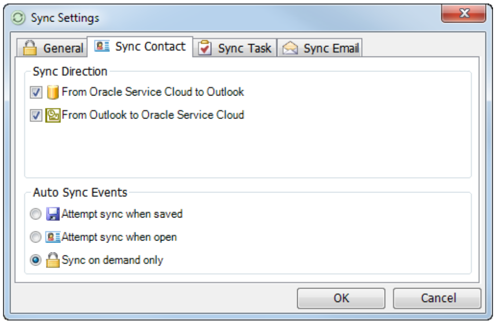
Field	Description
Use Secure Connection	Select this check box to use a secure connection between Outlook and Oracle Service Cloud.
User Information	This section contains fields for entering your Oracle Service Cloud user information.
User Name	Type your Oracle Service Cloud user name.
Password	Type your Oracle Service Cloud password.

4 Click the OK button to save your settings and close the Sync Settings window.

To select contact sync options

1 Click the arrow next to the Sync Email button and select Sync Settings. The Sync Settings window opens.

2 Click the Sync Contact tab.



3 Select from the options described in the following table.

Table 138: Sync Contact Tab Description

Field	Description
Sync Direction	This section contains check boxes for selecting the direction for contact synchronization. **Note:** Selecting only one of the contact synchronization settings results in a one-way synchronization.
From Oracle Service Cloud to Outlook	Select this check box to sync contact data from Oracle Service Cloud to Outlook. Contacts in Oracle Service Cloud are added to the Contacts folder in Outlook only if one or more of the following conditions are met. The contact is associated with an incident or opportunity that is assigned to you. The Salesperson field on the contact's record displays your name. The Salesperson field on the contact's organization record displays your name.
From Outlook to Oracle Service Cloud	Select this check box to sync contact data from Outlook to Oracle Service Cloud.
Auto Sync Events	This section contains options for selecting when you want to sync contact data.
Attempt Sync When Saved	Select this radio button to sync contact data between Oracle Service Cloud and Outlook when a contact is saved in Outlook.
Attempt Sync When Open	Select this radio button to sync contact data between Oracle Service Cloud and Outlook when a contact is opened in Outlook.
Sync On Demand Only	Select this radio button to sync contact data between Oracle Service Cloud and Outlook when you click the Share or Sync All Contacts button on the Outlook toolbar. This option is selected by default.

If both the From Oracle Service Cloud to Outlook and From Outlook to Oracle Service Cloud check boxes are selected, a two-way contact synchronization occurs. If the same data you are updating in Outlook has been updated by another staff member working in Oracle Service Cloud, the data from Oracle Service Cloud will be used during the two-way synchronization.

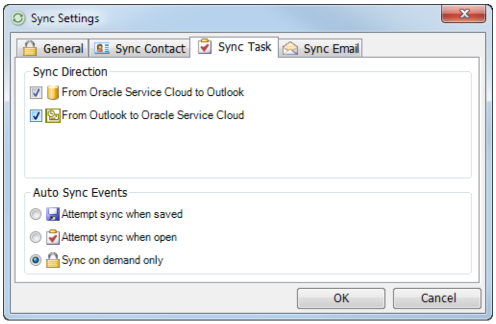
Note When a contact record is first created in Oracle Service Cloud as a result of a sync, the Salesperson field in the contact record is assigned to the staff member who performed the sync. Subsequent synchronizations do not affect this field. You can, however, manually update the Salesperson field by editing the contact record in Oracle Service Cloud.

4 Click the OK button to save the sync contact settings and close the Sync Settings window.

To select task sync options

1 Click the arrow next to the Sync Email button and select Sync Settings. The Sync Settings window opens.

2 Click the Sync Task tab.



3 Select from the options described in the following table.

Table 139: Sync Task Tab Description

Field	Description
Sync Direction	This section contains check boxes for selecting task synchronization settings. Selecting only one of the task synchronization settings results in a one-way synchronization.
From Oracle Service Cloud to Outlook	Select this check box to sync task data from Oracle Service Cloud to Outlook.
From Outlook to Oracle Service Cloud	Select this check box to sync task data from Outlook to Oracle Service Cloud.
Auto Sync Events	This section contains options for selecting when you want to sync tasks.
Attempt Sync When Saved	Select this radio button to sync task data between Oracle Service Cloud and Outlook when a task is saved in Outlook.
Attempt Sync When Open	Select this radio button to sync task data between Oracle Service Cloud and Outlook when a task is opened in Outlook.
Sync On Demand Only	Select this radio button to sync task data between Oracle Service Cloud and Outlook only when you click the Share or Sync All Tasks button on the Outlook toolbar. This option is selected by default.

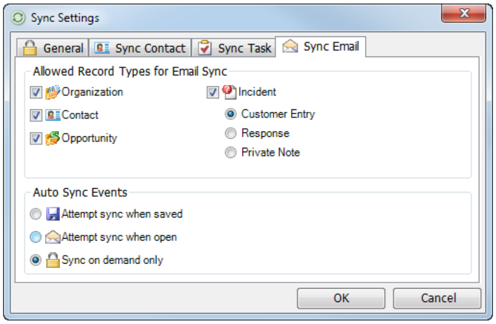
Important If both the From Oracle Service Cloud to Outlook and From Outlook to Oracle Service Cloud check boxes are selected, a two-way task synchronization occurs. If the same data you are updating in Outlook has been updated by another staff member working in Oracle Service Cloud, the data from Oracle Service Cloud will be used during the two-way synchronization.

4 Click the OK button to save the task sync settings and close the Sync Settings window.

To select email sync options

1 Click the arrow next to the Sync Email button and select Sync Settings. The Sync Settings window opens.

2 Click the Sync Email tab.



3 Select from the options described in the following table.

Table 140: Sync Email Tab Description

Field	Description
Allowed Record Types for Email Sync	This section contains check boxes for selecting the types of records that are allowed for email synchronization. All check boxes are selected by default. Email is always synchronized one way from Outlook to Oracle Service Cloud.
Organization	Select this check box to append email data from Outlook to the Oracle Service Cloud organization record associated with the contact that has the same email address as the selected email.
Contact	Select this check box to append email data from Outlook to the Oracle Service Cloud contact record with the same address as the selected email.
Opportunity	Select this check box to append email data from Outlook to one or more opportunities in Oracle Service Cloud for the contact associated with the email address.
Incident	Select this check box to append email data from Outlook to one or more incidents in Oracle Service Cloud for the contact associated with the email address. Then select one of the following options to designate how the email should be appended to records in Oracle Service Cloud: Customer Entry, Response, or Private Note. The Customer Entry radio button is selected by default.

Table 140: Sync Email Tab Description (Continued)

Field	Description
Auto Sync Events	This section contains options for selecting when you want to sync email.
Attempt Sync When Saved	Select this radio button to append email data from Outlook to Oracle Service Cloud when an email is saved in Outlook.
Attempt Sync When Open	Select this radio button to append email data from Outlook to Oracle Service Cloud when an email is opened in Outlook.
Sync On Demand Only	Select this radio button to append email data from Outlook to Oracle Service Cloud only when the Sync Email button on the Outlook toolbar is clicked. This option is selected by default.

4 Click the OK button to save the email sync settings and close the Sync Settings window.

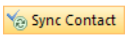
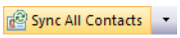
Synchronizing contacts

While viewing or editing a contact in Outlook, you can click a button to share the contact between Outlook and Oracle Service Cloud. If two-way synchronization is set up and you click the Sync All Contacts button, all your Outlook contacts are added to Oracle Service Cloud. Before you can add Oracle Service Cloud contacts to the Outlook Contacts folder, your staff account must be associated with the contacts. At least one of the following conditions must be true for each contact that you want to add.

- The contact is associated with an incident or opportunity that is assigned to you.
- The Salesperson field on the contact's record displays your name.
- The Salesperson field on the contact's organization record displays your name.

After contact integration is set up on your workstation and the Contacts folder is selected, your Outlook toolbar contains the buttons described in the following table.

Table 141: Outlook Buttons for Contact Integration

Button	Description
	Click this button to sync the selected contact between Outlook and Oracle Service Cloud. Refer to the procedure that follows to sync a contact between Outlook and Oracle Service Cloud.
	Click this drop-down menu to display contact sync options.
Sync All Contacts	Select this option to sync all contacts between Outlook and Oracle Service Cloud. Refer to the procedure on this page to sync all contacts between Outlook and Oracle Service Cloud.
Sync Settings	Select this option to select sync options. Refer to To select contact sync options.

To sync a contact between Outlook and Oracle Service Cloud

1 From Outlook, select a contact.

2 Click the Sync Contact button.

   a If you have not previously shared Outlook data, you must enter your Oracle Service Cloud user name and password to verify your permission before continuing. A message lets you know that the contact was synchronized successfully.

b If you have previously shared data from Outlook, the Share Contact window opens to let you know that the contact was synchronized successfully.

3 Click the OK button to close the window. Oracle Service Cloud now contains a contact record associated with the contact you shared.

To sync all contacts between Outlook and Oracle Service Cloud

1 From Outlook, click the Sync All Contacts button. A Synchronization Succeeded message lets you know that the contacts were synchronized successfully.

2 Click the OK button. The Sync All Contacts window opens, confirming the number of contact records that were synchronized between Outlook and Oracle Service Cloud.

Tip To view details about the individual contacts that were synchronized, click the plus sign next to the group of contacts you want to view.

3 Click the OK button to close the Sync All Contacts window.

Email address sharing in contact integration

When email address sharing is enabled in Oracle Service Cloud, which is the ability for more than one contact to have the same email address, duplicate email addresses are detected when performing contact synchronizations between Oracle Service Cloud and Microsoft Outlook. Refer to Email address sharing.

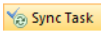
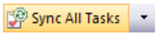
❖ Email address sharing

Synchronizing tasks

While viewing or editing a task in Outlook, you can click a button and share the selected task or all your tasks with Oracle Service Cloud. If two-way synchronization is set up and you click the Sync All Tasks button, all your Outlook tasks are added to Oracle Service Cloud, and all your Oracle Service Cloud tasks are added to the Outlook Tasks folder.

After task integration is set up on your workstation and the Tasks folder is selected, your Outlook toolbar contains the buttons described in the following table.

Table 142: Outlook Buttons for Task Integration

Button	Description
	Select a task from the list and click this button to sync the selected task between Outlook and Oracle Service Cloud. Refer to the procedure that follows to sync a task between Outlook and Oracle Service Cloud.
	Click this drop-down menu to display task sync options.
Sync All Tasks	Select this option to share all tasks between Outlook and Oracle Service Cloud. Refer to the procedure on this page to sync all tasks between Outlook and Oracle Service Cloud.
Sync Settings	Select this option to select sync options. Refer to To select task sync options.

To sync a task between Outlook and Oracle Service Cloud

1. From Outlook, select a task.
2. Click the Sync Task button. The Sync Task window opens, confirming that the task from Outlook has been synchronized with Oracle Service Cloud.
3. Click the OK button to close the Sync Task window. Oracle Service Cloud now contains the task you shared from Outlook.

To sync all tasks between Outlook and Oracle Service Cloud

1. From Outlook, click the Sync All Tasks button. A message displays the number of tasks that were synchronized between Outlook and Oracle Service Cloud.
2. Click the OK button. The Sync All Tasks window opens, confirming the number of tasks that were synchronized between Outlook and Oracle Service Cloud.

Tip To view details about the individual tasks that were synchronized, click the plus sign next to the group of tasks you want to view.

3 Click the OK button to close the Sync All Tasks window.

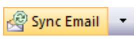
Integrating email

You can append Outlook email to contacts, organizations, opportunities, and incidents in Oracle Service Cloud. Email integration can also be used to create contacts and incidents from Outlook email if no associated email address exists in the **knowledge base** at the time of synchronization.

Important Email integration is a one-way data transfer from Outlook to Oracle Service Cloud. Email data is copied from Outlook and appended to the selected records in Oracle Service Cloud.

After email integration is set up on your workstation and an email folder is selected, your Outlook toolbar contains the button described in the following table.

Table 143: Sync Email Button Description

Button	Description
	Click this drop-down menu to select email sync options.
Sync Email	Select this option to append the selected email to an existing contact, organization, opportunity, or incident in Oracle Service Cloud. If the associated email address is not in the knowledge base, you will have the option of adding a contact or incident. Refer to To append Outlook email to a record in Oracle Service Cloud.
Sync Settings	Select this option to select sync options. Refer to To select email sync options.

To append Outlook email to a record in Oracle Service Cloud

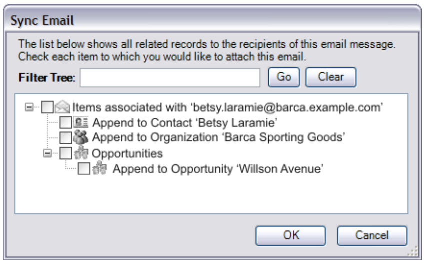
1 From Outlook, select or open the email you want to append to a record in Oracle Service Cloud.

Tip Only one email can be synchronized at a time. Selecting multiple emails will disable the Sync Email button.

2 If you selected the email in a list of messages, click the Sync Email button on the Outlook toolbar. The Sync Email window opens.

Or

If you have a new or existing email message open, click the Add-Ins tab and then click the Sync Email button.



3 To filter the list of returned records, type the contact's name, email address, organization name, or associated record name in the Filter Tree field and click the Go button. To return to the original list of records, click the Clear button.

Tip Although wildcards are not supported, you can type just a few characters in the Filter Tree field. After clicking the Go button, the system will present you with any matching records.

4 Select the appropriate check boxes associated with the addresses in the email. For example, if you select all check boxes, the same email will be added to the individual Notes tabs of the contact and organization records as well as all selected opportunities. The email text appears as a private note in the message thread of all selected incidents.

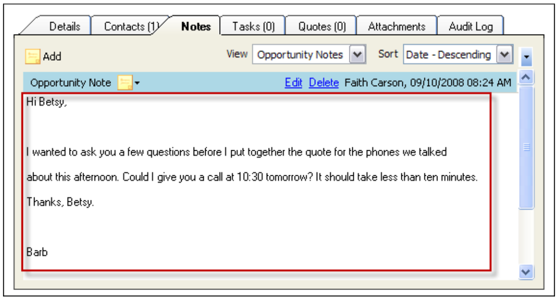
Note If the email includes attachments, you can select the attachments you want to include with the email, and they will appear on the Attachments tab of the selected record. For instance, when you select an attachment under Append to Contact, the email attachment is stored on the Attachments tab of the contact record in Oracle Service Cloud. You can also drag Outlook attachments to the Attachments tab of existing records in Oracle Service Cloud.

5 If the sender's email address does not exist in the **knowledge base**, a red exclamation point and a disabled check box display next to the email address. You can choose to add a contact record and incident using the contact's email address.

6 Click the OK button to append email to the appropriate records in Oracle Service Cloud.

After a successful synchronization, the Sync Email button is disabled for that message.

The following figure shows an email after it has been appended to the Notes tab of the opportunity.



Email address sharing in email integration

When email address sharing is enabled, which is the ability for more than one contact to have the same email address, duplicate email addresses are detected when performing email synchronizations between Oracle Service Cloud and Microsoft Outlook. If a duplicate email address is discovered, the Sync Email window displays all contacts that are associated with the email address, along with their individual records. You can choose one or more of the applicable contacts for email integration. You'll also have the option to create a new contact with the shared email address during the synchronization. Refer to Email address sharing.

- Email address sharing

Using smart tags

Outlook recognizes certain types of data in your email, such as an address, and lets you perform actions on that data. In addition, Oracle Service Cloud lets you install a smart tag that recognizes incident reference numbers contained in email messages. When you right-click the reference number in an email message, the incident automatically opens in Oracle Service Cloud.

Important

If you are using Outlook 2007, smart tags must be enabled through Tools > Options > Mail Format > Editor Options > Proofing > AutoCorrect Options > Smart Tags.

If you are using Outlook 2010 or 2013, smart tags must be enabled through File > Options > Mail > Editor Options > Proofing > AutoCorrect Options > Actions.

To install Oracle Service Cloud SmartTag

1. Close Outlook.
2. In Oracle Service Cloud, click File and select Links > Install Incident Reference Number Smart Tag. The SmartTag Setup Wizard opens.
3. Click the Next button to open the Select Installation Folder window.

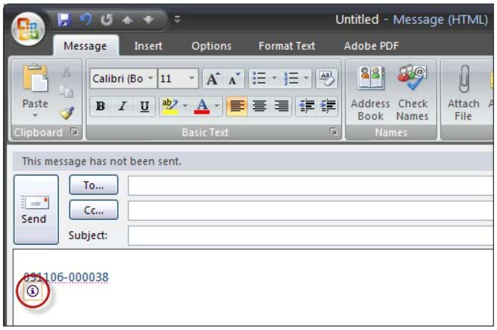
Tip We recommend that you install SmartTag at the default location of C:\Program Files\Oracle Service Cloud SmartTag.

4. To install SmartTag in a different location, click the Browse button, select the folder where you want to install SmartTag, and click the OK button.
5. To see a list of the drives where SmartTag can be installed, click the Disk Cost button. Click the OK button when you are finished.
6. Click the Next button to open the Confirm Installation window.
7. Click the Next button to begin the installation. After the installation is complete, the Installation Complete window opens.
8. Click the Close button to complete the installation.

To open an incident using Oracle Service Cloud SmartTag in Outlook

Important In Outlook 2007, the incident number is underlined with a dotted purple line, indicating it is a smart tag. In Outlook 2010 and 2013, the incident number is not underlined.

1 Hover over the incident number smart tag in the email message. The smart tag indicator appears.



2 Click the smart tag indicator and select Open Incident within Service Console.

Note If you are using Outlook 2010 or 2013, you must right-click the reference number and select Additional Actions to open the incident and view smart tag preferences.

If the **Service Console** is already open, the incident opens. If the Service Console is not open when you select Open Incident, you must log in to Oracle Service Cloud for the incident to open.

24

Reference Information

The following sections are intended for administrators and staff members. They contain information for configuring and using Oracle Service Cloud.

- Date and Time Format Tokens
- Regular Expressions
- Shortcut Keys
- SmartSense Emotive Rating

Date and Time Format Tokens

Oracle Service Cloud uses date and time format tokens to determine how dates and times are expressed throughout the application and how results are grouped in analytics.

- Date and time format tokens for analytics describes the format tokens you can use to specify date and time formats in reports.
- Date and time format tokens for configuration settings describes the format tokens you can use to specify date and time formats in configuration settings.

Date and time format tokens for analytics

The following table lists the date format tokens you can use in analytics. For a list of time format tokens you can use in analytics, refer to Time Format Tokens Used in Analytics.

Table 144: Date Format Tokens Used in Analytics

Token	Description
HH24	Displays hours in 24-hour format. For example, 1 PM = 13.
HH12	Displays the hour in 12-hour format. For example, 5 PM = 5.

Table 144: Date Format Tokens Used in Analytics (Continued)

Token	Description
HH	Displays the hour in 12-hour format. For example, 5 PM = 5.
AM	Displays the AM/PM indicator.
PM	Displays the AM/PM indicator (same function as AM).
MI	Displays the minutes as a two-digit number.
SS	Displays the seconds.
D	Displays the numeric day of the week with Sunday as zero. For example, Monday =1.
DD	Displays the numeric day of the month.
DDD	Displays the numeric day of the year. For example, April 7 = 97.
DY	Displays the three-letter abbreviation for the day of the week. For example, Monday = Mon.
DAY	Displays the full day name. For example, Monday.
WW	Displays the week of the year as a number. The week begins on a Sunday, so the first week (week 1) of a new year is the first week that contains a Sunday. For example, in 2015, the first Sunday was January 4th. This means that the dates January 1st through 3rd of 2015 are considered to part of the last week of the previous year. So, February 22, 2015 = 8.
WWW	Displays the full month name followed by the first date of the week. For example, Sunday July 27, 2008 = July 27. This can be useful to identify a week by its start date rather than simply seeing a number as provided with WW.
WEEKS	Rounds the entered date value to the beginning of the week, using Sunday as the week's start. For example, Thursday July 16, 2009 = 07/12/2009. **Note:** This token can be used only with the *date_add* and *date_trunc* functions.

Table 144: Date Format Tokens Used in Analytics (Continued)

Token	Description
IWEEKS	Rounds the entered date value to the beginning of the week, using Monday as the week's start. For example, Thursday July 16, 2009 = 07/13/2009. **Note:** This token can be used only with the *date_add* and *date_trunc* functions.
MM	Displays the month as a two-digit number. For example, November = 11.
MON	Displays the three-character abbreviated month name. For example, March = Mar.
MONTH	Displays the full month name. For example, March.
Q	Displays the numeric quarter of the year. For example, October 31 = 4.
YY	Displays the last two digits of the year. For example, 2008 = 08.
YYYY	Displays the four-digit year. For example, 2008.
YYYX	Displays the international four-digit year around the end of or beginning of the year. For example, December 31, 2008 = 2009. This is used in conjunction with WW such that all week grouping will consistently include 7 days even at the start and end of the calendar year. YYYX will return the Year for the week where Sunday is the first day of the week. For example, if grouping by Year/Week (WW), even though the dates January 1, 2015 through January 3, 2015 occur in 2015, since they are included with WW as being in week 52 (last week of 2014), YYYX will keep the year consistent and return 2014. If you are going to group by week using WW and want to include the Year number, use YYYX.
YYIX	Displays the international four-digit year. This is used in conjunction with IW such that all week groupings consistently include 7 days even at the start and end of the calendar year.YYIX will return the Year for the week where Monday is the first day of the week. For example, even though the dates December 29, 2014 through December 31, 2014 occur in 2014, since they are included with IW as being in week 1 (first week of 2015), YYIX will keep the year consistent and return 2015. If you are going to group by week using IW and want to include the Year number, use YYIX.

Table 144: Date Format Tokens Used in Analytics (Continued)

Token	Description
J	Displays the Julian date. For example, 2008-08-08 11:18:30 = 2454686.97118.
IW	Displays the international week of the year as a number. IW follows ISO 8601:1988 standards. The IW week begins on a Monday and ends on a Sunday. The first week (week 1) of a new year is the first week that contains four or more days in that year. For example, in 2015, January 1st was a Thursday. This means that the week beginning on Monday, December 29, 2014 contains 3 days in 2014 and 4 days in 2015. So, any dates in that time period will be week 1 (of the new year). For example, December 30, 2014= 01.
IWW	Displays the international full month name followed by the first date of the week. For example, Wednesday December 31, 2007 = December 31. This can be useful to identify a week by its start date rather than simply seeing a number as provided with IW.

Table 145: Time Format Tokens Used in Analytics

Token	Description
DD	Displays the number of days.
HH	Displays the number of hours.
MI	Displays the number of minutes.
SS	Displays the number of seconds.

Date and time format tokens for configuration settings

The following table lists the date and time formats you can use in configuration settings.

Table 146: Tokens Used in Configuration Settings

Token	Description
%a	Displays the three-character abbreviated weekday name. For example, Monday = Mon.
%A	Displays the full weekday name. For example, Monday.
%b	Displays the three-character abbreviated month name. For example, March = Mar.
%B	Displays the full month name. For example, November.
%d	Displays the two-digit numeric day of the month. The first through ninth days of the month are preceded by a zero (01-09).
%D	Displays the date as MM/DD/YY (same as %m/%d/%y).
%e	Displays the numeric day of the month. The first through ninth days of the month are not preceded by a zero.
%H	Displays hours in 24-hour format. For example, 1 PM = 13.
%I	Displays the hour in 12-hour format. For example, 5 PM = 5.
%j	Displays the numeric day of the year. For example, April 7 = 97.
%m	Displays the month as a two-digit number. For example, November = 11.
%M	Displays the minutes as a two-digit number.
%n	Inserts a hard return.
%p	Displays the AM/PM indicator.
%r	Displays the time as HH:MM:SS AM/PM (same as %I:%M:%S %p).
%R	Displays the time as HH:MM (same as %H:%M).
%S	Displays the seconds as a two-digit number.
%t	Inserts a tab character.

Table 146: Tokens Used in Configuration Settings (Continued)

Token	Description
%T	Displays the time as HH:MM:SS (same as %H:%M:%S).
%y	Displays the last two digits of the year. For example, 2008 = 08.
%Y	Displays the four-digit year. For example, 2008.
%z	Displays the abbreviated time zone name. For example, Mountain Standard Time = MST.
%Z	Displays the full time zone name. For example, Mountain Standard Time.

Regular Expressions

Regular expressions use **operators** and character strings to specify a set of character strings. They can be used when configuring business rules to allow more flexibility in the criteria used to route incidents. Regular expressions can also be used in mailbox filters and custom objects.

Note Since the values in drop-down menus are fixed, using regular expressions to match items in a drop-down menu (for example, Product or Category) is not supported. If you want to include an If condition for items in a drop-down menu, use EQUALS or CONTAINS instead of a regular expression.

The following table lists some of the regular expression operators that work with **business rules** and mailboxes. Oracle Service Cloud accepts any regular expression using POSIX Extended syntax.

Note Forward slash (/) delimiters are not required when using regular expressions in business rules or report filters.

The following table provides descriptions of regular expressions.

Table 147: Regular Expression Operators

Action	Description
[ ]	Matches any character in the brackets.

Table 147: Regular Expression Operators (Continued)

<table>
<tr><th>Action</th><th>Description</th></tr>
<tr><td>[0-9]</td><td>Matches any number between 0 and 9.</td></tr>
<tr><td>[A-Z]</td><td>Matches any character A-Z or a-z.</td></tr>
<tr><td>[^]</td><td>Matches any characters NOT in the brackets. The first character in the brackets must be ^.</td></tr>
<tr><td>text1 | text2</td><td>The pipe character acts as a Boolean OR, so text1 OR text2 results in a match.
Note: Do not include a pipe at the beginning or end of a regular expression.</td></tr>
<tr><td>.</td><td>Matches any single character except a new line.</td></tr>
<tr><td>?</td><td>The preceding item is optional and matched at most once.</td></tr>
<tr><td>*</td><td>The preceding item is repeated as many times as necessary to match. Also matches if preceding item is not present.</td></tr>
<tr><td>+</td><td>The preceding item is matched one or more times.</td></tr>
<tr><td>{n}</td><td>The preceding item is matched exactly n times.</td></tr>
<tr><td>{n,}</td><td>The preceding item is matched n or more times.</td></tr>
<tr><td>{n,m}</td><td>The preceding item is matched at least n times, but not more than m times, and as few times as possible.</td></tr>
<tr><td>( )</td><td>Used to group elements of the regular expression, as in arithmetic.</td></tr>
<tr><td>\w</td><td>Any alphanumeric character.</td></tr>
<tr><td>^</td><td>Match if at start of line.</td></tr>
<tr><td>$</td><td>Match if at end of line.</td></tr>
<tr><td>\</td><td>Quote or escape a character that would otherwise be interpreted as a syntactic character. Characters that must be quoted are: + ? | ( ) { }</td></tr>
</table>

The following table lists examples of how regular expressions can be used.

Table 148: Regular Expressions Examples

This regular expression...	matches...
^Example	"Example" at the beginning of a line
Example$	"Example" at the end of a line
^Example$	"Example" as the only word on the line
^...$	any line with exactly three characters
......-.....1	any reference number ending in "1"
t.e	tae, tbe, tce, t%e, tie, the, toe...
at*e	ae, ate, atte, attte, atttte...
at+e	ate, atte, attte
at?e	ae, ate
m[aeiou]t	mat, met, mit, mot, mut
cat|mat	cat, mat
lo{4}ng	loooong
lo{2,4}ng	loong, looong, loooong
ward | ward\. | ^ward	"ward" surrounded by spaces (this prevents "forward" or "backward" from matching), "ward" at the end of a sentence, and "ward" at the beginning of a line (no preceding space)

Shortcut Keys

To help you be more efficient and quickly navigate Oracle Service Cloud, default shortcut keys are included for creating records and other items, navigating the console and **content pane**, and performing functions.

Tip You can hover over buttons on **ribbons** to display shortcut keys. In addition, you can press the **Alt** key plus the first letter of the ribbon tab to display shortcut keys for the tab. Refer to Displaying shortcut keys on the ribbon.

The following table describes the shortcut keys included in Oracle Service Cloud.

Table 149: Oracle Service Cloud Shortcut Keys

Shortcut Key	Action
New Item	
Ctrl+Shift+i	Incident
Ctrl+Shift+a	Answer
Ctrl+Shift+p	Opportunity
Ctrl+Shift+c	Contact
Ctrl+Shift+o	Organization
Ctrl+Shift+t	Task
Ctrl+Shift+b	Dashboard
Ctrl+Shift+r	Report
Ctrl+Shift+g	Campaign
Ctrl+Shift+y	Survey
Ctrl+Shift+m	Mailing
Ctrl+Shift+d	Document
Ctrl+Shift+e	Guided assistance guide
Tab Switching	
Ctrl+Tab	Return to previous content pane tab in history
Ctrl+Shift+Tab	Move forward to next content pane tab in history
Ctrl+w or Ctrl+F4	Close the current content pane tab
Global	
F3	Make the Quick Search tool window active. If Quick Search is closed, pressing F3 will open it in an undocked window.
Alt+F4	Exit Oracle Service Cloud

Table 149: Oracle Service Cloud Shortcut Keys (Continued)

Shortcut Key	Action
Text Editing	
Ctrl+a	Select all
Ctrl+c	Copy
Ctrl+x	Cut
Ctrl+v	Paste
Ctrl+left/right arrow	Move forward or backward one word
Del	Delete
Record Editing	
F1	Help
F7	Spell check
Ctrl+n	New (same item type)
Ctrl+s	Save
Ctrl+Shift+s	Save and close
Ctrl+d	Forward
Ctrl+i	Information
Ctrl+p	Print
Explorers, Tree Operations, and Reports in Explorers	
F1	Help
F2	Rename
F5	Refresh
F12	Save as (available only in those explorers and reports that contain a Save As button on the ribbon)
Ctrl+a	Assign (available only in those reports that contain an Assign button on the ribbon)

Table 149: Oracle Service Cloud Shortcut Keys (Continued)

Shortcut Key	Action
Ctrl+e or Enter	Edit selected item
Ctrl+f	Find
Ctrl+r	Refresh
Del	Delete
Records Reports and Individual Records	
F1	Help
F5	Refresh
Ctrl+F1	Minimize the ribbon
Ctrl+a	Assign
Ctrl+c	Copy
Ctrl+e or Enter	Edit selected item
Ctrl+d	Forward
Ctrl+n	New (uses default new selection)
Ctrl+p	Print
Del	Delete

❖ Displaying shortcut keys on the ribbon

SmartSense Emotive Rating

SmartSense can help you determine the attitude of customers and staff members in **incident** correspondence, customer responses to Oracle RightNow Feedback Cloud Service (Feedback) **surveys**, and in posts returned from **cloud searches**. When working with incidents or reviewing survey responses or cloud search results, you can use SmartSense to determine which customers need immediate attention and when to notify supervisors or other staff members about specific incidents or situations. The emotive rating can also be used as a condition in incident rules and to detect potentially inappropriate content posted to a community.

How SmartSense works

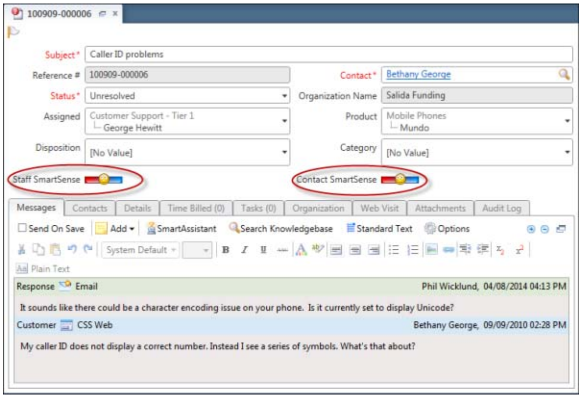
In incidents, two SmartSense ratings can be placed on the incident **workspace**: one for the customer and one for the staff member editing the incident. SmartSense scans the text and rates the words and phrases in all customer entries for the customer rating and all responses for the staff member rating.

Although the following descriptions discuss SmartSense as it applies to incidents, it also applies to surveys, cloud monitoring, and moderating community posts and comments. In surveys, responses to text questions, including SmartSense evaluations of each response, appear on the Results tab of the survey. Refer to Topic monitoring. In cloud monitoring, SmartSense ratings appear in reports next to cloud search results. Refer to Searching the social cloud. In moderating communities, SmartSense ratings may be used to automatically place posts and comments in pending status for moderator review. Refer to Content moderation.

Note SmartSense recognizes modifiers and negatives in all supported languages as well as some emoticons and acronyms. The SmartSense rating may be exaggerated if emotive words are set in all capital letters or the sentence contains an exclamation point.

When your administrator adds Contact SmartSense, Staff SmartSense, or both to the workspace you use for working on incidents, you will see the colored meter on the workspace. The following figure shows an incident workspace with both SmartSense meters displayed. The workspace you use for incidents depends on your **profile** and how your administrator configured incident workspaces.

Tip The SmartSense meter on the Results tab for responses to a Feedback text question appears the same as it does on the incident workspace.



On a new incident, both meters start at neutral. This is represented by the neutral face icon displayed in the center of the meter. Each time the incident is updated by the customer on the **customer portal**, the contact SmartSense rating is updated. When a staff member adds a response on the incident workspace, the staff SmartSense rating is updated. Current threads are weighted more heavily than earlier threads.

Note The contact SmartSense rating is not affected when a staff member updates an incident on the incident workspace by adding a customer entry. Only comments that the customer makes through the customer portal are evaluated for the SmartSense rating.

The farther to the left (the red zone of the meter), the more negative the rating, while ratings toward the right, or blue zone, are more positive.

Only response threads are considered for the staff SmartSense rating in incidents, as note threads are not evaluated. Additionally, SmartSense processes only the first 4,000 words in each incident thread rather than the entire thread, helping to make emotive indexing process faster for incident threads with a large number of words.

- Topic monitoring
- Searching the social cloud

How to evaluate SmartSense ratings

While SmartSense is an effective tool for assessing a customer's general attitude, it may not always provide a completely accurate rating. For example, if a word has several meanings, the SmartSense rating may not be exactly precise for one or more of the meanings. Also, if a word is not in the SmartSense list, it will not be considered, and sentences containing complex negation or qualification could be misinterpreted by SmartSense.

As a single rating, the SmartSense rating may be an oversimplification. If a customer writes both positive and negative remarks in an incident (for example, is pleased with the product but expresses anger or frustration about a support issue), the emotive rating may result in a neutral value, since the extreme words will balance each other. Despite these potential difficulties, SmartSense gives a useful overall estimate of emotional levels and can help you provide superior service to your customers.

Note While the SmartSense word list is proprietary and cannot be viewed, your administrator can specify word ratings that extend or override those used by SmartSense. This allows custom values for words that have specific meanings for a particular organization or industry. Refer to Wordlist files.

Your administrator can also disable SmartSense. If disabled, SmartSense evaluations are not performed on incidents, survey results, and cloud search results, and emotive rating options are not available when choosing conditions for business rules.

Dynamic Agent Desktop

The following sections are intended for administrators and staff members. They contain information and procedures for configuring and using the Oracle RightNow Dynamic Agent Desktop Cloud Service.

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Desktop Overview

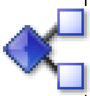
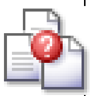
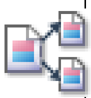
The dynamic agent desktop in Oracle Service Cloud is your staff members' portal to your knowledge base. It is comprised of a set of complementary features, each representing a different, powerful way of interacting with **records**. While each component serves a distinct purpose, they can be used together to create a highly adaptive work environment. This can help you match your customers' needs to an appropriate set of agent tools and free your staff to focus only on those parts of the process that cannot be automated.

To get the most from your agent desktop, be sure to review each feature and consider how it can help your team. The desktop features listed here share common concepts and functionality, so once you are familiar with one desktop feature, learning the others becomes easier. For example, once you learn to create workspaces, you will have most of the knowledge you need to create agent scripts.

Tip For a list of best practices for selecting the most appropriate features of the agent desktop to match your business needs, refer to *Best Practices for Implementing Contact Center Experiences*.

As you evolve beyond the default configuration to an optimized interface, you will increase agent productivity and extend the impact of their actions, producing a more dynamic, responsive operating environment.

The dynamic agent desktop consists of the following major features.

	**Workspace**—A configuration of the content pane, including the fields, controls, and ribbon that display when working with answers, assets, contacts, incidents, opportunities, organizations, or tasks; when working in Oracle RightNow Chat Cloud Service; or when working with quotes, quote products, or service opportunities. Standard workspaces are provided for each of these workspace types, and custom workspaces can be created. The workspaces staff members use depend on their profile. Refer to Workspaces.
	**Workspace rules**—Rules that dynamically adjust the display, behavior, and values of fields and controls on a workspace based on staff member actions. Each rule is triggered by one or more events and conditions. Refer to Workspace rules.
	**Guide**—An interactive tool that helps agents quickly locate solutions when composing incident responses or troubleshooting customer issues over the phone. Guides are built using controls to display questions, branches, text explanations, and answer links. They can be added to workflows, placed on workspaces, or presented on the **customer portal**. Refer to Guided Assistance.
	**Agent script**—A series of pages connected by branching logic that help agents enter information in a logical order. Scripts are built using fields and controls to display questions, text, and answers, and update records. They can be added to workflows or placed on workspaces. Refer to Agent Scripts.
	**Script rules**—Rules used to trigger actions (such as setting the value of a field or calling a named event) on script pages when specific conditions are met. Like workspace rules, each script rule is triggered by one or more events and conditions. Refer to Script rules.
	**Desktop workflow**—A sequence of workspaces, scripts, decisions, connectors, and actions presented to staff members as a dynamic interface to efficiently support and automate complex business processes. Refer to Desktop Workflows.

Add-ins—The desktop add-in framework allows application developers to add custom components, or "add-ins," to Oracle Service Cloud in order to integrate with other applications on staff members' workstations. Once you upload an add-in, you can place it on scripts and workspaces in the same way you add controls, such as report or browser controls. The add-in can be displayed anywhere you want on the script or workspace or you can hide it using functionality in the script and workspace designers. You can also configure script branches and script and workspace rules to communicate with the add-in. Refer to Add-ins in scripts and workspaces.

Defining your business needs

Time spent defining a business process is a worthwhile investment. Decisions made before implementation can save much time and trouble later on. Careful consideration of all aspects of a business process can make it more effective and easier to maintain and can help to avoid process holes and bottlenecks.

The first step in mapping your organization's processes to the agent desktop is to clearly define your business needs. Whether your goals are simple or complex, certain basic parameters should be identified and accounted for in your desktop design. Here, we'll provide you with some basic questions to help you identify the requirements and resources you will need to structure and refine your business processes.

Put simply, a process is a sequence of events—actions followed by other actions, governed by conditions and augmented by exceptions. Following is a sampling of essential questions that should be answered in preparation for defining a fully formed process.

Tip Once you have answered these questions, refer to *Best Practices for Implementing Contact Center Experiences* for best practices that include specific techniques for mapping your processes to the agent desktop and developing exceptional agent desktops.

- **What activities are you supporting?** What is your primary goal and responsibility for the process you are defining? Are you developing an entirely new process from scratch, or are there existing processes or systems that should be considered? If you are integrating with an external system, is there any functional overlap that is easier to manage within Oracle Service Cloud?
- **Who are your stakeholders?** Identify everyone who has an interest in the success (or failure) of your process. Success is defined by accounting for and delivering on all needs of your consumers, staff, group managers, directors, and executives. To achieve that success, it is important to give these stakeholders a voice when designing and testing your business process.
- **What outputs are required?** For each stakeholder, list the specific process output that they require to fulfill their needs. List any events and conditions that factor into those outcomes and, when appropriate, define alternate outcomes for cases where exceptions to those criteria occur. For example, each of the following stakeholders requires a specific output that their business process must account for:
    - ▹ A customer may need an **answer** to a question or **service** for a product they have purchased.
    - ▹ A manager may need **custom reports** to ensure that customer requests are met within a specified time period and that satisfaction scores are high.
    - ▹ A director from another department may be responsible for incorporating **customer feedback** into initiatives for new products or services.
    - ▹ A sales executive may be responsible for acting on business **opportunities** or **account issues** identified by your agents.
- **What are your channels?** How are you communicating with your customers—email, telephone, or chat? Are you monitoring the social cloud or providing a community to promote your services? Is your team logging incidents or opportunities manually, or are they being generated by some other means?
- **Who are your resources?** Identify the people who will be responsible for completing any necessary tasks. For example, who will be responsible for viewing and responding to customer inquiries? To whom will they escalate outstanding or complex issues? Who will be charged with developing and monitoring team performance? And who will be charged with maintaining these processes as needs change in the future? Do these people have staff accounts in Oracle Service Cloud with appropriate profile permissions?
- **What can be automated?** As you list the resources needed to service your stakeholders, consider each task carefully and ask yourself, "Does this output require human interaction, or can it be wholly or partly automated?" Can you reduce the number of human resources you require, or the time you require of them, while delivering full

value to your stakeholders? With desktop automation, you might be surprised how often the answer is "Yes." The more tasks that are automated, the more focused your team will be on tasks that actually require their attention.

- **What is your testing strategy?** Once your process definition is complete, how will you test it? Is it large enough that it should be rolled out in phases, or to a subset of your users in advance? Do agents have a means for providing you with meaningful feedback? The more complex your processes, the more important it is to fully test all scenarios your agents may encounter and ensure all process outputs are sufficient for stakeholder needs.

Once you have answered these questions, you are ready to begin defining your business process. At a very basic level, this involves listing the required actions, the conditions under which they occur, and any alternate outputs stemming from exceptions, and ordering them in an appropriate sequence. Then, you might sketch out a chart or detailed diagram to illustrate the flows implied by those business needs. Illustrating the order of action with a flow diagram can help you understand the finer nuances of your process and make it easier to verify your logic. For example, you may find instances where one part of a process overlaps another or creates a bottleneck, giving you the opportunity to streamline and increase the effectiveness of your flow.

Testing your desktop design

As you carefully map out and design your dynamic agent desktop, be sure to test it thoroughly before deploying to your operational environment. Here are some helpful guidelines.

- **Make frequent use of preview and validation**—As you design workspaces, guides, scripts, workflows, and rules, make a habit of correcting mistakes to your work as you go. The Home tab of each editor provides a Preview or Validate button to help you check for problems. If you correct configuration issues promptly, you will probably find them easier to resolve because your design decisions should still be fresh in your mind.
- **Account for the profile restrictions of your agents**—When you preview a workflow or a script, it will display as it would to any staff member who has the same set of profile permissions you have. To view it as it will appear to a specific staff member with different permissions, log in using a test account with the same profile as that staff member.

- **Phase in major changes**—In some cases, testing in a non-production environment may not find every conflict or hole in your process. Workspaces and workflows are specific to each profile, so if an agent desktop is designed to be used by multiple profiles across a large number of agents, you might also consider rolling it out in phases, or to a small subset of your staff before taking it fully live.
- **Invite suggestions for improvement**—Incorporate a method (such as an incident submission element or internal survey) for your agents to submit feedback about any problems found or suggestions for further refinements. And consider keeping it in place to augment your standard processes—timely, specific feedback can be just as useful during day-to-day production use as it is during the testing phase.

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Workspaces

Workspaces define the appearance of the agent desktop when staff members add, view, and edit records in Oracle Service Cloud. When you open a record—such as an incident, contact, opportunity, or custom object—the workspace determines the layout of fields, controls, and tabs on the content pane as well as the arrangement of buttons on the ribbon and the **Quick Access toolbar**.

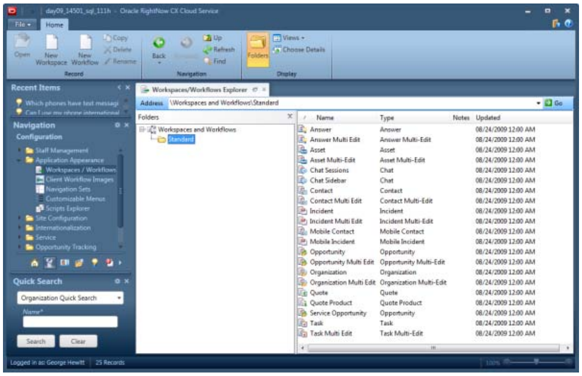
Oracle Service Cloud provides a set of standard workspaces suitable for most common record maintenance, but also gives you complete flexibility to create custom workspaces to help your staff work more efficiently. In addition, you can create **workspace rules** to dynamically change the behavior of fields and controls based on certain triggering events.

The workspaces used by staff members are defined in their staff **profile**, with one workspace associated for each type of record the profile can access. Different profiles can use different workspaces. However, each editor within a profile must be set to use a specific workspace, so all staff who share a profile will use the same set of workspaces. For example, when you create an incident workspace and assign it to the incident editor of a specific profile, all staff members with that profile will see that workspace when they add, view, or edit incidents. Refer to Customizing profiles.

Many functions used to design workspaces are also used to design agent scripts. To understand how workspaces can best be implemented in your agent desktop, you should also become familiar with **guides**, **scripts**, **script rules**, and **workflows**. For a summary of these features, refer to Desktop Overview.

Workspaces explorer

The Workspaces explorer is used to access and manage all of the workspaces on your site. With this explorer, you can browse, search, and organize workspaces in hierarchical folders on the content pane using functions similar to Windows Explorer (see Explorers).



Initially, the explorer lists only the Standard folder containing the standard workspaces. The folder is read-only and the standard workspaces cannot be opened, edited, or deleted—they exist mainly to be selected in staff profiles. However, you can copy standard workspaces to use as the basis for creating your own custom workspaces. Refer to Creating custom workspaces.

Listed next to each workspace's name is its workspace type, based on the type of record it opens. The workspace type determines which fields and controls can be added to the workspace. For example, the Incident workspace type provides access to controls and database fields that are related to incidents. In addition, some workspace types are multi-edit, meaning they are used when staff members open multiple records of the same record type at the same time (up to 250 records can be edited at once). This allows you to display one workspace when staff members open a single record and display a different workspace when they edit multiple records of the same type simultaneously.

To open the Workspaces explorer

1 Click the Configuration button on the navigation pane.

2 Double-click Workspaces under Application Appearance. The Workspaces explorer opens on the content pane.

Note If desktop workflows are enabled on your site, you will see Workspaces/Workflows listed under Application Appearance instead. Refer to Creating workflows. To enable desktop workflows, contact your Oracle account manager.

3 To display the list of standard workspaces, click the Standard folder in the tree under Workspaces.

Standard workspaces

Oracle Service Cloud provides a preconfigured set of standard workspaces, one of each workspace type, suitable for most common record editing. Each is named for its workspace type and is used as the default workspace for its corresponding editor for all new profiles.

The following table describes the standard workspaces and when they are used. Your explorer may list fewer workspaces depending on which Oracle Service Cloud products are enabled on your site. Contact your Oracle account manager for information about enabling products.

Table 150: Standard Workspaces Description

Workspace	Description
Answer	The standard answer workspace that is displayed when a staff member adds or edits an answer. Refer to Standard answer workspace.
Answer Multi Edit	The standard answer workspace that is displayed when a staff member edits multiple answers. Refer to Updating multiple records.
Asset	The standard assets workspace that is displayed when a staff member adds or edits an asset. Refer to Configuring workspaces and profiles.
Asset Multi Edit	The standard assets workspace that is displayed when a staff member edits multiple assets. Refer to Updating multiple records.

Table 150: Standard Workspaces Description (Continued)

Workspace	Description
Chat Sessions	The standard chat sessions workspace displays when an agent accepts a chat from a customer or when a supervisor monitors a chat. Refer to Chat sessions workspace overview. **Note:** The chat sessions workspace uses the chat workspace type.
Chat Sidebar	The standard chat sidebar workspace is used when transferring chats to other agents or conferencing agents into chat sessions. Refer to Transferring chats. **Note:** The chat sidebar workspace uses the chat workspace type.
Contact	The standard contact workspace that is displayed when a staff member adds or edits a contact. Refer to Standard contact workspace.
Contact Multi Edit	The standard contact workspace that is displayed when a staff member edits multiple contacts. Refer to Updating multiple records.
Incident	The standard incident workspace that is displayed when a staff member adds or edits an incident. Refer to Standard incident workspace.
Incident Multi Edit	The standard incident workspace that is displayed when a staff member edits multiple incidents. Refer to Updating multiple records.
Mobile Contact	The standard mobile contact workspace that is displayed when a staff member edits a contact in the Oracle Tap application. Refer to Mobile contact workspace.
Mobile Incident	The standard mobile incident workspace that is displayed when a staff member edits an incident in the Oracle Tap application. Refer to Mobile incident workspace.
Opportunity	The standard opportunity workspace that is displayed when a staff member adds or edits an opportunity. Refer to Standard workspace for opportunities.
Opportunity Multi Edit	The standard opportunity workspace that is displayed when a staff member edits multiple opportunities. Refer to Updating multiple records.

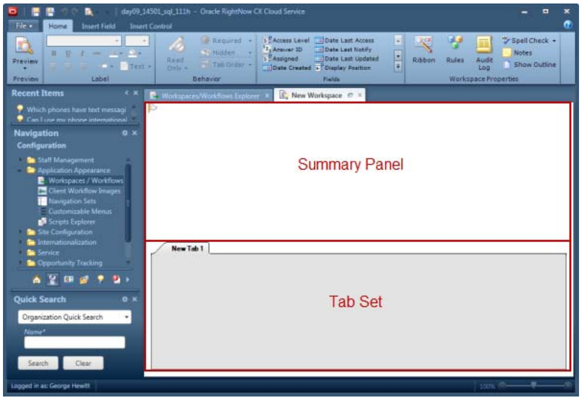
Table 150: Standard Workspaces Description (Continued)

Workspace	Description
Organization	The standard organization workspace that is displayed when a staff member adds or edits an organization. Refer to Standard organization workspace.
Organization Multi Edit	The standard organization workspace that is displayed when a staff member edits multiple organizations. Refer to Updating multiple records.
Quote	The standard quote workspace that is displayed when a staff member adds or edits a quote. Refer to Adding quotes to opportunities.
Quote Product	The standard quote product workspace that is displayed when a staff member adds a sales product to a quote. Refer to Adding sales products to quotes.
Service Opportunity	The standard service opportunity workspace that is displayed when a staff member adds or edits a service opportunity. Refer to Creating opportunities from incidents. **Note:** The service opportunity workspace uses the opportunity workspace type.
Task	The standard task workspace that is displayed when a staff member adds or edits a task. Refer to Standard task workspace.
Task Multi Edit	The standard task workspace that is displayed when a staff member edits multiple tasks. Refer to Updating multiple records.

Note Standard workspaces are not available for **custom objects** because custom objects are, by definition, nonstandard objects. However, you can create workspaces that provide access to custom objects that have Object is Available in Workspaces, Scripting, and Workflow field visibility. Refer to Creating objects and Agent desktop.

Custom workspaces

In addition to standard workspaces, Oracle Service Cloud gives you complete flexibility to create your own custom workspaces to help your staff work more efficiently. Custom workspaces are also used to provide your team with access to records stored in custom objects, which by definition have no standard workspaces of their own. Custom workspaces are created on a workspace designer (shown here) consisting of a ribbon and a design space. You define a workspace by dragging and dropping fields and **controls** from the ribbon to the design space.



The design space is the working area where you arrange fields and controls as you want them to appear on the workspace. In most standard workspaces, a summary panel at the top of the design space displays the most frequently accessed fields for the record type, while a tab set at the bottom provides controls and information related to the record, such as associated records, file attachments, and an **audit log**.

The summary panel and tab set both contain a table, hidden by default, that forms an underlying grid for aligning fields and controls. To aid you in laying out the workspace, you can display outlines around items on the design space to help you identify the table cells they are in. Refer to Design space layout options.

Once you add a field or control to the design space, you can select it to adjust its properties on the designer ribbon. The workspace designer ribbon functions are organized by the tabs described in the following table.

Table 151: Workspace Designer Ribbon Description

Tab	Description
Home	Contains buttons for managing the entire workspace. You can preview the workspace, customize the ribbon that will be displayed with the workspace, create workspace rules, add spell-check functionality, and display an outline on the workspace to guide your design. You can also add notes, review the audit log, insert fields, and alter display and behavior properties for fields and controls. **Note:** The Browser Compatibility button appears on the designer ribbon for incident, contact, organization, task, and custom object workspaces. It functions only when the Agent Browser User Interface feature is enabled. Contact your Oracle account manager for information about enabling Agent Browser User Interface.
Insert Field	Lists the fields you can add to the workspace. The type of workspace you select when creating a new workspace determines the fields available. For example, when creating an incident workspace, you can add incident, contact, and organization fields. Refer to Working with fields.
Insert Control	Lists controls and **relationship items** you can add to the workspace. Controls include spacers, tabs, scripts, reports, title bars, and other items you can use to enhance the display or add functionality. Relationship items also add functionality to the workspace, but vary based on the type of workspace you are creating. Refer to Working with controls.
Design	Displays when you select an item on the design space and contains buttons you can use to modify the properties of the selected item. For example, you can change fonts and margins for a field, or set a field to read-only if you want to display it only for informational purposes. The options available on the Design tab vary based on the control or field that is selected. For descriptions of the options available on the Design tab, refer to Design property descriptions. **Tip:** You can double-click an item on the workspace to automatically select the Design tab and populate it with properties related to the item.

Table 151: Workspace Designer Ribbon Description

Tab	Description
Rules	Displays when you select an item on the design space. Using the buttons on this tab, you can create rules that alter the workspace according to the conditions you define. For example, you can create a rule to hide a field when certain staff members use the workspace. Refer to Workspace rules.

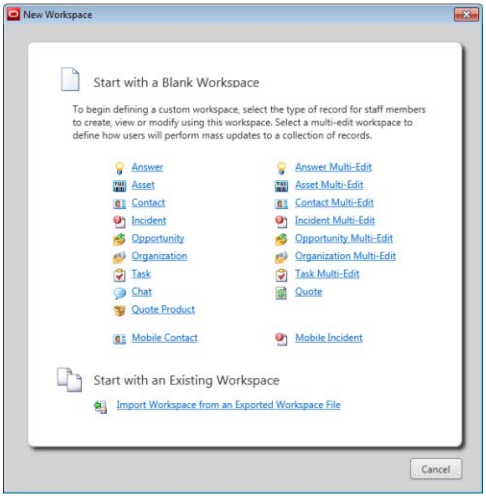
Creating custom workspaces

You can create a custom workspace from scratch by starting with a blank workspace. You can also copy an existing workspace or import a workspace from an exported workspace file to use as the basis for a new workspace. Then you can tailor the design by adding and removing fields and controls, adjusting properties, and arranging the layout to suit your business needs. Refer to Editing workspaces.

Note The following procedures describe how to create, copy, and delete workspaces. To import a workspace from an exported workspace file, refer to Exporting and importing workspaces.

To create a workspace

1 From the Workspaces explorer, click the New button on the ribbon. (If workflows are enabled, the button will be labeled New Workspace.) The New Workspace window opens.



2 In the Start With a Blank Workspace section, select a workspace type (refer to Standard workspaces). The workspace designer opens.

3 To design the workspace, refer to Editing workspaces.

4 Click the Save and Close button on the Quick Access toolbar to save and close the workspace.

To copy a workspace

1 From the Workspaces explorer, right-click the workspace you want to copy and select Copy. The Copy Workspace As window opens.

2 Select the folder to which you want to add the copied workspace.

3 Type a name for the copied workspace in the Name field.

4 Click the OK button. The workspace you added appears on the explorer in the folder you selected.

To delete a workspace

1 From the Workspaces explorer, right-click the workspace you want to delete and select Delete. A Confirm Workspace Deletion message appears.

2 Click the Yes button to delete the workspace.

Important If you delete a workspace that is selected for a standard object editor in a profile, the profile will revert to the standard workspace for the editor type. For example, if you delete a workspace that happens to be selected in a profile for the incident editor, the profile will automatically use the standard incident workspace for that editor.

If you delete a workspace that is selected for a custom object editor in a profile, the profile will revert to no workspace selection because there are no standard workspaces for custom objects.

Editing workspaces

The features available on the workspace designer are the same regardless of whether you are editing a new or existing workspace, or whether it was created from scratch, from a copy, or from an imported workspace file. However, the designer ribbon provides access only to fields, controls, and properties that apply to the workspace type. Controls specific to answers, for example, cannot be added to opportunity workspaces.

By default, most workspace types are blank on top with a single tab on the bottom. (Workspaces that are displayed in their own windows, such as quotes and quote products, are empty.) You can adjust the location of the tabbed area on the workspace by selecting the workspace on the design space and choosing the location you want from the Design tab's Tab Alignment button. You can also adjust the space allotted to the two main areas of the workspace by selecting options from the Design tab's Threshold Height and Summary Panel Height buttons. For more information about these and other workspace properties, refer to Design property descriptions.

To edit a workspace

1 Click the Configuration button on the navigation pane.

2 Double-click Workspaces under Application Appearance. (If workflows are enabled, the item is labeled Workspaces/Workflows.) The Workspaces explorer opens on the content pane.

3 Right-click the workspace you want to edit and select Open. The workspace opens on the content pane.

4 Drag the fields you want from the Insert Field tab onto the design space. Refer to Working with fields.

5 Drag the controls and relationship items you want from the Insert Control tab onto the design space. Refer to Working with controls.

6 To modify the properties for fields and controls, select the item, click the Design tab, and make the appropriate changes. Refer to Field and control properties.

7 To customize options specific to chat workspaces, click the Options button on the Home tab. Refer to Creating incidents from chat sessions.

8 To customize the workspace ribbon, click the Ribbon button on the Home tab. Refer to Customizing ribbons and Quick Access toolbars.

9 To add workspace rules that alter the display or behavior of items on the workspace or the values in its fields, click the Rules button on the Home tab. You can also select an item on the workspace and then click the Add Rule button on the Rules tab. Refer to Adding workspace rules.

Note The Rules button and Rules tab are available only when workspace rules are enabled, and are not available for multi-edit workspaces. To enable workspace rules, contact your Oracle account manager.

10 To view a history of all actions taken on the workspace, such as when the workspace was created and edited and by whom, click the Audit Log button on the Home tab.

11 To invoke spell checking on fields that have the spell checking property enabled whenever a record that uses this workspace is saved, click the Spell Check button on the Home tab and select Auto-Check Spelling on Save.

   a To permit staff members to cancel automatic spell checking, click the Spell Check button and select Allow Canceling Auto-Check. When this option is not selected, staff members will be unable to save the record if they cancel spell checking.

12 To add notes about the workspace, click the Notes button on the Home tab to open the Workspace Notes window.

   a Type any notes you want in the text field.
   b Click the OK button.

Notes added to your workspace are for internal use and are visible only when editing the workspace. They do not appear when working with records.

13 To hide the banner flag on an answer, contact, incident, opportunity, or organization workspace, click the Insert Control tab and clear the Banner Flag check box.

Note When visible, staff can use the banner flag to set an importance indicator and enter text pertaining to the record. The banner flag does not appear on asset, chat, task, quote, quote product, or multi-edit workspaces.

14 To see what your workspace will look like when it is used by staff members, click the Home tab and click the Preview button. You can choose to see the workspace as it will display when creating a record or when editing an existing record. Refer to Previewing workspaces.

15 Click the Save and Close button on the Quick Access toolbar to save and close the workspace.

Note If you save changes to a workspace that staff members are using at the time, they will need to log out and then log back in to see the changes you have applied.

Best practices for creating workspaces

When optimized properly, workspaces are extremely flexible and useful for achieving a high degree of efficiency for staff members. When developing custom workspaces for your site, keep the following best practices in mind.

- **Design for appropriate screen resolution**—Be sure to tailor workspace layouts to your agents' screen resolution. If your display is set to a higher resolution than that of the people who will use your workspace, they may find that the layout is difficult to use. Test appropriately when making design changes such as adding a column or adjusting the size of a field or add-in control.
- **Optimize your layouts**—Give careful thought to the number and sequence of controls and fields in the layout of workspaces and tabs, providing only the information, fields, and controls staff members need to do their job. Also, try to avoid nesting tab

sets, panels, and tables more than two or three levels deep. Streamlined layouts can optimize workspace performance and improve staff efficiency. They are also much easier to update as new processes are rolled out to your team.

- **Add shortcut keys and tab indexes**—Agents can be more efficient when they can keep their fingers on the keyboard. Once you have optimized your workspace layout, select a Tab Order option to specify the order in which field focus is advanced when the Tab key is pressed, such as top-to-bottom or left-to-right (refer to the Tab Order button description at Behavior properties). Add shortcut keys to the most commonly accessed fields to provide even faster navigation, and train your team to use them (refer to the Text label description of Label properties).
- **Hide or require fields**—Reduce visual clutter and improve performance by making fields visible only when they need to be, and only to agents who need access to them. For example, some fields might be required only when a new record is being created, and then hidden or displayed in a read-only format the rest of the time. When a workspace is shared by multiple profiles, you can choose to hide some of your fields from profiles of agents that don't use them. For profiles of agents that must complete a specific field, you can make that field required for that specific profile. Refer to Setting hidden, required, and read-only properties.
- **Use different tabs for different tasks**—Tabs can be used to organize alternate field layouts tailored to common tasks. For example, in addition to a base tab containing an incident discussion thread, you could create another tab containing a **guided assistance** control and fields commonly used to solve technical issues. Additional tabs could contain alternate layouts for resolving billing issues, tracking and returning orders, soliciting feedback, or creating sales opportunities. Whatever content you add, be sure each tab and field has an accurate, descriptive label. Also, be sure to order the tab set appropriately based on priority, with the most frequently used tabs first. Then set tab indexes and define shortcut keys so your agents can navigate quickly using their keyboard. Refer to Working with tab controls.
- **Delay loading data-heavy controls**—Some controls, such as reports and browsers, may take awhile to load based on the amount of data they return. To reduce the initial load time of your workspace, you can delay the loading of these controls when they are located on tabs that are not visible when the workspace is initially opened. Refer to Report properties and Working with browser controls.
- **Use scripts and workflows to simplify your workspaces**—Scripts and desktop workflows can be effective alternatives for complex workspaces. A workspace laden with a large number of fields, controls, and rules can be challenging to create, use, and maintain. By splitting up some of those processes across multiple elements, you can

reduce the risk of functional or procedural conflicts while also simplifying and improving the performance of the interface for your agents. Refer to Agent Scripts and Desktop Workflows.

Tip For best practices for mapping the agent desktop to your business processes, refer to *Best Practices for Implementing Contact Center Experiences*.

Workspace rules

The efficiency provided by custom workspaces can be extended even further using workspace rules. Workspace rules are an automation layer used to set properties for different workspace items based on actions and conditions occurring in the workspace.

Note Workspace rules are not available for multi-edit workspaces.

Workspace rules can save your agents a lot of time by simplifying or completely automating routine tasks. For example:

- If your workspace contains a lot of fields and controls, you can use rules to show only the information that is relevant based on the type of interaction, the data being entered, or the identity of the contact or agent.
- If a specific tab on the workspace correlates to a specific incident category, you could add a rule that focuses a specific tab based on the category value when the editor loads.
- If agents are required to select from a certain subset of dispositions when solving incidents, you could create a workspace rule to make the Disposition field required and hide several of its items when incidents are set to Solved.
- If incidents are escalated among groups based on product and profile, you could add a rule that sets the Assigned field to a specific group based on the product value selected and the profile of the logged-in staff member when a certain button control is clicked.

With every few clicks you save your agents, you help them become more efficient. Over time, automating your most repetitive tasks can help your team avoid distraction and better focus on the task at hand—assisting your customers.

- ❖ Working with fields
- ❖ Working with controls
- ❖ Field and control properties
- ❖ Desktop Overview

Overview of workspace rules

With workspace rules, you can dynamically adjust the display, behavior, and values of fields and controls on a workspace based on staff member actions. (Workspace rules are not available for multi-edit workspaces.) Each rule is triggered by one or more events and conditions you define, and can result in one or more actions, including the following.

- Set the value of a field
- Set the required status of a field
- Make a field or control read-only
- Show or hide a field or control
- Show only a select group of menu items
- Open a guided assistance guide (if Guided Assistance is enabled)
- Open a specific script (if Agent Scripting is enabled)
- Create a named event to trigger another workspace rule or a script rule

In simplest terms, a workspace rule is basically a "when-then" statement you use to control the behavior of fields and controls on your workspace, such as:

- When the status is changed, then make the Product field required.
- When the disposition is changed, then make the Status field noneditable.

At a basic level, each rule defines a triggering event and a resulting action that will occur after the event is triggered. In some cases, you may find that the triggers available for rules are not precise enough to address a specific business need. You can make a rule more restrictive by adding conditions under which the event will trigger an action. If conditions are specified in a rule, actions will be triggered only if those conditions are met. For example, your rule could state that when a button is clicked, *if the status is Unresolved*, assign the record to the logged-in staff member. The button click is the triggering event, but the Unresolved status is the condition under which that event will trigger the action after the button is clicked.

There are two types of actions: Then and Else. Every rule has at least one Then action, which is the result of the triggering event and conditions. However, once conditions are specified for a rule, you can also add one or more Else actions. An Else action is triggered in cases where the rule's conditions are *not* met. For example, a rule could state that when the status changes, if the value of the status is Solved, make the Disposition field editable, *or else make the Assigned field editable*. In this case, when the rule is evaluated, the Assigned field will be made editable if the record's status has *not* been set to Solved.

Caution Since business rules are checked after workspace rules, changes made to a record by workspace rules can be overridden by business rules if the rules have similar actions. Refer to Business rules overview.

Workspace rules can be created and managed from two locations on the workspace designer's ribbon. Clicking the Rules button on the Home tab gives you an overview of all the workspace's rules. This is helpful if you need a quick look at all the rules that impact the workspace behavior. You can also add, edit, delete, and order all the rules on the workspace from this location. If you want to know which rules are associated with a specific field on your workspace, you can select the field on the design space, then click the Rules tab to view a filtered list.

Note The Rules button and Rules tab are available only when workspace rules are enabled. For information about enabling workspace rules, contact your Oracle account manager.

As with the Rules button on the Home tab, you can also view, add, edit, delete, and order any of the rules from the Rules tab.

The following table describes the buttons on the Rules tab.

Table 152: Rules Tab Description

Field	Description
Current Selection	Click this drop-down menu to view a hierarchical listing of all the items on the workspace's design space. Selecting an item from the hierarchy will select it on the design space. Refer to Selecting fields and controls using the ribbon.
Show Details	Click this button to view the properties of the selected item.

Table 152: Rules Tab Description (Continued)

Field	Description
Delete	Click this button to remove the selected item from the workspace.
Contextual Button	One or more contextual buttons may also display in the Selected Object button group, depending on the item selected. Click these buttons to modify item properties based on the selected item. Refer to Selected Object properties.
Add Rule	Click this button to open the Rule Wizard where you can add a rule.
Filter List	Click this button to filter the visibility of rules in the list.
Rules Triggered by this Object	Click this button to list only rules that use the selected item in the rules' triggers.
Rules that Reference this Object	Click this button to list only rules that use the selected item in the rules' triggers, conditions, Then actions, or Else actions.
All Workspace Rules	Click this button to list all rules configured for the workspace.
Rule List	This area lists the rules that match the filter selected from the Filter List button. **Note:** You can scroll the rule list using the up and down arrows on the list's scroll bar. You can expand the list by clicking the Expand Fields button at the bottom of the list's scroll bar.
Edit Rule	Select a rule in the rule list and click this button to edit the rule.
Delete Rule	Select a rule in the rule list and click this button to delete the rule.
Move Up	Select a rule in the rule list and click this button to move the rule up one position in the list to reorder the rules. **Note:** Rules with the same trigger run in the order listed.
Move Down	Select a rule in the rule list and click this button to move the rule down one position in the list to reorder the rules. **Note:** Rules with the same trigger run in the order listed.

- ❖ Working with fields
- ❖ Working with controls
- ❖ Field and control properties

❖ Desktop Overview

Adding workspace rules

You create rules using the Rule Wizard, which you can open from the Rules tab or from the Rules button on the Home tab.

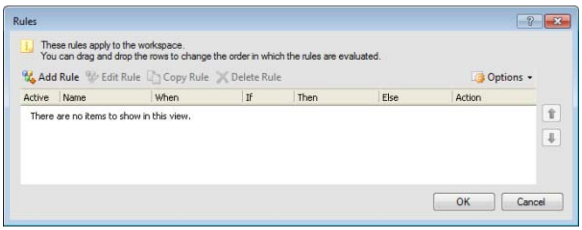
Note With some exceptions, the method used to create workspace rules is the same as that used to create script rules. The procedures to create rules from the Rule Wizard can also be used when creating script rules. Refer to Script rules.

To add a workspace rule

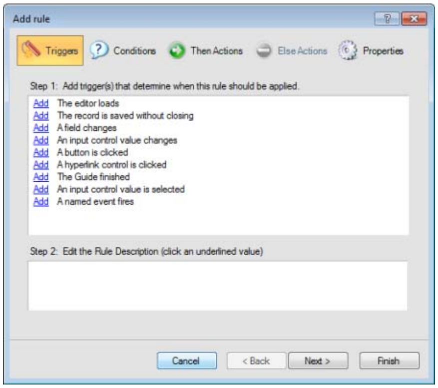
1 On the open workspace, click the Home tab and click the Rules button to open the Rules window.

Or

Select a field on the workspace and click the Rules tab.



2 Click the Add Rule button to open the Rule Wizard.



Displayed along the top of the wizard are five buttons—Triggers, Conditions, Then Actions, Else Actions, and Properties. You construct the rule by clicking each button and adding items to the rule description.

3 Select one or more triggers that will cause the rule to fire. Refer to Selecting rule triggers.

4 Click the Conditions button to add conditions that determine whether the triggering event will result in an action. Refer to Selecting rule conditions.

5 Click the Then Actions button to define the actions that should occur if the conditions are met. Refer to Adding and editing actions.

6 Click the Else Actions button to define the actions that should occur if the conditions are not met. Refer to Adding and editing actions.

7 Click the Properties button and type the name of the rule in the Rule Name field.

8 Type any notes you want to add to the rule in the Notes field.

9 To deactivate the rule, clear the Active check box.

10 Click the Finish button to save the rule.

- Working with fields
- Working with controls
- Field and control properties
- Desktop Overview

Selecting rule triggers

Rule triggers are events that occur in a workspace that cause a rule to be evaluated. If you add more than one trigger to the rule description, the rule will be evaluated after any of the selected triggers occur.

Designing for efficiency

To best support the maintenance and performance of your workspaces as they grow and change over time, always try to construct workspace rules that are scalable and suited to the need at hand. For example, rather than setting up a rule that hides a tab on a workspace when the editor loads, you might simply edit the workspace itself and set the tab to be hidden by default. Rule actions that are triggered unconditionally when "The editor loads" can be eliminated by simply having the workspace default to the desired state, which is more efficient for your system to perform.

Available triggers vary based on the fields and controls that have been added to the workspace and are described in the following table.

Table 153: Rule Triggers Description

Event	Description
The editor loads	Add this event to trigger the rule immediately after a record is opened using the workspace. **Note:** When using this trigger, rule conditions are evaluated at the time the record is opened. If any of the conditions require that items be changed after the record is opened, the rule will not fire.
The record is saved without closing	Add this event to trigger the rule immediately after a record is saved without being closed. For example, you could have a rule that runs when a staff member clicks the Save button instead of Save and Close. **Note:** This event does not affect records which are closed when saved or without being saved. This trigger should not be used as a last check before the record is saved, since it changes the values displayed in the workspace after the save occurs, not before.

Table 153: Rule Triggers Description (Continued)

Event	Description
A field changes	Add this event to trigger the rule immediately after the value of a field is changed. Once added, click the event's underlined text to select a field that will trigger the rule. Available fields vary depending on the type of workspace you are editing. For example, when creating a rule on an incident workspace, you can select fields from the *incidents*, *contacts*, and *organizations* tables. However, not every field in these tables is available for use in workspace rules. **Note:** When using this trigger, the rule is evaluated at the time any change is made to the selected field. If the selected field is a text field, the rule will be evaluated the moment any character in the field is changed. If the selected field is a currency, the rule will be evaluated when the field loses focus.
An input control value changes	Add this event to trigger the rule immediately after the value of an input control is changed to another value or to no value. Once added, click the event's underlined text to select an input control that will trigger the rule. Available input controls include any menus, radio buttons, list boxes, and text boxes that are not used to trigger other rules. **Note:** This event is available only when an input control has been added to the workspace. When using this trigger, the rule is evaluated immediately after any change is made to the input control. If you want to verify that a specific value was selected, add An Input Control Has a Certain Value as a condition.
A button is clicked	Add this event to trigger the rule immediately after a button on the workspace is clicked. Once added, click the event's underlined text to select a button from the workspace that will trigger the rule. **Note:** This trigger is available only when a button has been added to the workspace.
An image is clicked	Add this event to trigger the rule immediately after an image is clicked. Once added, click the underlined text to select an image from the workspace that will trigger the rule. **Note:** This trigger is available only when an image has been added to the workspace.

Table 153: Rule Triggers Description (Continued)

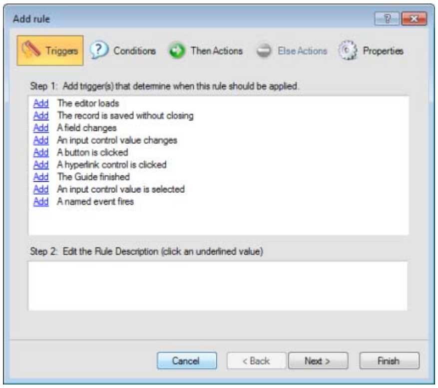
Event	Description
A hyperlink control is clicked	Add this event to trigger the rule immediately after a hyperlink is clicked. Once added, click the underlined text to select a link from the workspace that will trigger the rule. **Note:** This trigger is available only when a hyperlink has been added to the workspace.
The exit script event fires	Add this event to trigger the rule immediately after the Exit button is clicked, or when an exit script event is fired by a rule in a script placed on the workspace. Rule conditions are evaluated at the time that the event is fired. Refer to Using events in workspace and script rules.
The finish script event fires	Add this event to trigger the rule immediately after the Finish button is clicked, or when a finish script event is fired by a rule in a script placed on the workspace. Rule conditions are evaluated at the time that the event is fired. Refer to Using events in workspace and script rules.
The guide finished	Add this event to trigger the rule immediately after the Finish button is clicked in a Guided Assistance **relationship item** indicating that a staff member has finished using a guide. Refer to Adding guided assistance to workspaces. **Note:** This trigger is available only when the Guided Assistance relationship item has been added to the workspace.
An input control value is selected	Add this event to trigger the rule immediately after an input control value is selected. Once added, click the event's underlined text to select an input control that will trigger the rule. Available input controls include any menus, radio buttons, and list boxes that are not used to trigger other rules. **Note:** This event is available only when an input control has been added to the workspace. When using this trigger, the rule is evaluated at the time a value is selected from the input control. If you want to verify that a specific value was selected, add An Input Control Has a Certain Value as a condition.

Table 153: Rule Triggers Description (Continued)

Event	Description
A named event fires	Add this event to trigger the rule immediately after a named event is fired by another rule on the workspace or by a rule in a script placed on the workspace. Once added, click the underlined text to type the name of the event that will trigger the rule. Rule conditions are evaluated at the time that the event is fired. Refer to Using events in workspace and script rules.

To add a rule trigger

1 On the Rule Wizard, click the Triggers button to list available trigger items.



2 Click Add next to the triggers you want to add to the rule description.

3 If a trigger you have added to the rule description contains underlined text, click the underlined text to specify the source of the trigger action (such as the field, control, or event name). Click here for a description of trigger actions.

4 Click the Next button to add conditions to the rule.

Or

Click the Then Actions button to add actions to the rule.

Selecting rule conditions

Rule conditions are additional criteria that determine whether a rule action will be triggered. Conditions are evaluated at the time that the trigger event occurs. If all conditions are met (and the logical expression is valid), the rule's Then actions will be taken immediately after the triggering event. If any condition in the rule is *not* met, the rule's Else actions will be taken. If no Else actions are defined and any condition is not met, no action will be taken.

Available conditions vary based on the fields and controls you have added to the workspace and are described in the following table.

Table 154: Rule Conditions Description

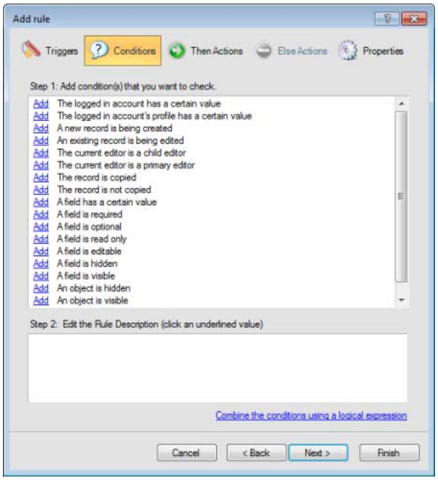
Condition	Description
The logged in account has a certain value	Add this condition to take action based on whether the logged-in account has a certain value. Click the underlined text to select the account to be evaluated.
The logged in account's profile has a certain value	Add this condition to take action based on whether the logged-in account's profile has a certain value. Click the underlined text to select the profile to be evaluated.
A new record is being created	Add this condition to take action based on whether a new record is being created.
An existing record is being edited	Add this condition to take action based on whether an existing record is being edited.
The current editor is a child editor	Add this condition to take action based on whether the record is open in a child editor.
The current editor is a primary editor	Add this condition to take action based on whether the record is open in a primary (non-child) editor.
The record is copied	Add this condition to take action if the record is being copied from another record. **Tip:** This condition can be useful if you want to automatically set field values when records are copied.
The record is not copied	Add this condition to take action if the record is not being copied from another record.
A field has a certain value	Add this condition to take action based on whether a field has been set to a specified value. Click the underlined text to select the field to be evaluated.

Table 154: Rule Conditions Description (Continued)

Condition	Description
A field is required	Add this condition to take action based on whether a field is required. Click the underlined text to select the field to be evaluated.
A field is optional	Add this condition to take action based on whether a field is optional (not required). Click the underlined text to select the field to be evaluated.
A field is read only	Add this condition to take action based on whether a field is read-only. Click the underlined text to select the field to be evaluated.
A field is editable	Add this condition to take action based on whether a field is editable. Click the underlined text to select the field to be evaluated.
A field is hidden	Add this condition to take action based on whether a field is hidden. Click the underlined text to select the field to be evaluated.
A field is visible	Add this condition to take action based on whether a field is visible. Click the underlined text to select the field to be evaluated.
An object is read only	Add this condition to take action based on whether a control is read-only. Click the underlined text to select the control to be evaluated.
An object is editable	Add this condition to take action based on whether a control is editable. Click the underlined text to select the control to be evaluated.
An object is hidden	Add this condition to take action based on whether a control is hidden. Click the underlined text to select the control to be evaluated.
An object is visible	Add this condition to take action based on whether a control is visible. Click the underlined text to select the control to be evaluated.
An input control has a certain value	Add this condition to take action based on whether an input control has a certain value. Click the underlined text to define the input control to be evaluated.
An add-in control condition returns a certain value	Add this condition to take action based on whether an add-in control returns a certain value. Click the underlined text to select the add-in control and the parameters to be evaluated. Refer to Add-ins in scripts and workspaces.

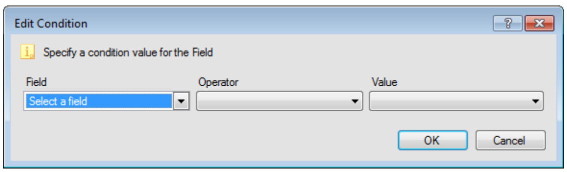
To add a rule condition

1 On the Rule Wizard, click the Conditions button to list available conditions.



2 Click Add next to the conditions you want to add to the rule.

3 If a condition you have added to the rule description contains underlined text, click the underlined text to open the Edit Condition window. Click here for a description of rule conditions. The following figure shows the Edit Condition window as it appears when defining a condition based on a field value.



a If defining a condition based on a value for a field, click the Field drop-down menu and select a field.
b Click the Operator drop-down menu and select an operator.
c Click the Value drop-down menu and select a value.
d Click the OK button to close the window.

4 To evaluate two or more conditions using a logical expression, click Combine the Conditions Using a Logical Expression. Refer to Defining logical expressions for workspace rule conditions.

5 Click the Finish button to save your condition in the rule.

Or

Click the Next button to add actions to the rule.

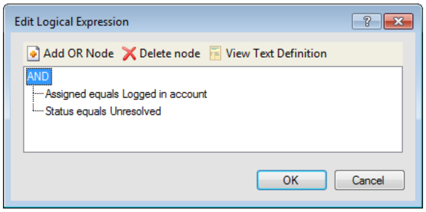
Defining logical expressions for workspace rule conditions

When you add multiple conditions to a rule, the conditions are automatically joined together to form a logical expression. The logical expression defines how the conditions are evaluated together to determine whether rule actions should be performed. By default, the logical expression uses Boolean AND logic rather than OR logic. Conditions joined by an AND operator must all be met for rule actions to be performed. When using the OR operator, any condition can be met.

To edit a logical expression

1 Add more than one condition to the rule.

2 Click Combine the Conditions Using a Logical Expression. The Edit Logical Expression window opens.



The conditions you added are automatically joined with AND logic and are displayed in an AND tree node.

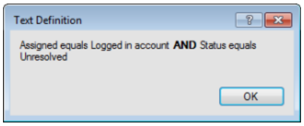
3 To add a condition joined with OR logic, click the Add OR Node button and drag the condition to the OR node.

When you add nodes to the expression, the nodes are displayed in a tree structure, with conditions displayed either under an AND node or an OR node. Conditions under the same AND node are joined to each other using AND logic. Conditions under the same OR node are joined to each other using OR logic. Conditions can be dragged from one node to another to define their logical relationships.

Caution Deleting a node from the logical expression will also delete any conditions listed beneath that node in the tree structure, and there is no Undo option.

4 To delete a node from the logical expression, select the node and click the Delete Node button.

5 To view a text definition of the conditions' logical expression, click the View Text Definition button.



a Click the OK button to close the Text Definition window.

Adding and editing actions

Immediately after a rule is triggered (and all conditions are met), its actions are performed. Actions provide a wide array of functions to meet your business needs. They can be used to set the value of a field or change its required, read-only, or visibility status. They can set the visibility of controls on the workspace. Actions can even hide individual items within menus. For example, an action can change the properties of the Status field to allow staff members to select from only two of the four incident statuses.

Every rule must have at least one Then action, which is the result of the rule being triggered and its conditions being met. Else actions can be added if conditions have been defined in the rule. Else actions can use any of the same actions as Then actions, except they are performed when the rule's conditions are *not* met.

Note If a rule action triggers a connector in a desktop workflow, the workflow will advance to the next element without running any subsequent rules in the workspace. Refer to Defining connector events and conditions.

Available actions depend on the type of workspace and the fields and controls you have added and are described in the following table.

Table 155: Rule Actions Description

Action	Description
Set the value of a field	Add this action and click the underlined text to select a field and the value you want to set for that field. **Note:** In addition to setting an absolute value, you can set relative values for some field types. Relative values are defined by adding or subtracting (or appending or prepending) a value to the field's previous value. Refer to Setting relative field values.
Set menu field to include menu items	Add this action and click the underlined text to select items you want to appear in a specified menu field. **Note:** When selecting items in hierarchical menus, you can select the parent item to add the parent and all child items to the list, or you can select only the child items you want.
Set menu field to exclude menu items	Add this action and click the underlined text to select items you want to hide from a specified menu field.
Make a field required	Add this action and click the underlined text to select a field that you want to require staff members to complete.
Make a field optional	Add this action and click the underlined text to select a field that you want to be optional (not required) for staff members to complete.
Make a field read only	Add this action and click the underlined text to select a field that you want to be uneditable by staff members.
Make a field editable	Add this action and click the underlined text to select a field that you want to be editable by staff members.
Hide field	Add this action and click the underlined text to select a field that you want to be hidden from staff members.
Show a field	Add this action and click the underlined text to select a field that you want to be visible to staff members.
Set the value of an input control	Add this action and click the underlined text to select an input control and the value you want to set for that control.

Table 155: Rule Actions Description (Continued)

Action	Description
Set the URL of a web browser control	Add this action and click the underlined text to select a browser control and specify a URL for it to load.
Assign the value of a text box control to a field	Add this action and click the underlined text to select a text box control and give its value to a text field.
Make an object read only	Add this action and click the underlined text to select a control that you want to be uneditable by staff members.
Make an object editable	Add this action and click the underlined text to select a control that you want to be editable by staff members.
Hide an object	Add this action and click the underlined text to select a control that you want to be hidden from staff members.
Show an object	Add this action and click the underlined text to select a control that you want to be visible to staff members.
Focus a tab	Add this action and click the underlined text to select a tab that you want to receive focus.
Hide a ribbon button	Add this action and click the underlined text to select a button on the ribbon that you want to be hidden. **Note:** When you choose to hide a ribbon button, all instances of the button on the workspace's ribbon will be hidden.
Show a ribbon button	Add this action and click the underlined text to select a button on the ribbon that you want to be visible.
Invoke a guide	Add this action and click the underlined text to select a guide to display to staff members. Refer to Associating answers to guides. **Note:** This option is available only if guided assistance is enabled on your site.
Prompt agent to select a guide	Add this action to prompt staff members to select a guide to display. Refer to Associating answers to guides. **Note:** This option is available only if guided assistance is enabled on your site.

Table 155: Rule Actions Description (Continued)

Action	Description
Prompt agent to search for a guide using a report	Add this action and click the underlined text to select a report and prompt the agent to search for a guide using the selected report. Refer to Associating answers to guides. **Note:** This option is available only if guided assistance is enabled on your site.
Run a script	Add this action and click the underlined text to select a script control and the script that you want to run in it. Refer to Creating and editing scripts. **Note:** This option is available only if agent scripting is enabled on your site and you have added a script control to the workspace.
Fire a named event	Add this action and click the underlined text to type the name of an event that you can use to trigger a script branch, desktop workflow connector, or another rule. Refer to Using events in workspace and script rules. **Note:** Named events let you trigger a workspace rule from a script rule or a script rule from a workspace rule. For example, you could create a script rule to fire a named event when a button control is clicked. You could then create a workspace rule to set the Status field to Solved when the named event is fired.
Execute an editor command	Add this action and click the underlined text to select an editor command that you want to run. Any of the record commands that are available as ribbon buttons for the workspace type can be selected, such as Save, Print, Propose, and Refresh.
Execute an add-in action	Add this action and click the underlined text to select an add-in action that you want to run. Refer to Add-ins in scripts and workspaces.
Add standard text to thread	Add this action and click the underlined text to select a standard text to insert into an incident thread. Any standard text that has Rule Text enabled can be inserted as a customer entry, response, or private note. **Note:** The Incident Thread **relationship item** does not need to be added to the workspace for this action to occur. However, the new thread entry will not be committed until the incident is saved.

Table 155: Rule Actions Description (Continued)

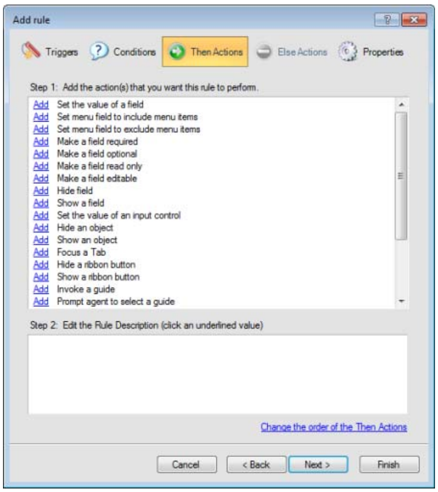
Action	Description
Display a message box	Add this action and click the underlined text to define a customized message that will display in a pop-up window. For example, you can use this action to alert the agent when an incident contains a high severity issue or is missing important information. You can define the window title and the text of the message and select an icon to indicate the message context (error, information, question, or warning).
Make the editor read only	Add this action to make all content in the editor read-only, preventing further changes from taking place to the record. For example, you could add this action to prevent agents from making changes to solved incidents.

To add or edit an action

1 On the Rule Wizard, click the Then Actions button to list available Then actions.

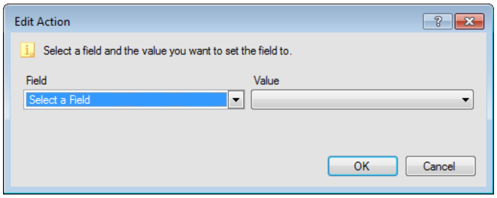
Or

Click the Else Actions button to list available Else actions.



2 Click Add next to the conditions you want to add to the rule.

3 If the action you have added to the rule description contains underlined text, click the underlined text to open the Edit Action window. Click here for a description of rule actions. The following figure shows the Edit Action window as it appears when setting a field value.



a Click the OK button to close the window.

4 To change the order of the actions listed in the rule description, click Change the Order of the Then (or Else) Actions.

a Click the action you want to move, then click the up or down arrow to move the action where you want it.

b Click the OK button to close the window.

5 Click the Finish button to save the rule.

Modifying workspace rules

Once you add rules, you can easily edit them, reorder them, or delete them once they are no longer needed. These functions can be accessed from both the Rules tab and the Rules button on the Home tab.

Important Rules are fired in the sequence in which they are listed. Adjusting them can impact how other rules affect the workspace. For example, if multiple rules set different values for the same field, the field will be set to the value assigned by the last rule in the sequence.

To modify workspace rules

1 From an open workspace, click the Home tab and then click the Rules button. The Rules window opens and lists all workspace rules.

Or

Click an item on the workspace and then click the Rules tab. The rule list displays all rules triggered by the selected item. (If you want to display the rules that reference the selected item, or all rules in the list, click the Filter List button and select the option you want.)

2 In the rule list, select the rule you want to modify.

3 To edit the rule, click the Edit Rule button. The Rule wizard opens. Refer to Adding workspace rules.

4 To copy the rule, click the Copy Rule button. The Rule Wizard opens the rule copy where you can make any needed changes to rule.

Note The Copy Rule button is available only when modifying rules using the Rules button on the Home tab. It does not appear on the Rules tab.

a Click Finish to save the rule copy.

5 To change the order of the rule, click the up or down arrow to move the rule where you want it.

Caution Deleting a rule is permanent and cannot be undone. To ensure that a rule is not needed before deleting it, you can disable it instead. To disable a rule, click the Rules button on the Home tab and clear the Active check box next to the rule.

6 To delete the rule, click the Delete Rule button.

Avoiding rule conflicts

Because processes for workspace rules, script rules, script branching rules, and workflows are often running at the same time, care must be taken to ensure that their actions do not conflict. For instance, when a script is added to a workspace, the script rules will be running even when the script does not have focus on the workspace. If a script rule and a workspace rule are configured to update the same field, an agent may find that the field does not update to the value they might expect.

For this reason, it is helpful to understand the sequence in which rules are performed. Currently, rules are processed in the following order:

1 Workspace rules

2 Script current page rules

3 Script current page's branching logic

If additional scripts appear on the same workspace, processing continues as follows:

4 Script 2 current page rules

5 Script 2 current page's branching logic

6 Script 3 current page rules

7 Script 3 current page's branching logic

While a large number of rules may be difficult to track, remember that you can avoid most common types of conflicts by limiting the number of rules you create and avoiding overlap in triggers. For example, if a workspace rule and script rule are both triggered by a change to the Category field, you will want to make sure that these rules do not act on the same field or control (such as trying to set two different values for the Product field). If they must do so, add appropriate conditions to the rules to narrow their focus and impact.

Since most trigger events are common to workspace rules, script rules, and workflow connectors, it is important to try to minimize or reserve certain types of triggers for certain functions. For example, it is generally best to avoid or minimize the number of data changed triggers (such as "A field changes") in your scripts. This is especially true for the first page of scripts, as this page will load when the workspace does and is therefore more likely to run into a conflict.

Finally, work performed in the agent desktop is augmented by another feature that is usually thought of as separate and distinct—the server-side **business rules**. Don't forget to consider your existing business rules when designing your agent desktop, especially those functions most commonly performed by rules, such as changing incident assignment. And be sure to consider your agent desktop designs when adding new business rules. Tracking functional overlaps between business rules and your agent desktop is just as important as preventing conflicts within the desktop to ensure expected results.

Previewing workspaces

When you are editing a workspace, it can be helpful to preview the workspace to see what it will look like when staff members use it. This can help you assess whether it meets your needs or if it needs further changes. The preview feature displays the workspace as it will appear to any staff member who has the same set of administration permissions as you have. To view the workspace as it will appear to a staff member with different permissions, you must log in using a staff account with the same profile as the staff member.

Note As in production, previewed reports used on report controls or **relationship items** automatically attempt to filter on the record shown using the workspace to display information related to the record. For this reason, you should make sure that each report contains at least one filter for the primary identification types for the workspace type. For example, reports used in incident workspaces should filter on incident *(i_id)*, contact *(c_id)*, or organization *(org_id)*. If such a filter does not exist, the previewed report could return all records.

To preview a workspace

1 While editing a workspace, click the Home tab.

Or

Right-click a workspace on the Workspaces explorer and select Open.

2 To view the workspace as it will appear to staff members when they add records using this workspace, click the Preview button and select New Record. A preview of the new record opens.

3 To view the workspace as it will appear with data from a specific record, click the Preview button and select Opening a Record.

a Type the record ID number.

b Click the OK button. The record preview opens.

4 To view a chat workspace as it will appear with data from a specific chat session, click the Preview button.

a Type the chat session ID. (Chat session IDs can be found on the tab of an agent's active chat session as well as the All Chats report.)

b Click the OK button. The chat preview opens.

5 Click X on the top right or press **Esc** to close the preview window.

Note When you click the Preview button on a multi-edit workspace, the workspace displays without any record data. You cannot enter a reference or ID number to view existing data as you can when you select Opening a Record on a single-record workspace.

Exporting and importing workspaces

Administrators can spend a lot of time creating and optimizing custom workspaces to support complex business processes. However, because workspaces are often comprised of fields and controls that are unique to the interface in which they were created, they cannot simply be copied between interfaces.

To save time when creating workspaces in multiple interfaces, Oracle Service Cloud lets you export a workspace as an XML file containing descriptions of all the workspace elements, including fields, controls, layout, and rules. The XML file can then be used by the import wizard to import the workspace to another interface. The export/import features can help you migrate a workspace efficiently while accounting for fields and controls that are not configured identically between interfaces. This is helpful if you have a custom workspace you like on one Oracle Service Cloud interface and want to create a copy or similar workspace on a different interface.

Note Workspace notes are not included when exporting a workspace to an XML file.

When a workspace is exported as an XML file, the file includes a hash value that will be used when the file is imported to determine if the file has been modified externally. If the file has been modified, it will not be available for importing, and an error message notifies you that the file is invalid.

The XML file can be no larger than 1 MB.

To export a workspace

1. On the Workspaces explorer, right-click the workspace you want to export and select Open. The workspace opens.
2. Click File and select Export Workspace. The Save As window opens.
3. Select the directory where you want to save the workspace definition file and type the file name.
4. Click the Save button to save the workspace definition file.

To import a workspace

1. From the Workspaces explorer, click the New button on the ribbon. (If workflows are enabled, the button will be labeled New Workspace.) The New Workspace window opens.

2 Click Import Workspace from an Exported Workspace File to open the Import Workspace wizard.

3 Click the Next button.

4 Type the full path of the workspace definition file you want to import.

Or

Click the Browse button to find the file on your workstation and click the Open button.

5 Click the Next button.

6 To map the file to a workspace type, click the Map To Type drop-down menu and select the record type you want to map the workspace to. By default, the imported workspace is mapped to the same workspace type as the original workspace.

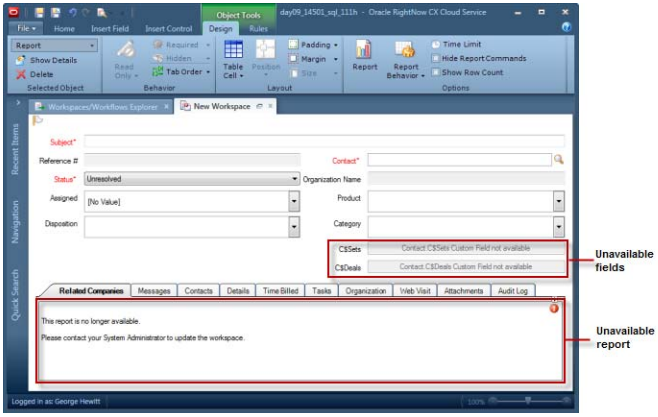
Important If items from the workspace you are importing are not used by the workspace type you are converting it to, the next window lists these invalid items and informs you that they will be replaced by spacers, field placeholders, or removed from the imported workspace. Since most database fields and workspace controls are not shared by workspace types, the majority of fields and controls will often not be included in the new workspace when you convert the type. However, this option is helpful if you want to import the general layout from a workspace with a different type.

7 Click the Next button.

8 If the workspace includes records from a custom object, click the Map To Record Type drop-down menu and select the record type you want to map the records to. If Oracle Service Cloud detects a record type of the same name already in the site, it is selected by default.

a Click the Next button.

9 Click the Finish button. The workspace designer opens with the imported workspace. Any fields on the workspace that do not exist on the site you are importing the workspace into will be indicated as unavailable, as shown here.



10 Edit the workspace to remove or replace fields that are not available. Refer to [Editing workspaces](#).

11 Click the Save button to save the workspace.

Important When you save a workspace, reports that are used by the workspace's report controls will be checked to ensure they exist on the site. If a report does not exist, a message will be placed in the control stating the report is no longer available. You can save a workspace that has invalid reports, but you will need to select new reports for the controls before they can be used by the workspace.

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Guided Assistance

Guided assistance gives agents and customers the ability to locate **answers** or **text explanations** by selecting responses from question branches in **guides**. This lets agents quickly find information they can provide to customers when working with them on the phone, when responding to an **incident**, or when chatting. In addition, guides can be embedded in answers so customers can use them on the **customer portal**. Refer to Adding answer details and Configuring the GuidedAssistant widget.

Important Many factors control answer visibility. For instance, if an answer or section of an answer is available only to customers whose **SLAs** give them permission to view certain **answer access levels**, that answer will not be visible to customers without that SLA even if they click an answer in a guide. Refer to Controlling answer visibility.

To understand how guides can best be implemented in your agent desktop, you should also become familiar with **workspaces**, **scripts**, **script rules**, and **workflows**. For a summary of these features, refer to Desktop Overview.

Configuring guided assistance

You can create as many guided assistance guides as you need to help your agents and customers locate appropriate responses to questions related to different topics. For example, you can create guides to help agents answer questions about different products and other guides to help answer questions about service plans. Each guide can include multiple question branches, so you can use a single guide to lead agents to answers regarding different models of a product or multiple service plans.

Note These configuration options will not be available until guided assistance is enabled. To enable guided assistance, contact your Oracle account manager.

To provide guided assistance to agents and customers

1 Add the Guided Assistance explorer to your **configuration list** for the Configuration button. Refer to Creating a navigation set for the administrator.

2 Assign guided assistance permission to **profiles**. Refer to Assigning guided assistance permission to profiles.

3 Create **guides** for your agents or customers. Refer to Creating guides.

4 To display a guide to agents, add the Guided Assistance **control** to a **workspace** selected in the agent profiles. Refer to Adding guided assistance to workspaces.

5 To display a guide to customers, add the GuidedAssistant **widget** to the **customer portal**. Refer to Configuring the GuidedAssistant widget.

Assigning guided assistance permission to profiles

You first need to edit your **profile** to include permission to create **guides**. Staff members with appropriate profile permission can create, copy, delete, and rename guides from the Guided Assistance **explorer**.

Note Guided assistance permission is not available on the Profiles editor unless guided assistance is enabled on your site. To enable guided assistance, contact your Oracle account manager.

To assign guided assistance permission to profiles

1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management. The Profiles report displays on the content pane.

3 Right-click a profile and select Open. The Profiles editor displays on the content pane.

4 Click the Permissions button on the ribbon.

5 Click the Service tab and select the Guided Assistance – Add/Edit check box under More Options.

6 Click the Save and Close button on the ribbon.

Note Staff associated with the profile you have edited must log out of Oracle Service Cloud and log back in to apply the changes you have made.

❖ Customizing profiles

Creating guides

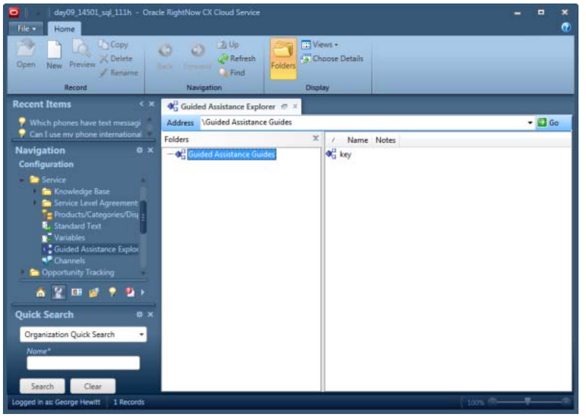
The Guided Assistance **explorer** provides all the tools you need to manage the guides you create. You can copy and delete guides and organize them in custom folders in the same way you work with items in any explorer. Refer to Explorers.

Caution If you attempt to delete a guide that is being used in another guide, a dependency warning will list each location where the guide is used and provide you with an option to cancel the deletion. If you choose to continue deleting the guide, all references to the guide will be invalidated and you will need to manually update each reference to either remove it or replace it with a valid guide.

To create or edit a guide

1 Click the Configuration button on the **navigation pane**.

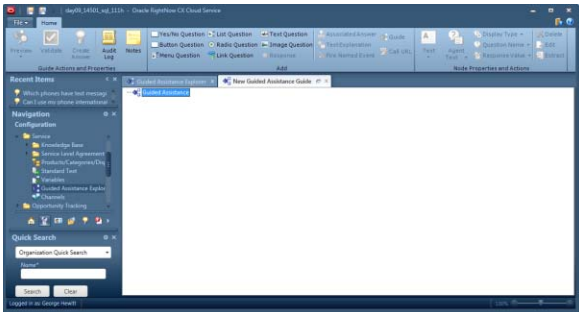
2 Double-click Guided Assistance Explorer in the **configuration list**. The Guided Assistance explorer opens on the content pane.



3 To create a new guide, click the New button on the Guided Assistance explorer's ribbon. The guided assistance designer opens.

Or

If your navigation set is configured to add guides from the application menu, click File and select Guided Assistance Guide. See To configure the file menu.



When creating a guide, you add questions to the guide, add text for the question responses, and associate answers or **text explanations** with each response. You can also insert existing guides into other guides if you have a set of common questions and answers you want to use in multiple guides.

4 To edit an existing guide, right-click the guide in the list and select Open.

The buttons on the designer's ribbon give you access to all the tools you need to preview, validate, and edit a guide. The groups and buttons on the guided assistance designer's ribbon are described in the following table.

Table 156: Guided Assistance Designer Ribbon Description

Group/Button	Description
Guide Actions and Properties	The buttons in this group let you preview the guide you create, validate the guide to ensure it is complete, create answers to add to the guide, add a note to the guide, and select a language for the guide.
Preview	Click this drop-down menu and select from the following options. **Note:** If you click on answers while testing a guide, hits will be recorded to the *clickstreams* table.
Agent Preview	Select this option to open a window displaying the guide as it will appear on the agent desktop.
Web Preview	Select this option to open a window displaying the guide as it will appear on the customer portal.
Validate	Click this button to verify that all the question branches in the guide are associated with answers or text explanations. **Note:** You can save a guide that cannot be validated, but we recommend that you correct all errors before using the guide.
Create Answer	Click this button to create a new answer associated with the guide. (That is, the guide is automatically selected in the answer's Guided Assistance field.) When staff members search for guides, a search that matches the associated answer's content will return the guide. Refer to Configuring guide searching and Adding answers.
Audit Log	Click this button to open the audit log for the guide, which shows you when the guide was created and edited, and by whom. Refer to Audit logs.
Notes	Click this button to open a text window where you can type notes for the guide. The notes can be used to explain the purpose of the guide or relay other information to agents using the guide.

Table 156: Guided Assistance Designer Ribbon Description (Continued)

Group/Button	Description
Language	Click this button to select the language to use for the guide. Only languages deployed to your site are available. **Note:** This button does not display if your site uses a single language.
Add	The buttons in this group let you add questions, responses, answers, text explanations, and other guides to the guide you are creating. **Note:** Some of the options available in this group are also available when you right-click a question or response in the guide.
Yes/No Question	Click this button to add a question with two responses. The text in the responses reads Yes and No, but you can change the text as necessary.
Button Question	Click this button to add a question with responses shown on buttons.
Menu Question	Click this button to add a question with responses shown in a drop-down menu.
List Question	Click this button to add a question with responses shown in a list.
Radio Question	Click this button to add a question with responses shown with radio buttons.
Link Question	Click this button to add a question with responses shown as links. **Note:** To add links to other websites, you must right-click a response and select Call URL. After typing the URL, double-click it to open the Edit Call URL Properties window. Next to the Parameter Pass Method field, select the Post radio button and click OK.
Text Question	Click this button to add a question with a response shown as a text box and an OK button. **Note:** All text fields are automatically marked as required on the customer portal.

Table 156: Guided Assistance Designer Ribbon Description (Continued)

Group/Button	Description
Image Question	Click this button to add a question with responses shown as clickable images. Using the Client Workflow Images explorer, you can add images to use in guides. Once you open the explorer, you can manage images the same way you do in the Images explorer. Refer to Images explorer.
Response	Click this button to add an additional response to any of the questions you have added to the guide.
Associated Answer	Click this button to open a search window to search for or select an answer to associate with the selected response. Each response can be associated with multiple answers.
Text Explanation	Click this button to add a text explanation to the selected question response. Use text explanations when you do not have an answer to associate with the response and do not want to create an answer for the purpose.
Fire Named Event	Click this button to add a named event that will fire when the response is selected. Refer to Using events in workspace and script rules.
Guide	Click this button to associate another guide with the selected response in the guide you are creating. For example, you can create a smaller guide used for a number of purposes and then add it to a larger guide with a more specific purpose.

Table 156: Guided Assistance Designer Ribbon Description (Continued)

Group/Button	Description
Call URL	Click this button to add an external URL that is called when the response is selected. You can right-click the Call URL node and select Edit to specify the URL and preview it in a browser. You can also select a parameter pass method (get or post) and view all name-value pairs that will be passed to the URL as parameters. Refer to Passing parameters through Call URL nodes. **Important:** Following a Call URL node can be unsettling to customers if they do not expect to leave the guide. To avoid confusion, you can open the URL in a separate window by editing the answer details page on the customer portal. Refer to Opening URLs in a separate window. Otherwise, be sure that the text of the question or response containing each Call URL node indicates the action that will result when the option is selected. **Note:** Call URL nodes support both absolute and relative URLs. For example, you can post the relative URL `/app/ask` to load your site's Ask a Question page.
Node Properties and Actions	The buttons in this group let you add text, images, and web pages to questions. You can also edit, delete, and export questions and all the items in the questions' branches. **Note:** Some of the options available in this group are also available when you right-click a question or response in the guide.
Text	Click this button to edit the text for the selected question or response.
Agent Text	Click this button to add explanatory text to the selected question. The agent text is displayed beneath the question and is visible only to the staff members who is using the guide.
Display Type	Click this button to change the question type for the selected question. You can change the question type to Button, Menu, List, Radio, Link, Text, or Image.
Question Name	Click this button to add a name for the question, which is used to display the question in the designer and when passing the question as a parameter name to an external URL (Call URL node).
Response Value	Click this button to set the value for the response, which is used when passing the response as a parameter value to an external URL (Call URL node).

Table 156: Guided Assistance Designer Ribbon Description (Continued)

Group/Button	Description
Delete	**Caution:** When deleting a question or response, all the images, web pages, questions, and responses beneath the item will also be deleted. Click this button to delete the selected question or response.
Edit	Click this button to open the Edit Question Properties window to change the properties of the selected question. You can also change a question's properties from the ribbon. Refer to Adding questions and responses to guides. In addition, you can select an answer associated with a question response, and then click this button to open a search window to find a different answer to associate with the response. Refer to Adding answers and text explanations to responses.
Extract	Click this button to open the Extract Guide window where you can copy the selected question branch to a new guide or to an XML file.

❖ Explorers

Adding questions and responses to guides

The questions you add to guides can be simple or complex. If you think your agents may need additional context to better understand a question, you can add a web page or an image that will appear with the question text. Refer to Adding images for use on workspaces.

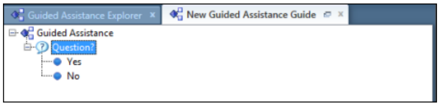
You can also save time by inserting the content from another guide into the guide you are creating. Inserting guides can save time if you have a number of common questions, responses, and answers that are used throughout a number of guides.

Tip When editing a guide, you can press **Ctrl+f** to search for specific text on the content pane. This can be helpful for locating descriptions or answer IDs referenced within a guide.

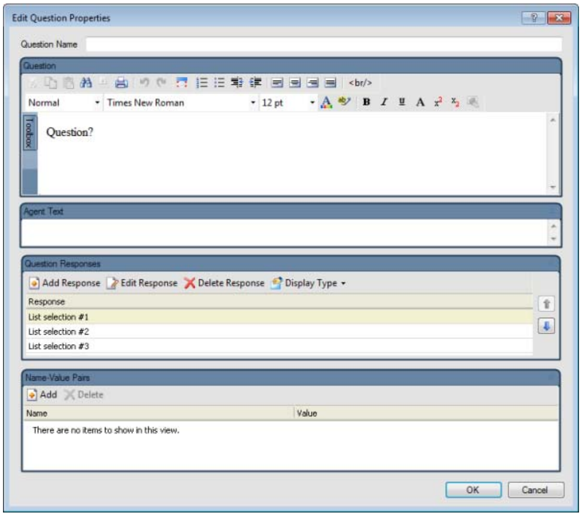
To add questions and responses to a guide

1 Select a question type button on the ribbon to add the first question to the new guide. For a description of the question types, refer to Guided Assistance Designer Ribbon Description.

Once you add a question, the designer displays the question and its responses using default text. The question is added with the default text selected for editing.



2 Double-click the text for the question. The Edit Question Properties window opens.



3 Enter the following field information.

Table 157: Edit Question Properties Window Description

Field	Description
Question Name	Type a question name to be used as the name of the parameter to be passed to a URL as defined in a Call URL node. This field is associated with the Question Name button on the ribbon.

Table 157: Edit Question Properties Window Description (Continued)

Field	Description
Question	Type the question to display in the guide. This section contains an HTML editor and toolbox to help create guides. The HTML editor and toolbox are similar to the editor and toolbox used for answers. Refer to Adding HTML answers. • When inserting an image from the toolbox, you must select a client workflow image and choose to display it either inline (in the body of the answer) or in a pop-up window. Refer to Adding images for use on workspaces and Configuring the GuidedAssistant widget. • When inserting an inline web page from the toolbox, you must specify the URL address, width, and height.
Agent Text	Type an internal note to further explain the logic in the question. This text will not display in guides and is available only to staff members. This field is associated with the Agent Text button on the ribbon.
Question Responses	Displays all question responses that are associated with the question being edited. Responses can be added, edited, and deleted. In addition, a display type can be set to change the format of the responses. This field is associated with the Response Value button on the ribbon.
Name-Value Pairs	Click this section header to display name-value pairs that are associated with the question. Name-value pairs can be added and deleted and are used in Call URL nodes to pass parameters for integration purposes. Refer to Passing parameters through Call URL nodes.

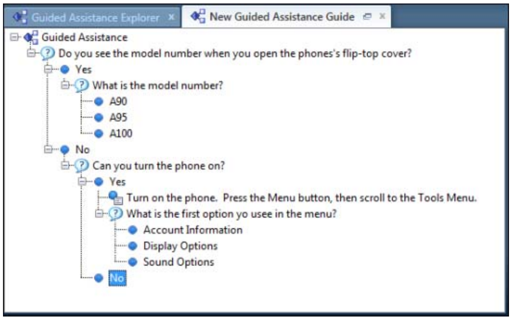
4 Click the OK button.

5 To add responses to the question, click the Response button on the ribbon. The new response is added to the question.

6 To edit a question response, double-click the response to open the Edit Response Properties window.

a Type the text and value for the response.
b Click the OK button.

7 To add another question to the guide, select one of the responses in a question you have added and click one of the question type buttons on the ribbon. The designer is updated to display the new question. When agents use the guide, they will see the new question when they choose the response the new question is branched from. An example of a designer with several questions and responses is shown in the following figure.



8 Click the Save button on the **Quick Access toolbar** to save the guide. The Save As window opens if you have not yet named the guide.

Important If there are problems with the guide (that is, if one or more questions are not associated with an answer or text explanation), a validation message will display the errors. Click the Continue button to save the guide or click the Cancel button to cancel.

If problems exist with your guide, we recommend that you fix them before making the guide available to agents.

a Type a name for the guide in the Name field.
b Click the OK button to save the guide.
❖ [Adding images for use on workspaces]

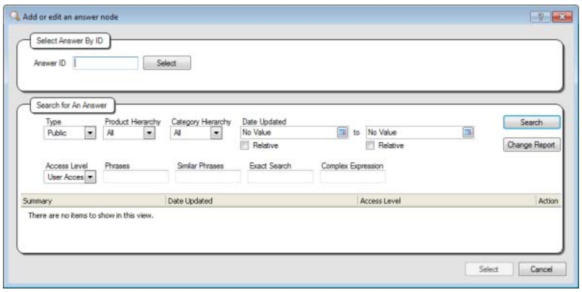
Adding answers and text explanations to responses

For a guide to be valid, all questions in the guide must be associated with responses, and all responses must be associated with other questions or with one or more public answers or **text explanations**. The following procedure explains how to associate answers and text explanations with responses.

Tip Once a guide has been saved, you can click the Create Answer button on the ribbon to create an answer to associate with your guide.

To associate answers and text explanations with question responses

1 To associate an answer with a question response, select the response and click the Associated Answer button on the ribbon. The Add or Edit an Answer Node window opens.



a If you know the ID number of the answer you want, type it in the Answer ID field and click the Select button.

b To search for an answer, enter search criteria in the fields, click the Search button, select the answer you want, and click the Select button on the bottom of the window. The window closes and the answer is associated with the response.

2 To change an answer that has been associated with a response, double-click the answer on the guided assistance designer. The Add or Edit an Answer Node window opens.

a Select a different answer and click the Select button.

The answer in the guide is replaced with the new answer.

Note When you edit a guide, you can view the answers associated with responses by right-clicking an answer and selecting View Answer.

3 To associate a text explanation with a question response, select the response and click the Text Explanation button on the ribbon.

   a Type the text you want for the explanation and press **Enter**. The explanation displays beneath the response.

4 To change the text for an explanation already added to the guide, select the explanation, click the Text button on the ribbon, and type the text you want.

   Or

   Double-click the explanation and type the text you want.

   If the text explanation exceeds 200 characters, the Edit Node Text window opens when you double-click the text explanation.

   a Type the text you want and click the OK button to save the change and close the window.

5 Click the Validate button on the ribbon to verify that each question response is associated with a public answer or a text explanation. A message opens stating that the guide successfully validated or that it contains errors.

   a Click the OK button to close the window.

Important Validation also occurs automatically when saving a guide. If validation errors occur when saving, you can click the Continue button on the Validation Results window to save without first correcting the errors. However, the guide will not function properly until all validation errors have been corrected. If problems exist with your guide, it is important to fix them before making the guide available to agents or customers.

6 Click the Save and Close button on the Quick Access toolbar to save and close the guide.

Passing parameters through Call URL nodes

A Call URL node is used to link a guide response to an absolute or relative URL. For instance, a customer-facing guide could lead customers to a solution that requires the involvement of support agents. In this case, you could add a Call URL node to route customers from the guide to your site's Ask a Question page. This can be done by entering the relative URL `/app/ask` in the Call URL properties.

Important Following a Call URL node can be unsettling to customers if they do not expect to leave the guide. To avoid confusion, be sure that the text of the question or response preceding each Call URL node indicates the action that will result when the option is selected.

You can also pass parameters through the Call URL function by defining name-value pairs in the question or response properties. For example, when linking to the Ask a Question page, you can pass parameters to automatically set values for fields such as Product, Category, or a custom field. To accomplish this, you must first update the question name to indicate the name of the parameter you want to set. You can then edit the response properties to set the value you want.

Alternately, you can add name-value pairs to question properties to declare a static parameter. Static parameters are parameters that are carried through a guide's remaining branches and are passed through any Call URL function that exists in the question's subhierarchy.

To test Call URL functions and parameters, click the Preview button and select an option for previewing your guide.

Note The following procedures assume you have created a guide containing a question and a response with a Call URL node. Refer to Creating guides.

To pass a parameter using response properties

1 From the open guide, right-click the question containing the response and Call URL node, and select Edit. The Edit Question Properties window opens.

2 In the Question Name field, type the name of the parameter you want to pass.

Note If passing a parameter to an Oracle Service Cloud field, such as a field on the Ask a Question page, use the format *table.fieldname*. For example, to pass a parameter to the Products field, type `incidents.prod`. Custom fields are indicated in the format *table.c$fieldname*, such as `incidents.c$priority`.

3 In the Question Responses section, select the response containing the Call URL node and click the Edit Response button. The Edit Response Properties window opens.

4 In the Response Value field, type the parameter value you want to pass.

Note If passing a parameter to an Oracle Service Cloud field, be sure to use a value consistent with the field's purpose and type. For example, to set a Yes/No field, use a response value of 1 for Yes and 0 for No. To pass a value to the Products field, you would type a number or number sequence corresponding to the product ID. Refer to Finding product ID numbers.

5 Click the OK button.

6 Click the OK button to close the Edit Question Properties window.

7 Right-click the Call URL node and select Edit. The Edit Call URL Properties window displays the URL, parameter pass method, and all name-value pairs that will be passed as parameters.

8 Select a parameter pass method from the Parameter Pass Method field. Available options include Get and Post.

Note The Post method must be used when passing parameters to set fields on a page, such as when setting the Product field on the Ask a Question page.

9 Click the OK button.

10 Click the Save and Close button to save your changes.

To pass a static parameter using question properties

1 From the open guide, right-click the question you want to declare the static parameter for and select Edit. The Edit Question Properties window opens.

2 Expand the Name-Value Pairs section and click the Add button.

3 Type the name of the parameter in the Name field.

Note If passing a parameter to an Oracle Service Cloud field, such as a field on the Ask a Question page, use the format *table.fieldname*. For example, to pass a parameter to the Products field, type `incidents.prod`. Custom fields are indicated in the format *table.c$fieldname*, such as `incidents.c$priority`.

4 In the Value field, type the parameter value you want to pass.

Note If passing a parameter to an Oracle Service Cloud field, be sure to use a value consistent with the field's purpose and type. For example, to set a Yes/No field, use a response value of 1 for Yes and 0 for No. To pass a value to the Products field, you would type a number or number sequence corresponding to the product ID. Refer to Finding product ID numbers.

5 Click the OK button to close the Edit Question Properties window.

6 Right-click the Call URL node and select Edit. The Edit Call URL Properties window displays the URL, parameter pass method, and all name-value pairs that will be passed as parameters.

7 Select a parameter pass method from the Parameter Pass Method field. Available options include Get and Post.

Note The Post method must be used when passing parameters to set fields on a page, such as when setting the Product field on the Ask a Question page.

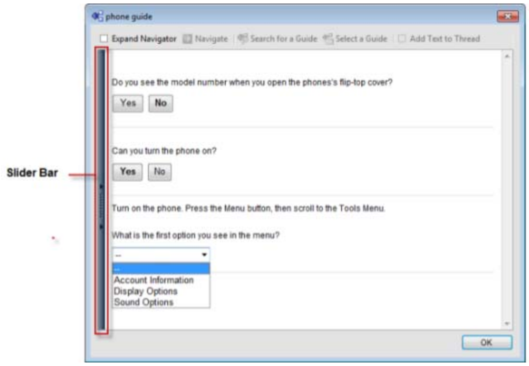
8 Click the OK button.

9 Click the Save and Close button to save your changes.

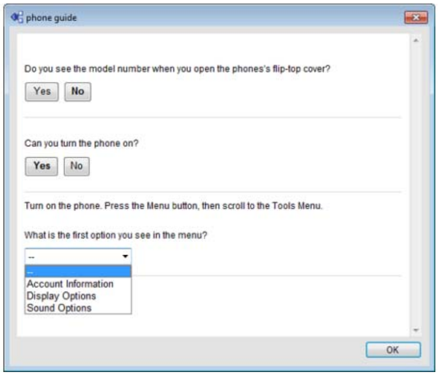
Previewing guides

You can preview a guide to confirm that it appears and functions as you want it to. The Preview button on the ribbon provides two options for previewing guides.

Agent Preview—This option opens the guide in a separate window and shows you the guide exactly as your agents will see it, including the slider bar you can expand to view the navigator. The following figure shows an example of the Agent Preview feature.



Web Preview—This option opens the guide in a separate window and shows you the guide as your customers will see it. The following figure shows an example of the Web Preview feature.



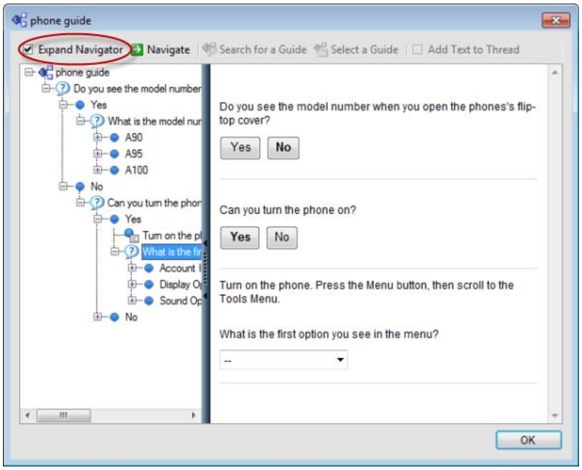
Note The Web Preview feature does not include the toolbar that is available on the Agent Preview feature. To configure display options for guides that are included in answers, refer to [Configuring the GuidedAssistant widget](#)

To use Agent Preview

1 When viewing a guide, click the Preview button on the ribbon and select Agent Preview. A window opens, showing only the first question in the guide.

2 To view the guide's contents, respond to the first question just as you would if you were an agent using the guide. Additional questions, responses, answers, and **text explanations** display as you navigate the guide's branches.

3 To view the guide's branches, select the Expand Navigator check box at the top of the window. A panel on the left side of the window displays the guide's contents.



4 To quickly view the content under a question or response, select the question or response on the left side of the window and click the Navigate button at the top of the window. The content of the question or response displays on the right.

5 Click the OK button to close the window.

To use Web Preview

1 When viewing a guide, click the Preview button on the ribbon and select Web Preview. A window opens, showing only the first question in the guide.

2 To view the guide's contents, respond to the first question just as you would if you were a customer using the guide. Additional questions, responses, answers, and text explanations display as you navigate the guide's branches.

3 Click the OK button to close the window.

Adding guided assistance to workspaces

Before your agents can use guides, you must add the Guided Assistance **relationship item** to a custom incident or chat **workspace**. Refer to Relationship items.

Once added, the Guided Assistance relationship item functions as a container for displaying guides to your staff on the agent desktop. Guides can be displayed manually, based on a guide search or selection performed by an agent. Refer to Configuring guide searching. They can also be loaded dynamically, based on a **workspace** or **script rule**. For example, you can design a workspace rule to display a guide automatically when the editor loads based on the incident's category, or you can load a different guide when an agent selects a certain incident disposition. Refer to Using guided assistance in workspace and script rules.

Note A separate Guided Assistance field can be added to answer workspaces and scripts. This field allows you to associate answers directly to guides for search-matching purposes. Refer to Associating answers to guides.

Guides can also be embedded in answers so customers can use them on the **customer portal**. Refer to Adding answer details and Configuring the GuidedAssistant widget.

- ❖ Creating custom workspaces
- ❖ Overview of workspace rules

Configuring guide searching

You can provide your agents with the ability to manually select and display guides on the Guided Assistance **relationship item**. When these options are enabled, agents can use a set of buttons at the top of the control to search for and select a guide appropriate for their needs. Refer to Finding answers using guided assistance.

Important When providing the guide search feature to your agents, you must ensure that each guide is appropriately associated to one or more answers. Refer to Associating answers to guides.

Several design options are available for the guide searching feature. By default, the Guided Assistance Search report is used when performing searches, but you can select a different search report to use instead. Also, as an alternative to displaying the default Search for a Guide and Select a Guide buttons, you can display the guide search fields inline at the top of the control. You can also choose to hide the left navigation page if you want to restrict agents from jumping freely to different sections of the guide.

In addition, when the Guided Assistance relationship item is added to incident workspaces, the Guided Assistance button is automatically displayed on the ribbon. By default, this button provides both select and search options for locating guides. However, you can edit the Guided Assistance button to show or hide either option. Or, if you do not want the Guided Assistance button to display at all, you can remove it. Refer to Customizing ribbons and Quick Access toolbars.

To edit guide searching options

1 From the Workspaces explorer, right-click the workspace containing the guide you want to edit and select Open.

2 Select the Guided Assistance relationship item on the workspace and click the Design tab.

3 Edit the following properties on the Options button group. Refer to Editing design item properties.

Table 158: Design Options for the Guided Assistance Relationship Item

Option	Description
Search Report	Click this button to select the report you want to use when searching for guides from a workspace. The report is displayed when you click the Search for a Guide button on the workspace's guided assistance panel or you click the Guided Assistance button on the incident workspace's ribbon and select Search. The report is also shown on the incident workspace's guided assistance panel when the Show Search Inline option is enabled on the incident workspace. **Note:** By default, the standard Guided Assistance Search report is used to search for guides. We recommend that you do not change the default report unless you require a custom report with different fields.

Table 158: Design Options for the Guided Assistance Relationship Item

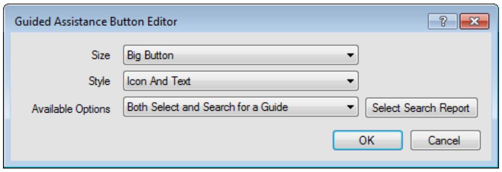
Option	Description
Show Search Inline	Selecting this option displays search fields on the workspace's guided assistance panel you can use to search for a guide. The fields that are displayed come from the search report you select for finding guides. **Note:** Selecting this option prevents the Search for a Guide and Select a Guide buttons from displaying on the workspace's guided assistance panel, though these can still be accessed from the Guided Assistance button on the incident workspace's ribbon.
Show Search Button	This option adds the Search for a Guide button on the workspace's guided assistance panel. Clicking this button on a workspace opens the Search for a Guide window where you can enter search criteria to find the guide you want. **Note:** If this check box is not selected on the workspace designer, the Search for a Guide window can still be opened from the Guided Assistance button on the incident workspace's ribbon.
Show Select Button	This option adds the Select a Guide button to the workspace's guided assistance panel. Clicking this button opens the Select a Guide window where you can select the guide you want from a list of available guides. Refer to Configuring guide searching. **Note:** If this option is disabled, the Select a Guide window can still be opened from the Guided Assistance button on the incident workspace's ribbon.
Show Navigation	This option adds the Expand Navigator check box and slider bar to the workspace's guided assistance panel. Clicking this button on a workspace allows you to view all the branches in the guide simultaneously. Refer to Previewing guides.

To edit the Guided Assistance button

1 From the open incident workspace, click the Home tab and click the Ribbon button.

2 Select the Guided Assistance button.

3 Click the Edit Button button on the ribbon editor. The Guided Assistance Button Editor opens.



4 Select the size and style options you want for the button.

5 Click the Available Options drop-down menu and select the option you want to display on the button.

- **a** Choose Select a Guide if you want only the Select option on the button. This option opens a window listing all the guides configured on your site that your agents can select from.
- **b** Choose Search for a Guide if you want only the Search option on the button. This option opens the Search for a Guide window where agents can search for the guide they want using the content from answers associated with the guide.
- **c** Choose Both Select and Search for a Guide to show both options on the button.

6 To change the search report you want to display when the Search option is selected, click the Select Search Report button to open the Select Report window.

- **a** Select the report you want agents to use to search for guides.
- **b** Click the OK button to close the window.

Note By default, the standard Guided Assistance Search report is used to search for guides. We recommend that you use this report unless you require different search options.

7 Click the OK button to save the changes to the Guided Assistance button.

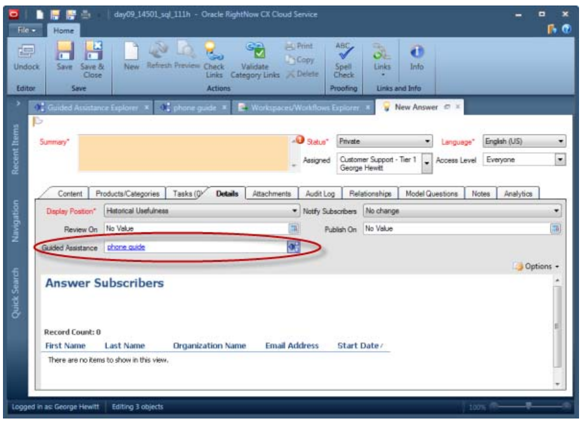
- ❖ Editing design item properties
- ❖ Customizing ribbons and Quick Access toolbars

Associating answers to guides

In order for your agents to search for guides effectively, you must understand how guide searching works and manage your content accordingly. Because guide content (such as question text) is highly contextual and not wholly descriptive of a topic, it is *not* indexed for searching. However, answers associated with each guide are very relevant to searching, so the content of those answers *is* indexed. For this reason, when a search is performed, the results are based on the content of associated answers, not on the content of the guides themselves. For example, searching for the product Phones will return guides that are associated with answers set to that product.

Therefore, in order for a guide to be searchable, you must associate it to an answer. And so that it can be searched for intuitively, the answer's content must be relevant to the topic addressed by the guide. There are two ways to associate an answer to a guide.

- **Associate the answer to a guide response**—When editing the Guided Assistance relationship item on a workspace, you can select a response on the guide and use the Associated Answer button to associate an answer to it. This creates a natural association because, in this case, the answer is part of a solution path defined by the guide. Refer to Adding answers and text explanations to responses.
- **Select a guide from the answer's Guided Assistance field**—Sometimes, a guide may not contain any responses that link to answers from the knowledge base. For example, a guide's responses could be associated only with **text explanations**. In this case, to make the guide searchable, you must associate it with an answer using the Guided Assistance field in the answer editor. On the default answer workspace, the Guided Assistance field is located on the Details tab, as shown in the following figure. (For custom workspaces, you can add the *answers.guided assistance* field from the Insert Field ribbon tab on the workspace editor.) Here, the answer is associated with a guide named Service Plan Assistance, and the guide will be returned in guide searches when the search criteria matches the answer's contents.



You do not need to associate the answer with a guide if the answer is already associated with a response in the guide. For procedures detailing how to add fields, controls, and relationship items to workspaces, and how to create workspace rules, refer to Workspaces.

Tip To help you identify guides that will be impacted by changes to guides or the removal of associated content, the Guide Dependency report lists answers and other guides that have been linked to by each guide. The Guide Dependency report can be accessed at Public Reports > Service > Guided Assistance. Refer to Reports explorer.

To associate an answer with a guide

1 With the answer open, navigate to the tab or other location where the Guided Assistance field is displayed. In the default answer workspace, this field is located on the Details tab.

2 Click the Select Guide button to the right of the field to open the Select a Guide window.

3 Select the guide you want to associate the answer with.

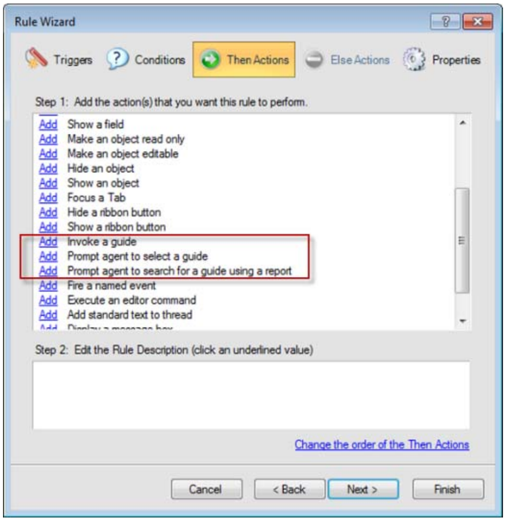
4 Click the OK button to close the Select a Guide window.

5 Click the Save and Close button on the ribbon to save the answer.

❖ Adding answer details

Using guided assistance in workspace and script rules

Guided assistance functions are available as triggers and actions when configuring rules for incident and chat workspaces. For example, you can design a rule on an incident workspace that will open a guide based on the incident's product or category. Refer to Workspace rules.



Although the Guided Assistance control is not available for scripts, incident scripts that share a workspace with a Guided Assistance control can also access these functions. For instance, in a workspace that contains both an incident script and Guided Assistance control, you can create a script rule that is triggered when the guide is completed. Refer to Script rules.

You can select the following Guided Assistance operations in supported rule types.

Table 159: Guided Assistance Functions in Workspace and Script Rules

Trigger/Action	Description
The guide finished	Select this trigger to invoke a rule when a staff member completes a guide in the workspace.
Invoke a guide	Select this action to choose a specific guide to open. When this operation is selected, you choose the guide you want from the Add Action window's Value field.
Prompt agent to select a guide	Select this action to display a list of guides to agents. Agents can then choose the guide they want to use.

Table 159: Guided Assistance Functions in Workspace and Script Rules (Continued)

Trigger/Action	Description
Prompt agent to search for a guide using a report	Select this action to display a search window where agents can search for a specific guide. **Note:** By default, the standard Guided Assistance Search report is used. If you want to select a different report, click the Select Search Report button on the window's Value field when this operation is selected.

Note Guided assistance options are also available when configuring workflow connector events leading from incident elements. Refer to Defining connector events and conditions.

- Workspace rules
- Script rules
- Defining connector events and conditions

Exporting and importing guides

Once you create a **guide**, you can export it to a guide definition file and import it into other Oracle Service Cloud interfaces to create a new guide. This allows you to create a single guide for use in several interfaces.

You can also extract a subset of the guide's questions and responses to either create a new guide or save to a guide definition file that you can then import into another site. This function also includes an option to replace the extracted branch with an embedded reference to the new guide, which can be useful for simplifying the configuration of a complex guide.

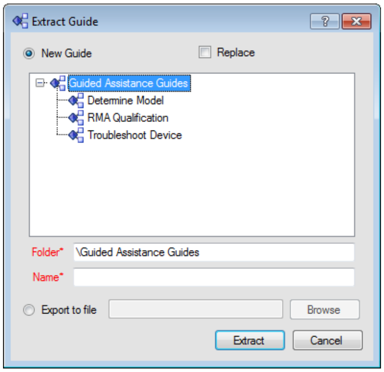
To export an entire guide

1. On the Guided Assistance explorer, right-click the guide you want to export and select Open. The guide opens on the content pane.
2. Click File and select Export Definition from the menu. The Save As window opens.
3. Select the directory where you want to save the guide definition file and type the file name.
4. Click the Save button to save the guide definition file.

To export part of a guide

1 On the Guided Assistance explorer, right-click the guide you want to extract from and select Open. The guide opens on the content pane.

2 Right-click the question at the top of the section you want to extract and select Extract. The Extract Guide window opens. By default, the selected part of the guide will be saved in the Guided Assistance explorer as a new guide.



  a Type a name for the new guide.
  b To replace the selected part of the open guide with an embedded reference to the new guide, select the Replace check box.

3 To export the selected section as a guide definition file, select the Export to File radio button.

  a Click the Browse button and select the location where you want to save the file.
  b Type a name for the new guide.
  c Click the Save button.

4 Click the Extract button. All responses, answers, and **text explanations** that are part of the extracted question's branch will be included in the extracted guide.

To import a guide definition file

1 From an open guide on the designer, click File and select Import Definition from the menu. A message appears indicating that the import process will overwrite the current open guide.

2 Click the Yes button to allow the import to overwrite the current open guide.

Note Guide definition files include a hash value that is used when the file is imported to determine if the file has been modified externally. If the file has been modified, it will not be available for importing, and an error message notifies you that the file is invalid.

3 Select the guide definition file containing the guide you want to import and click the Open button. The imported guide displays on the content pane.

4 If the guide was exported from a different Oracle Service Cloud site, verify that the answers associated with question responses are correct and choose different answers if necessary.

5 Click the Save and Close button on the Quick Access toolbar to save the guide. The Save As window opens if you have not yet named the guide.

a Type a name for the guide.

b Click the OK button to save the guide.

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Agent Scripts

Agent scripts in Oracle Service Cloud add powerful functionality to **workspaces** and **workflows**, leading staff members through a series of pages to help them enter information in a logical progression. Script pages can contain most fields and controls available to workspaces, with the exception of **relationship items**. They can also include questions and branching logic, similar to **guides**, so you can create wizards to guide staff members to different pages based on the information entered or actions taken on a previous page. Combining branching logic with page layout capabilities, agent scripting provides your staff with a methodical, efficient interface for capturing information and resolving issues.

For example, you could create a script to help your agents identify new customers and prompt for contact information before entering incident information. The script could also include questions to determine what product the customer is calling about and branching logic to guide agents to a page containing troubleshooting information and database fields for capturing information pertinent to that product.

To further extend the efficiency provided by scripts, you can add script rules. Like workspace rules, script rules are triggered by events and conditions to perform actions on script pages, such as setting the value of a field or calling a named event.

Once you create a script, it can be inserted into one or more workspaces using the Script workspace control (see Working with script controls) or presented as a standalone component of a desktop workflow using the Script workflow element (see Editing Script attributes).

Many functions used to design scripts are also used to design workspaces. To understand how agent scripts can best be implemented in your agent desktop, you should also become familiar with workspaces, **workspace rules**, guides, and workflows. For a summary of these features, refer to Desktop Overview.

Assigning scripts permission in profiles

Before you can create or access agent scripts, you first need to update your profile to include scripting permission. Staff members with scripting permission included in their profile can create, copy, and delete scripts from the Scripts explorer, as well as add them to workspaces and workflows.

Note Scripting permission is not available on the Profiles editor unless agent scripting is enabled on your site. To enable agent scripting, contact your Oracle account manager.

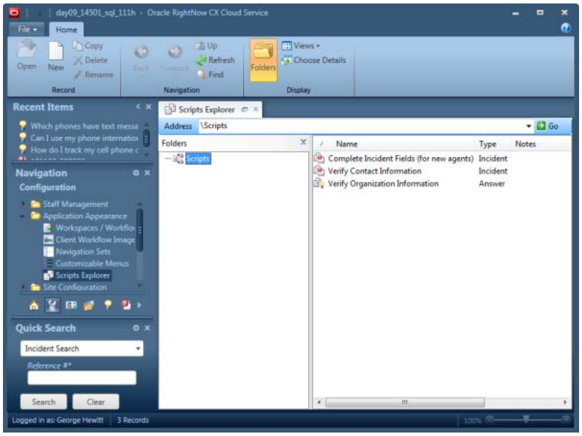
To assign scripts permission in profiles

1. Click the Configuration button on the navigation pane.
2. Double-click Profiles under Staff Management. The report opens on the content pane.
3. Right-click the profile you want to add scripts permission to and select Open. The Profiles editor opens.
4. Click the Permissions button on the ribbon.
5. Select the Scripting check box on the Administration tab.
6. Click the Save and Close button on the ribbon to save the changes to your profile.

Note Staff associated with the profile you have edited must log out of Oracle Service Cloud and log back in to apply the changes you have made.

Scripts explorer

The Scripts explorer is used to access and manage all of the agent scripts on your site. With this explorer, you can browse, search, and organize scripts in hierarchical folders on the content pane using functions similar to Windows Explorer (see Explorers).



Note Oracle Service Cloud does not include a set of standard scripts because all scripts are designed with unique content to meet specific business needs.

The explorer displays the tree structure on the left and lists scripts and custom folders on the right. Listed next to each script's name is its script type, based on the type of **record** it is used to update. The script type determines which fields and controls can be added to the script. For example, the Incident script type provides access to controls and database fields that are related to incidents. Refer to Script types.

You can create custom folders to help you organize the scripts you create by right-clicking the Scripts item in the Folders tree and selecting New Folder. Simply click a folder to display a list of the scripts it contains.

To open the Scripts explorer

1 Click the Configuration button on the navigation pane.

2 Double-click Scripts Explorer under Application Appearance. The Scripts explorer opens.

Note You can also add the Scripts explorer to any of your **navigation lists** if your profile allows. Refer to Customizing navigation and configuration lists.

Script types

Each agent script is associated with a script type, named for the type of record it updates, that determines which fields and controls can be added to the script. Oracle Service Cloud provides the following standard script types.

- Answer
- Asset
- Chat
- Contact
- Incident
- Opportunity
- Organization
- Task

In addition, you can create scripts for custom objects that have Object is Available in Workspaces, Scripting, and Workflow field visibility. Refer to Creating custom objects.

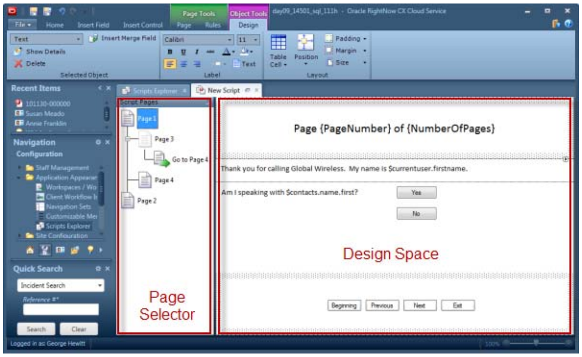
When you create a script, you need to select the type of script you want to ensure the appropriate fields are available for use in the script and that the script's type matches the type of workspace you want to add the script to. For example, when creating a script to use on an incident workspace, you would select an incident script type, giving you access to controls and database fields that are related to incidents.

The script types available to you depend on the products that are enabled in your application. For instance, Oracle RightNow Opportunity Tracking Cloud Service must be enabled in order for the opportunity script type to be available, and Oracle RightNow Chat Cloud Service must be enabled for the chat script type to be available.

Note If you plan to add your script to a workspace, the script type must match the workspace type. However, there are fewer script types than workspace types because scripts are not available for use in quote, quote product, or multi-edit workspaces. Refer to Standard workspaces.

Creating and editing scripts

Scripts are created on a script designer consisting of a design space, a ribbon, and a page selector. You define a script by dragging and dropping fields and **controls** from the ribbon onto the design space and arranging them as you want them to appear on the script page.



The design space is the working area where you arrange fields and controls as you want them to appear on the script page. When you create a new script page, the design space consists of three areas—a header and a footer shared by all pages, and a main area for content specific to the page. You can add fields and controls to any of these areas.

Each area contains a table, hidden by default, that forms an underlying grid for aligning fields and controls. To aid you in laying out the script page, you can display outlines around items on the design space to help you identify the table cells they are in. Refer to Design space layout options.

Once a field or control has been added to a page, you can select it to adjust its properties on the designer ribbon. The script designer ribbon functions are organized by the tabs described in the following table.

Table 160: Script Designer Ribbon Description

Tab	Description
Home	Contains buttons for managing the entire script. You can preview the script, add pages and branches, configure the ribbon for scripts added to workflows, add notes, view the **audit log**, add an outline around the script, and show or hide the page selector. The tab's Insert group also includes shortcuts to the controls you can add from the Insert Control tab.
Insert Field	Lists the fields you can add to the script. The type of script you select when creating a script determines the fields available. For example, you can add incident, asset, contact, and organization fields when creating an incident script. Refer to Adding fields to workspaces and scripts.

Table 160: Script Designer Ribbon Description (Continued)

Tab	Description
Insert Control	Lists controls and questions you can add to the script. Controls include spacers, tabs, title bars, and other items you can use to enhance the display or add functionality. Refer to Working with controls. Questions controls are used to configure script branching. Refer to Adding branches to scripts. **Note:** The values staff members enter in questions and their corresponding controls are available for use with the script's rules and branches, but they are not saved to the record in the database.
Page	Contains buttons for adding, editing, deleting, and ordering pages and branches. This tab also includes buttons to display or hide the header and footer on pages. Refer to Adding branches to scripts and Placing headers and footers in scripts.
Rules	Using the buttons on this tab, you can create rules that alter the script according to the conditions you define. For example, you can create a rule to assign an incident to a specific staff member when the incident is submitted by a particular organization. Refer to Script rules.
Design	This tab displays when you select an item added to a script and contains buttons you can use to edit the display of the selected item. For example, you can change fonts and margins for a field or set a field on the script to read-only if you want to display it only for informational purposes. The options available on the Design tab vary depending on the control or field selected on the script design space. For descriptions of all the options available on the Design tab, refer to Design property descriptions.

In addition to editing field and control properties on the designer ribbon, you can also right-click an item on the design space to access contextual menu options. The available options vary based on the item you right-click but generally include such actions as branching to a page, resetting tab indexes, or deleting the item.

Once a page is complete, you can use the page selector to add more branches and pages to your script (refer to Adding branches to scripts). The page selector displays a tree view of the pages and branches of the script, showing their relationship to one another. You can click a page or branch to view it on the design space or right-click to access a menu from which you can quickly add, edit, delete, or rename pages and branches. You can also use the arrow keys on your keyboard to navigate between pages, or delete a page by pressing **Delete**. Script pages that are inaccessible due to a removed branch or other reason are also indicated on the page selector.

Tip To hide the page selector, click the Home tab, click the Page Selector button, and select Show Selector to toggle it on or off. You can also select Use Large Icons on the Show Selector button to toggle between using large and small icons on the page selector.

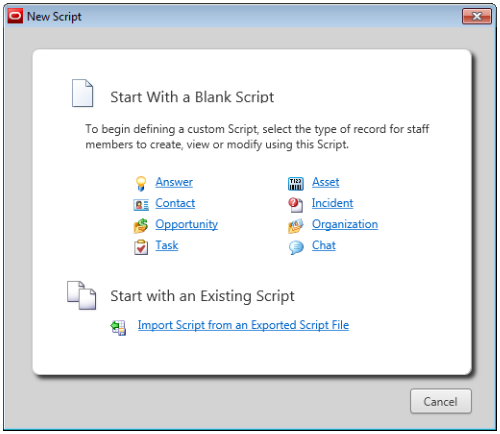
Creating agent scripts

You can create scripts from scratch by starting with a blank script. You can also copy an existing script or import a script from an exported script file to use as the basis for a new script. You can then adjust the design by adding and removing fields and controls, setting properties, and arranging the layout to suit your business needs (refer to Editing agent scripts).

Note The following procedures describe how to create, copy, and delete scripts. To import a script from an exported script file, refer to Exporting and importing scripts.

To create a script

1 From the Scripts explorer, click the New button on the ribbon. A window opens where you can select the type of script you want to create.



2 In the Start With a Blank Script section, select a script type (refer to Script types). The script designer opens.

3 Click the Save button on the Quick Access toolbar to save the script.

To copy a script

1 From the Scripts explorer, right-click the script you want to copy and select Copy. The Copy Script As window opens.

2 Select the folder to which you want to add the copied script.

3 Type a name for the copied script in the Name field.

4 Click the OK button. The script you added appears in the folder you selected.

To delete a script

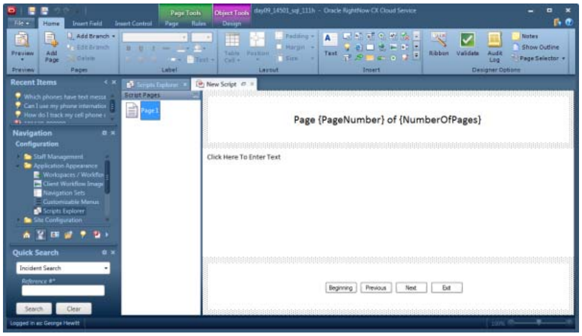
1 From the Scripts explorer, right-click the script you want to delete and select Delete. A Confirm Script Deletion message appears.

2 Click the Yes button to delete the script.

Important If you delete a script that is used in a **workspace**, the workspace will still include the Script control. You will need to edit the workspace to remove the control or select a new script for the control. Refer to Working with script controls.

Editing agent scripts

Whether you are editing a blank script or an imported script, the features you use on the script designer are the same. When creating a new script, the script designer opens with a page already added, as shown in the following figure, that contains a header, footer, and text control.



You use the options available on the ribbon's tabs to remove or edit this default content, and add fields, controls, and other pages to the script. If your script is to be used in a workflow, you can also customize the script's ribbon.

Note The fields and controls available for a script will vary depending on the type of script you are creating. For example, a contact script will provide access only to contact and organization fields.

The following procedure provides an overview of the steps needed to edit a blank incident script, though the same procedures can be used for other script types. Cross-references to more detailed editing procedures are provided in the appropriate step.

To edit a script

1. Click the Configuration button on the navigation pane.
2. Double-click Scripts Explorer under Application Appearance. The Scripts explorer opens on the content pane.

3 Right-click the script you want to edit and select Open. The script opens on the content pane.

4 Drag the fields you want from the Insert Field tab onto the design space. Refer to Working with fields.

5 Drag the controls and questions you want from the Insert Control tab onto the design space. Refer to Working with controls.

Note You can also drag controls onto the design space using the icons on the Home tab's Insert group.

6 To modify the properties of a field or control, select the item, click the Design tab, and make the appropriate changes. Refer to Field and control properties.

7 To add script rules that alter the display, content, or behavior of items on the page, click the Rules tab and then click the Add Rule button. Refer to Script rules.

8 To add a new page to the script, select the existing page on the page selector that you want the new page placed after.

a Click the Home tab and click the Add Page button. The new page is added to the script and displayed on the page selector.

9 To add a branch to the script, select the page you want to add the branch to on the page selector and create the branch by right-clicking a field or control or by using the Add Branch window. Refer to Adding branches to scripts.

10 To reposition a page in the script, drag it to the position you want on the page selector.

When you move a page, the page and all pages that branch off it are moved to the location you specify. When reordering pages, you can move a page that branches off one page to branch off a different page, or remove branching from the page completely.

Important Once a page has been moved, logic used in the branches linking the page to other pages may no longer be valid. We recommend validating the script after moving pages to ensure the script's pages can all be reached.

11 To rename a page, select the page, click the Page tab, type the name you want in the ribbon's Name field, and press **Enter**.

12 To add or remove the header and footer from script pages, click the Page tab, click the Header or Footer button, and select the option you want. Refer to Placing headers and footers in scripts.

13 To customize the ribbon for a script that is used in a workflow, click the Ribbon button on the Home tab. Refer to Customizing ribbons and Quick Access toolbars.

Note Because ribbons are not displayed on scripts when they are added to workspaces, the Ribbon button is available for scripts only if workflows are enabled on the site. For information about enabling workflows, contact your Oracle account manager.

14 To view a history of all actions taken on the script, such as when the script was created and edited and by whom, click the Audit Log button on the Home tab.

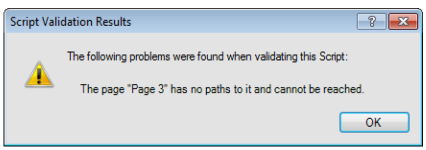
15 To add notes about the script, click the Home tab and then click the Notes button to open the Script Notes window.

a Type any notes you want in the text field.
b Click the OK button.

Note Notes added to your script are for internal use and only visible when editing the script. They do not appear when working with records.

16 To see what your script will look like when it is used by staff members, click the Home tab and click the Preview button. You can choose to see the script as it will display when creating a record or when editing an existing record. Refer to Previewing scripts.

17 To confirm that the script's pages are all accessible from a branch or a navigation button, click the Home tab and click the Validate button. The Script Validation Results window will list any inaccessible pages, as shown in the following figure.



a Click the OK button to close the window.

Note Validation is also performed automatically when you save a script. If errors are found, the Script Validation Results window will include a Cancel button, so you can correct the error before saving, and a Continue button you can click to save the script as it is. You can save and use a script that does not validate. However, until all errors are corrected, some pages or functions may be inaccessible to staff members when they use the script.

18 Click the Save and Close button on the Quick Access toolbar to save and close the script.

Note If you save changes to a script that staff members might be using at the moment, it is a good idea to have them log out and then log back in to be sure your changes have been applied.

Removing items from scripts

You can easily remove fields, controls, branches, rules, and entire pages from your script. However, it is important to be aware of the following considerations before you remove items.

- If your script has only one page, you cannot remove it.
- When you remove a table on a page, the fields and controls on the table are also removed.
- When you remove a page, all fields and controls on the page are removed along with branches and rules created from the page.
- When you remove a page with other pages branching off it, those pages are also removed.
- When you remove an item used by a rule or branch, the rule or branch will likely be impacted, and you will need to edit or delete it.
- When you remove a branch used to access a page, the page is not removed. However, this can result in an orphaned page if the deleted branch provided the only path to the page.

Important Pages that cannot be accessed by a branch or navigation button are grayed out on the page selector. When you validate the script, these pages are listed in the validation message.

To remove an item from a script

1 From your open script, select the item you want to remove on the design space.

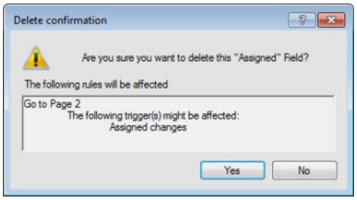
Or

Click the Design tab and select the item you want to remove from the drop-down menu on the Selected Object group.

Tip Selecting the item you want to remove from the drop-down menu helps to ensure that you select the correct item before you delete it. For example, you can be certain you select a specific field on a table rather than the entire table. Refer to Selecting fields and controls using the ribbon.

a Click the Delete button on the Design tab. The Delete Confirmation window opens, asking if you want to delete the item.

If the item you are deleting is used in rules or branches, a warning will list the affected rules and branches.



b Click the Yes button to delete the item.

2 To delete a page or branch, select the item on the page selector and click the Home tab.

a Click the Delete button. The Delete Confirmation window opens, asking if you want to delete the item.

b Click the Yes button to delete the item.

Placing headers and footers in scripts

Headers and footers can contain any of the fields or controls you can add to script pages. Unlike the content you add to other areas of a page, which is displayed only on that page, the content you add to the header and footer is shown on every page where the header and footer is displayed. For example, if you want to display contact information at the top of every page of the script, you could add the first name, last name, and phone numbers contact fields to the script header, and then display the header on all pages of the script.

By default, the header that is shown on the initial script page contains the progress label control, which shows staff members what page of the script they are on. The default footer contains the navigation panel control, which adds buttons staff members can use to move between script pages. Refer to Working with the navigation panel control.

The following procedure describes how to place the header on script pages. You use a similar procedure when placing the footer on script pages.

To place the header on script pages

1 From your open script, click the Page tab.

2 To show the header only on the selected page, click the Header button and select Show Header On This Page. The header is added to the page on the design space.

3 To show the header on all pages in the script, click the Header button and select Show Header On All Pages.

4 To remove the header, click the Header button and select Don't Show Header On Any Pages. The header is removed from all pages in your script, along with any fields or controls you added to the header.

5 To add content to the header or footer, click the ribbon's Insert Field or Insert Control tab and drag the items you want to the design space.

Working with the navigation panel control

The navigation panel contains four buttons that let you navigate between pages in the script even if there are no branches to the pages. Some of the buttons can be used in the When condition in branches and script rules, so you can create your own functionality for these buttons.

Since these buttons are available in a single control, you can quickly add the buttons to any page you want. The page footer contains this control by default. The following buttons are included in the control.

- **Beginning**—Click this button to return to the first page of the script.
- **Previous**—Click this button to return to the previous page in the script.
- **Next**—Click this button to proceed to the next page in the script. By default, this is the next page that is on the same tree level, shown on the page selector, as the current page. However, a branch can be created to load a different page when this button is clicked.

- **Exit/Finish**—Click this button to trigger any rules or branches that include the Exit Script Event Fires or Finish Script Event Fires triggers. When you are on the last page of a script, the Exit button is renamed Finish. This button is not enabled unless a rule or branch is configured to use one of these conditions.

Adding branches to scripts

Scripts use branching logic for guiding agents to specific pages based on conditions you specify. For example, you could design a script to branch to a certain page if the Organization Name field is set to a specific value.

You can also create branches that are triggered when different responses are selected from question controls, such as the Radio Question or Menu Question controls, or from the Next, Exit, and Finish buttons on the navigation panel.

Branches can be created using different methods and simple or complex logic, depending on your needs. Once you create branches, you can easily edit, reorder, and delete them using the tools available on the ribbon.

Adding branches

You can create branches quickly by right-clicking fields and controls on the design space. You can also define more complex branches using the Add Branch window. The options on the window are similar to those used to add **workspace** or **script rules**.

Tip While you can create branches from most of the controls and fields available for scripts, question controls are ideal for branching, allowing you to quickly branch to other pages using agents' responses to the questions you add to the script.

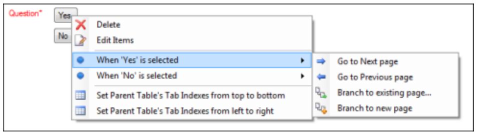
Adding branches using the right-click menu

When you want to take agents to another page in a script when they change a value in a field or a control, the easiest way to create the branch is to right-click the field or control and create the branch using options on the right-click menu.

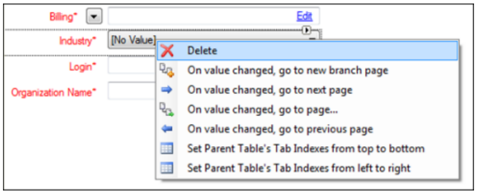
To add a branch by right-clicking a field or control

1. From your open script, select the page you want to add the branch to on the page selector.
2. Right-click the field or control on the design space that you want to branch from. A menu opens showing branching and other options.

The branching options vary depending on the item you select. You can branch from question controls when a specific question choice is selected, and you can branch from fields and controls when their value changes or when actions are taken, such as when you click a button control. The options for a Yes/No Question control are shown in the following figure.



Here are the options for an organization field.



3 To create a branch from a question control, right-click the question control and select the question response you want to trigger the branch from.

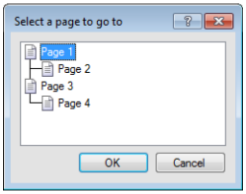
Note This step is necessary only when creating a branch from a question control.

4 Select the page you want the branch to go to. The page options vary slightly depending on the item you create the branch from and which page you are on when you create the branch.

a To branch to the next page on the same branch level as the current page, select the Go to Next Page option. This option is not displayed when creating a branch on the last page of a script.

b To branch to the previous page in the script, select the Go to Previous Page option. The previous page is the page staff members would visit before the current page when using the script. This option is not displayed when creating a branch on the first page of a script

c To branch to an existing page, select the Go to Page (or Branch to Existing Page) option. A window opens where you can select the page you want to branch to.



d To branch to a new page, select the Go to New Branch Page (or Branch to New Page) option. A new page is created and displayed on the design space where you can add the fields and controls you want.

Adding branches using the Add Branch window

Using the Add Branch window, you can create complex branches that fire when different events occur or when multiple fields are changed. Creating branches using the window is similar to creating script or workspace rules and many of the procedures you use are identical, including those to select triggers and conditions. This section provides an overview of creating a branch using the Add Branch window. For information about script rules, refer to Script rules. For detailed procedures to create workspace rules, refer to Adding workspace rules.

To add a branch using the Add Branch window

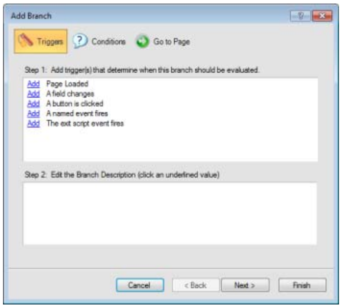
1 From your open script, select the page you want to add the branch to on the page selector.

2 Click the ribbon's Page tab and then click the Add Branch button.

Or

Right-click the page you want to add a branch to on the page selector.

3 Select whether you want to branch to a new page or a page you have already placed on the script. The Add Branch window opens.



Three buttons are displayed along the top of the Add Branch window—Triggers, Conditions, and Go to Page. You construct the branch by clicking each button and specifying the triggers that determine when the branch should be checked, what conditions must be met for the branch to take agents to a new page, and the page the branch will take agents to.

4 Select one or more triggers that will cause the branch to fire. Specifying branch triggers is identical to specifying triggers for script and workspace rules and the triggers that are available for branches are the same as those available for script rules. As with script rules, there are four triggers that are unique to scripts beyond those also available as workflow triggers.

- **Page Loaded**—Select this item to trigger the branch immediately after the page the branch is on is opened.
- **A Button is Clicked**—Select this item to trigger the branch when the Next button on the page's navigation panel is clicked to proceed to the script's next page.
- **The Exit Script Event Fires**—Select this item to trigger the branch when the Exit button on the page's navigation panel is clicked to exit the page. The Exit button displays on the script page only if there is a branch or subsequent page allowing staff members to navigate to another page. For this reason, exit script events usually occur before the script has reached a branch's final page.
- **The Finish Script Event Fires**—Select this item to trigger the branch when the Finish button on the page's navigation panel is clicked to leave the script. The Finish button displays only if there is no branch or subsequent page to navigate to from the script page. For this reason, finish script events usually occur after the script has reached a branch's final page.

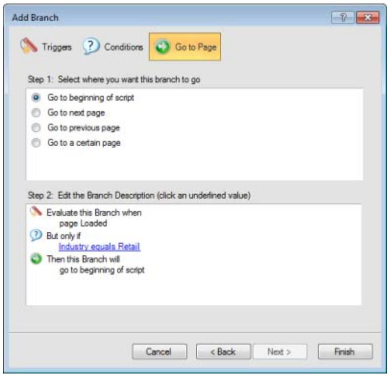
For descriptions of the other triggers and how to add them to your branch, refer to Selecting rule triggers.

Note When multiple triggers are specified, the branch's conditions will be checked if any of the triggers' actions occur. For example, the branch could be triggered when the value in a field on the script is changed *or* when a button on the script is clicked.

5 Click the Conditions button to add conditions that must be met to trigger the branch. The conditions available for script branches are identical to those available for workspace and script rules. Refer to Selecting rule conditions.

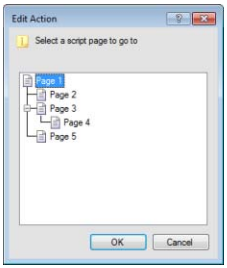
6 Click the Go to Page button to select the page you want the script to display immediately after the branch is triggered and all conditions are met.

Note This step is not necessary if you chose to create a branch to a new page in step 3 since the branch will be automatically configured to go to the new page. However, you can select a different target page if you want.



a Select the appropriate radio button to define where the branch should go when the branch conditions you specify are met. You can select Go to Beginning of Script (the first page of the script), Go to Next Page, Go to Previous Page, or Go to a Certain Page.

b If you select Go to a Certain Page, this option is added to the branch description. Click the underlined text in the branch description to open a window where you can select the page you want.



c Select the page you want to branch to.

d Click the OK button to close the window.

7 Click the Finish button to save the branch.

8 To add other branches from the page, repeat steps 2 through 7.

Important Branches are fired in the order in which they are listed. This can impact how the branches affect the script.

Managing branches

Once you add branches, you can easily edit, reorder, and delete them from the ribbon's Page tab. It is important to update existing branches when you make changes to your script to ensure the branches work as you expect. For example, when you add a new branch to a page, you need to make sure that other branches on the page do not have similar conditions. If they do, you can edit or delete the other branches, or reorder the branches so the branch you want to trigger will be checked first.

This section describes how to edit, delete, and reorder script rules using the tools available on the Page tab.

To modify branches

1 From your open script, select the page the branch is on from the page selector and click the Page tab. The branches list, located on the ribbon's Branching group, displays all the branches created on the page.

2 In the branches list, select the branch you want to modify.

3 To edit the branch, click the Edit Branch button. The Edit Branch window opens. Refer to Adding branches.

4 To change the order of the branch, click the up or down arrow to move the branch where you want it.

Important Just like script and workspace rules, branches are fired in the sequence in which they are listed. This can impact how the branches on a page affect the script.

5 To delete the branch, click the Delete Branch button.

Script rules

Just as you can create **workspace rules** to automatically perform actions on workspaces, you can create script rules to trigger actions on script pages when the conditions you specify are met. For example, you can create a rule that automatically sets the value of a field on a script page when a button on the page is clicked or when the page is opened.

Important Whereas workspace rules apply to the entire workspace, script rules impact only the script pages the rules are created on.

Once you create script rules, they can be modified if you need to change their triggers, conditions, or actions. You can also reorder the rules on your page to ensure they fire in the order you want. If you no longer need a rule, you can also quickly delete it. Refer to Managing script rules.

Generally, script rules impact only the items on the script page you add the rules to. However, using named events, you can use script rules in conjunction with workspace rules to trigger an action on a workspace when conditions on the script are met. For example, a workspace rule that sets the incident workspace's Status field to Solved can be triggered when a staff member clicks a button on a script page. Refer to Using events in workspace and script rules.

- Working with fields
- Working with controls
- Field and control properties
- Desktop Overview

Adding script rules

Just as with workspace rules, you create script rules from the Add Rule window, which is opened from the script editor's Rules tab. You specify the rule's triggers, conditions, actions, and properties just as you would when creating a workspace rule. However, there are a few triggers and actions that are unique to script rules.

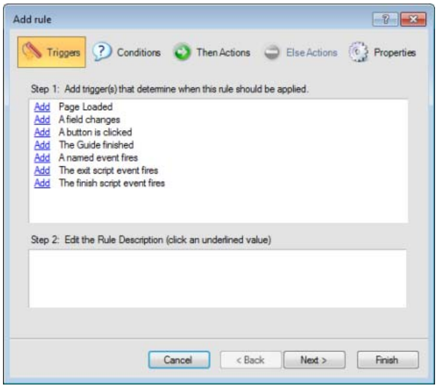
Note Creating script rules is similar to creating script branches, though branches take agents to script pages whereas rules trigger actions you specify in the rule.

This section provides an overview of the process to create a script rule and describes the triggers and actions that are unique to scripts. For detailed procedures to create script and workspace rules, refer to Adding workspace rules.

To create a script rule

1 From your open script, select the page you want to place the rule on from the page selector.

2 Click the Rules tab and click the Add Rule button. The Add Rule window opens.



Five buttons are displayed along the top of the window—Triggers, Conditions, Then Actions, Else Actions, and Properties. You construct the rule by clicking each button and adding different items to the rule description.

3 Select one or more triggers that will cause the rule to fire. There are four triggers that are unique to scripts beyond those available as workspace rule triggers.

- **Page Loaded**—Select this item to trigger the rule immediately after the page the rule is on is opened.
- **A Button is Clicked**—Select this item to trigger the rule when the Next button on the page's navigation panel is clicked to proceed to the script's next page.
- **The Exit Script Event Fires**—Select this item to trigger the rule when the Exit button on the page's navigation panel is clicked to exit the page. The Exit button displays on the script page only if there is a branch or subsequent page allowing staff members to navigate to another page. For this reason, exit script events usually occur before the script has reached a branch's final page.
- **The Finish Script Event Fires**—Select this item to trigger the rule when the Finish button on the page's navigation panel is clicked to leave the script. The Finish button displays only if there is no branch or subsequent page to navigate to from the script page. For this reason, finish script events usually occur after the script has reached a branch's final page.

For descriptions of the other triggers and how to add them to your rule, refer to Selecting rule triggers.

4 Click the Conditions button to add conditions that must be met for the rule to fire and perform the actions you specify. The conditions available for script rules are identical to those available for workspace rules. Refer to Selecting rule conditions.

5 Click the Then Actions button to define the actions that should occur immediately after the triggering event if the conditions are met. There are two actions that are unique to script rules.

- **Fire Exit Script Event**—Select this action to fire a subsequent rule that uses the Exit Script Fires condition. Using this option, you can add your own Exit button to a script page to trigger the same rule fired by the Exit button on the navigation panel control.
- **Fire Finish Script Event**—Select this action to fire a subsequent rule that uses the Finish Script Fires condition. Using this option, you can add your own Finish button to a script page to trigger the same rule fired by the Finish button on the navigation panel control.

Refer to Using events in workspace and script rules. For descriptions of the other rule actions and how to add them to your rule, refer to Adding and editing actions.

6 Click the Else Actions button to define the actions that should occur if the conditions are not met. The Fire Exit Script Event and Fire Finish Script Event actions described in step 5 are also available to use as Else actions in script rules. Refer to Adding and editing actions.

7 Click the Properties button and type the name of the rule in the Rule Name field.

8 Type any notes you want to add to the rule in the Notes field.

9 To deactivate the rule, clear the Active check box.

10 Click the Finish button to save the rule.

❖ Adding workspace rules

❖ Working with fields

❖ Working with controls

❖ Field and control properties

Managing script rules

Once you add script rules, you can easily edit them, reorder them, or delete them once they are no longer needed. This section describes how to edit, delete, and reorder script rules using the tools available on the Rules tab.

Important Rules are fired in the sequence in which they are listed. Adjusting them can impact how other rules affect the script. For example, if multiple rules set different values for the same field, the field will be set to the value assigned by the last rule in the sequence.

To modify script rules

1 From your open script, select the page the rule is on from the page selector and click the Rules tab. The rule list displays all rules created on the page.

Tip If you want to view only rules that are triggered by or that impact a specific item on the page, such as a field or control, select the item, click the Filter List button on the Rules tab, and select Rules Triggered by Selected Object or Rules that Reference Selected Object. The rule list will be updated to display only rules that are related to the selected item.

2 In the rule list, select the rule you want to modify.

3 To edit the rule, click the Edit Rule button. The Edit Rule window opens. Refer to Script rules.

4 To change the order of the rule, click the up or down arrow to move the rule where you want it.

Important Deleting a rule is permanent and cannot be undone. To ensure that a rule is not needed before deleting it, you can disable it instead. To disable a rule, edit the rule, click the Properties button on the Edit Rule window, clear the Active check box, and click the Finish button to save the change.

5 To delete the rule, click the Delete Rule button.

Using events in workspace and script rules

Script rules, workspace rules, and workflow connectors can be triggered by actions taken by staff members, such as changing a field value or saving a record. However, they can also be triggered by other rules using rule-defined events. Events are defined by adding event fire actions, which vary by event type.

- **Named Event**—Named events are defined by adding the Fire a Named Event action to a script rule or workspace rule and specifying a name for the event.
- **Exit Script Event**—Exit script events are defined by adding the Fire Exit Script Event action to a script rule. (Exit script events are also fired automatically when a staff member clicks the Exit button in a script.)
- **Finish Script Event**—Finish script events are defined by adding the Fire Finish Script Event action to a script rule. (Finish script events are also fired automatically when a staff member clicks the Finish button in a script.)

Note Although exit script events and finish script events perform similar roles, they are intended to serve slightly different purposes. Exit script events usually occur before the script has reached a branch's final page, while finish script events usually occur after the script has reached a branch's final page. In this way, you can distinguish between an early exit from the script and a case where the script was followed to completion.

Once defined as a rule action, an event can be used to trigger other rules. Any workspace rule or script rule configured for the workspace that uses the event as a trigger is run immediately after the event is fired—conditions are evaluated and, if they are matched, the rule actions are run. Events can also be used to trigger any workflow connector that is connecting from the workspace.

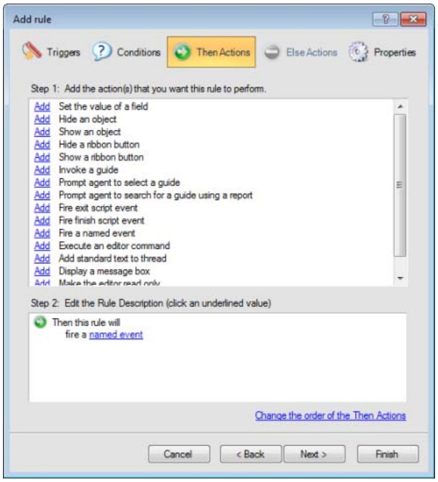
Exit and finish script events can be fired only in script rules. However, named events can be fired in either script or workspace rules. Therefore, while you can use a named event, exit script event, or finish script event to trigger a workspace rule from a script rule, only a named event can be used to trigger a script rule directly from a workspace rule. (A workspace rule could take other non-event actions that result in a script rule being fired indirectly.)

Whether you are firing a named event in a script rule or a workspace rule, the process for using it is the same. The first procedure that follows explains how to fire a named event in a rule. The second procedure explains how to use that event as a trigger for another rule. The process for using an exit script event or finish script event is similar.

To fire a named event in a rule

1 From your open script, create a new rule and specify the triggers and conditions that should run the rule. Refer to Adding workspace rules.

2 Click the Then Actions tab and click Add next to the Fire a Named Event action.



3 Click the underlined named event text in the window's Rule Description area.

4 Type a name for the named event that will fire when the rule runs.

Tip The name you specify has no restrictions on the characters you can use and is not case sensitive. However, we suggest entering a simple name since you will need to enter it again when adding the event as a rule trigger.

5 Click the OK button to save the name.

6 Click the Finish button on the Add Rule window to save the rule.

To trigger a rule when a named event is fired

1 From your open script, create the rule that you want the named event to trigger and specify conditions and actions for the rule. Refer to Adding workspace rules.

2 Click Add next to A Named Event Fires.

3 Click the trigger's underlined named event text in the window's Rule Description area to open a window where you can enter the name of the named event that you want to trigger the rule.

4 Click the OK button to close the window.

5 Specify any remaining triggers, conditions, and actions you want to use in the rule. Refer to Script rules.

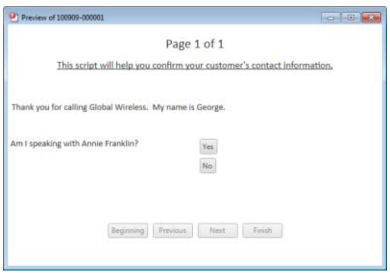
6 Click the Finish button on the Add Rule window to save the rule.

Previewing scripts

When you are editing a script, it can be helpful to see what it will look like when staff members use a workspace that includes the script. The preview feature lets you see the script as it will appear on a workspace, so you can modify it if necessary. When previewing a script, you can navigate between pages using the script's navigation buttons and branches you create to verify they function as expected.

Note When you preview a script, it will display as it would to any staff member who has the same set of profile permissions you have. To view the script as it will appear to a specific staff member with different permissions, you must log in using a staff account with the same profile as the staff member.

The following figure shows the first page of a previewed script. The page includes a header with a progress label control and a text control. The page also includes a text control with one current user merge field, a text control with two contact merge fields, and two button controls. The navigation panel control is in the script's footer.



To preview a script

1. From your open script, click the Home tab.
2. To view the script as it will appear to staff members when creating new records using a workspace with this script, click the Preview button and select New Record. A preview of the new record opens.
3. To view the script as it will appear when editing an existing record on a workspace, click the Preview button and select Opening a Record.
   a. Type the record ID number.
   b. Click the OK button. A preview of the record opens with the script's fields populated with values from the record you specified.
4. Click the X button on the window or press **Esc** to close the preview window.

Exporting and importing scripts

Scripts can be exported as XML files and stored on your workstation or network and then imported to other interfaces. This is helpful if you have a script on one interface and want to quickly create a duplicate or similar script on a different interface. An imported script becomes its own unique copy and can be modified without impacting the original.

The exported script XML file includes all of the script's elements, including fields, controls, branches, rules, and the script's layout. When you are ready to import the script, the script import wizard guides you through the import process.

To export a script

1. From the Scripts explorer, right-click the script you want to export and select Open. The script opens.
2. Click File and select Export Script. The Save As window opens.
3. Select the directory where you want to save the script definition file and type the file name.
4. Click the Save button to save the script definition file.

Note When a script is exported to a script definition file, the file includes a hash value that is used when the file is imported to determine if the file has been modified externally. If the file has been modified, it will not be available for importing, and an error message will notify you that the file is invalid.

To import a script

1 From the Scripts explorer, click the New button on the ribbon. The New Script window opens.

2 Click Import Script from an Exported Script File to open the Import Script wizard.

3 Click the Next button. The next window asks you for the name of the script definition file you want to import.

4 Type the full path of the script definition file.

   Or

   Click the Browse button to find the script definition file on your workstation and click the Open button.

5 Click the Next button to select the script type.

6 Click the Map To Type drop-down menu and select a record type to map the workspace to. By default, the imported script is mapped to the same script type as the original script.

Important If items from the script you are importing are not used in the script type you are converting it to, the next window lists these items and informs you that they will be replaced by spacers, field placeholders, or removed from the imported script. Since most database fields and script controls are not shared by script types, the majority of fields and controls will generally not be included in the new script when you convert the type. However, this option is helpful if you want to import the general layout from a script with a different type.

7 Click the Next button.

8 Click the Finish button. The script designer opens with the imported script.

9 Edit the script to remove or replace fields that are not available and then save the script. Refer to Editing agent scripts.

Important When you save a script, reports that are used in the script's report controls are checked to ensure they exist on the site. If a report does not exist, a message is placed in the control stating the report is no longer available. You can save a script that has invalid reports, but you will need to select new reports for the controls before they can be used in the workspace.

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Workspace and Script Elements

To provide you with a consistent, intuitive design environment, Oracle Service Cloud **workspace** and **agent script** editors share a common set of design elements for constructing agent desktops for your staff members. In many instances, the design space, fields, controls, and rules available for creating workspaces function the same when creating scripts. First, you add fields and controls to the design space, and then adjust each item's property so that it displays and behaves as desired. You can also customize the buttons that appear on the ribbon and the Quick Access toolbar for workspaces and for scripts that are used in workflows. Because the design tools are similar for workspaces and scripts, the experience you gain in creating workspaces can help you better understand and create scripts, and vice versa.

To understand how workspaces and scripts can best be implemented in your agent desktop, you should also become familiar with other desktop components such as **guides** and **workflows**. For a summary of agent desktop features, refer to Desktop Overview.

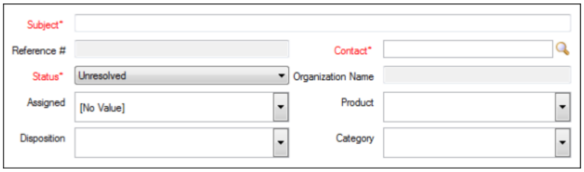
Design space layout options

The design space is the working area where you arrange fields and controls as you want them to appear on your workspace or script. On most new workspace layouts, the design space contains a summary panel and a tab set control, while script layouts feature a content area with header and footer sections. Each of these design areas contains a table, hidden by default, that forms an underlying grid for aligning fields and controls.

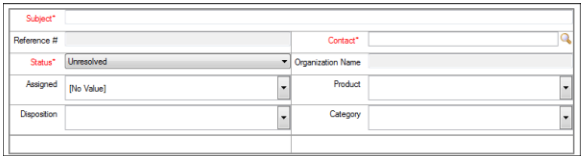
Initially, these tables contain a single row and column, and the first item added to them fills the height and width of a single cell. As you add other elements, additional rows and columns are automatically added with new cells holding each added field and control. Moving or removing an item from a cell will cause the other cells to adjust automatically to fill the space left by the removed item.

Tip Although there is no limit to the number of rows and columns allowed, you should avoid using large numbers of them so that the layout is easier to use. Also, when adding items to a workspace, try to keep fields and controls roughly the same height on the same row, since the height of the row is determined by the tallest element. For example, a date field is generally displayed with only one line of information, whereas a notes field with a text box is taller.

When adding and arranging items on the design space, it can be helpful to show the table outlines to help you identify the layout's structure. The following figure shows the fields of an incident workspace when no outline appears.



The following figure shows the same fields when the table outline has been activated.



To display or hide design space table outlines

1 From an open workspace or script, click the Home tab on the ribbon.

2 Click the Show Outline button to display the outline.

3 Click the Show Outline button again to hide the outline.

When the Show Outline button is highlighted, the table outline is displayed.

Spanning table cells

In some cases you may want a field or control to span more than one table cell. For example, if you add an incident subject line to a workspace with three columns in the table, the subject line will be only one column wide, too narrow to display much information. By spanning the field over multiple columns, you can expand the field to display the full content of the subject line. You can also span an item over multiple rows if you want it to expand vertically.

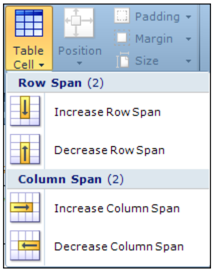
Important In order to span an item over multiple columns or rows, there must be empty table cells adjacent to the cell containing the item you are expanding.

To change the number of table rows and columns used by a field or control

1 From an open workspace or script, click the field or control that you want to edit on the design space.

2 Click the Design tab.

3 Click the Table Cell button.



Note The number of rows and columns the selected field's cell currently occupies is shown when selecting row and column span options.

4 To span the field or control over an additional table row, click Increase Row Span.

5 To span the field or control over one less table row, click Decrease Row Span.

6 To span the field or control over an additional table column, click Increase Column Span.

7 To span the field or control over one less table column, click Decrease Column Span.

8 Click the Save and Close button on the Quick Access toolbar to save and close the workspace.

Working with fields

A field holds a piece of information that is stored in the knowledge base. For example, a contact record includes fields for name, email, address, and phone number. To add a field to a workspace or script, just drag it from the ribbon and place it on the design space. You can also promote staff efficiency by defining a shortcut key in the field label that can be used to focus the field.

For information about a field on the ribbon, you can hover over it for a description. Fields are listed in alphabetical order. Different icons are displayed next to each field showing the field type, which impacts how the field will be shown. In addition, required, linkable, and customer-entered fields have unique properties when using them on workspaces and scripts.

Tip Information about each field can also be found in the Data Dictionary located under Configuration > Database.

❖ Editing workspaces
❖ Editing agent scripts
❖ Desktop Overview

Overview of fields and field types

Many fields have special properties related to their function. The following sections include information about working with the field tree, required fields, custom fields, customer-entered fields, and linkable field types.

Field types

The fields you can add to your workspace or script are shown on the Insert Field tab, and are associated with icons to indicate the type of input they accept. For example, fields that accept phone numbers are displayed with a phone icon. You can hover over a field's icon to see a description of the field and the field name as it appears on the API, regardless of any changes that might have been made to the field's message base label. The following table shows each icon and the type of field input it represents.

Table 161: Field Type Icons Description

Icon	Field Type
	Field with drop-down menu options
	Field with search capability
	SmartSense meter for rating emotional context of messages
	Field with calendar for selecting date and time
	Text box field
	Integer field
	SLA selection field
	Address field
	Email address field
	Phone number field
	Currency field
	Quote document selection field
	Contact lists field

Required fields

Oracle Service Cloud requires that certain fields always be populated when using workspaces or scripts to update certain record types. For instance, all incidents must have a contact, so the contact field is always required when it is added to incident workspaces and scripts. Likewise, opportunities must always have a contact or organization, so you must add a contact field or an organization field, if not both, to all opportunity workspaces and scripts.

In some cases, fields are required only if a record is associated with another record. For example, when using a contact workspace, if a contact is associated with an organization, the Organization Name field is required. If the contact is not associated with an organization, the field is not required.

You can save a workspace or script that does not include fields required for its type, but you must include them if the workspace or script will be used to create new records. When you place one of these required fields, you cannot edit the field's Required property since these fields are always required.

Tip Labels for required fields appear in red text with an asterisk. Fields that are not always required can be set to required by changing their Required properties or by using workspace rules.

Most fields are required by default when placed on a script page, with the exception of chat scripts. However, in many cases, you can change the field's Required property to be not required once you place it on the script.

Refer to Setting hidden, required, and read-only properties and Workspace rules.

The following table lists fields that are always required when added to each type of workspace. Fields required for each script type are the same as those required for the corresponding workspace type.

Table 162: Required Fields for Workspace Types

Workspace Type	Required Fields
Answer and Answer Multi Edit	Display Position, Language, Status, and Summary
Asset and Asset Multi Edit	Name, Product, and Date Purchased
Contact and Contact Multi Edit	Disabled Flag and State
Incident and Incident Multi Edit	Contact, Interface, State, and Status
Opportunity and Opportunity Multi Edit	Interface, Manager Commit, Rep Commit, and Status
Organization and Organization Multi Edit	Organization Name and State
Quote	Name, Forecast, and % Discount
Quote Product	Discount and Quantity

Table 162: Required Fields for Workspace Types (Continued)

Workspace Type	Required Fields
Task	Name and Status
Task Multi Edit	Status

Custom fields

The availability and behavior of custom fields in the knowledge base is affected by the following visibility settings. Refer to Setting custom field visibility.

- **Admin Display**—When selected, the custom field is available in the list of fields that can be added to the design space.
- **Admin Edit**—When selected, the custom field will be set to Read Only by default when it is added to the design space. Once the custom field has been added to the design space, this setting has no effect.
- **Chat Display**—When this option and the Admin Display check box are both selected, the custom field is available in the list of fields that can be added to chat workspaces.
- **Required on Accessibility Interface**—When selected, the custom field will be set to Required by default when it is added to the design space. Once the custom field has been added to the design space, this setting has no effect.

Note If an additional instance of a field is placed on the design space, it will automatically be set to the same Required setting as the first instance. It is not possible to set the same field to both required and non-required in the same workspace.

When a workspace or script is used by staff members, all behavior related to visibility, read-only, and required attributes is determined by the properties defined for each field. Refer to Setting hidden, required, and read-only properties.

Customer-entered fields

The following fields can be added to the Account Settings page on the customer portal so customers can personalize their knowledge base search results. These fields have a default read-only property when added to a workspace or script, and are not available on contact multi-edit workspaces.

- **Lines Per Page**—The number of items to list per page when the customer is searching on the Answers page.
- **Search Text**—The default search text to use for searching on the Answers page.

- **Search Type**—The default search method.

Linkable field types

When you add the following fields to a workspace or script, staff members can click the action link associated with the field to access special functionality.

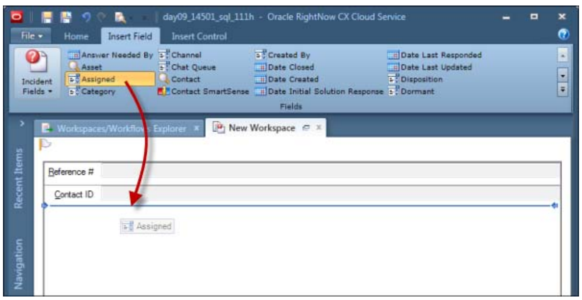
- **Email field**—This field includes a click-to-email link that opens the staff member's email client with a blank message to the selected address. This behavior can be disabled by selecting the Disable Email Icon setting on the Design tab.
- **URL field**—A custom text field set to URL usage includes a link to open a URL in a web browser.

Adding fields to workspaces and scripts

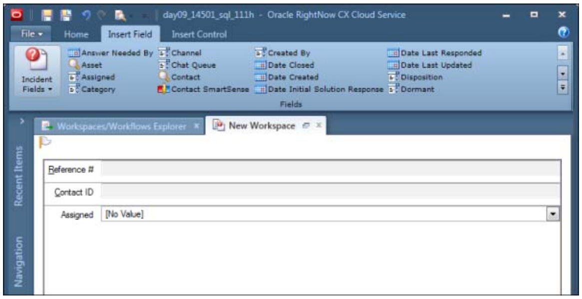
The design space is structured by a table, even if you have not enabled the display of its rows and columns by clicking the Show Outline button. How the table changes when you add fields to a workspace or script depends on several factors: where you add them, whether other fields already exist in the column or row, and whether the column or row contains controls. You can add fields above or below another field or control, or you can add them to the right or left.

For example, the following figure demonstrates how the Assigned field is selected and placed in a new row below Reference # and Contact ID on the workspace. When you select the field and hover over the workspace, a horizontal indicator shows where the field will be placed.

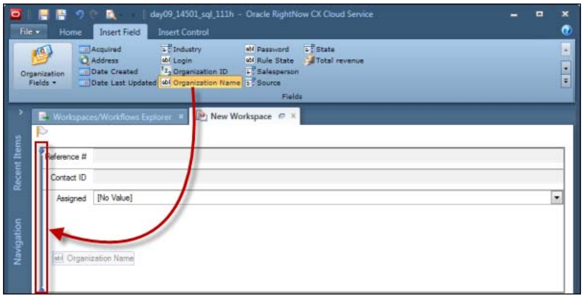
Note The following examples have the table outline displayed for clarity. To display the outline for a workspace or script, click the Show Outline button on the ribbon's Home tab.



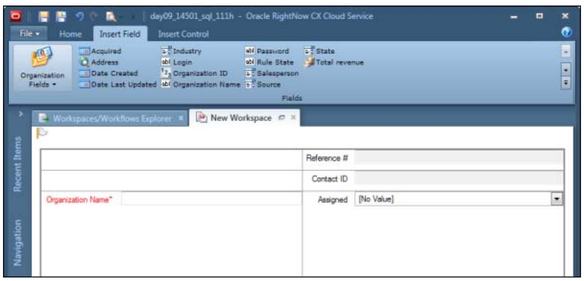
Simply click to add the field in that position.



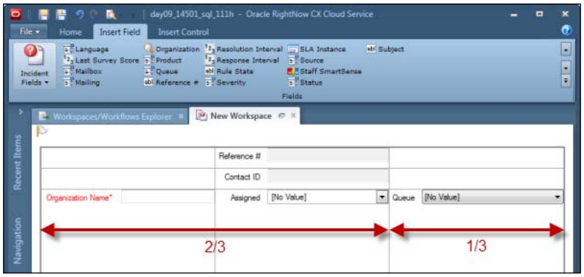
To add a field to the right or left of another field or control, click the field on the ribbon and hover over either side of a field on the design space. When the vertical indicator appears, click to add the field to the table.



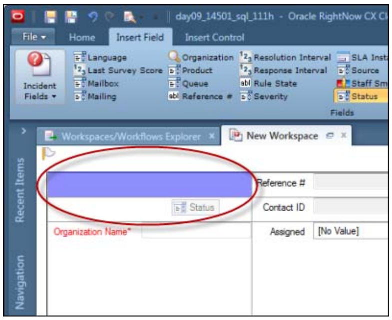
This action adds the field to a new column in the table, as shown in the following figure.



As columns are added, the original columns are evenly redistributed to make room. For example, when you add a field to the right side of a two-column table, the original columns narrow to span the left two-thirds of the workspace and the new column fills the remaining third.



When a table contains open cells, as it does in the previous figure, you can drag a field directly into one of the cells. When the field is positioned over a cell, the cell will become highlighted to show you where the field will be placed. Like the indicators, this highlight appears whether or not you have clicked the Show Outline button.

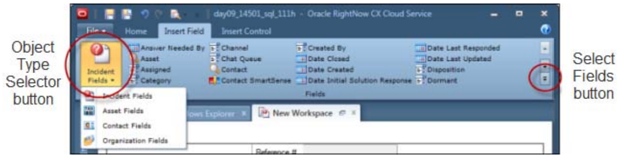


Tip You can also add a column or row to the table by right-clicking any empty cell and selecting Add Column or Add Row.

To add a field to a workspace or script

1 From an open workspace or script, click the Insert Field tab on the ribbon.

2 Click the Object Type Selector button on the ribbon.



Note The fields available depend on the type of workspace or script you are adding them to. Refer to Standard workspaces or Script types.

Custom fields can be added to the design space only if their Admin Edit visibility setting is selected. Refer to Setting custom field visibility.

3 Click the type of field you want to add to the workspace. The ribbon is updated to display the fields for the record type you select.

4 To view fields that do not fit on the ribbon, click the up and down arrows on the scroll bar on the right of the ribbon.

5 To view all the fields available for the workspace type you are editing, click the Expand Fields button below the scroll bar.

6 Click the field you want to add.

7 To add the field to an open cell in the design space table, hover over the cell and then click when it becomes highlighted.

8 To insert the field between fields or controls already added to the design space, hover the mouse between the fields or controls and then click when the line indicator appears.

9 To set a shortcut key for the field, click the Text button on the Design tab, enter a label for the field, and type an ampersand (&) in front of the character you want to be the shortcut key. For example, to allow staff members to move the focus to a field with the label "Details" by pressing **Alt+t**, type `De&tails`.

Tip You can also click the label on the design space to edit the label value without clicking the Text button.

10 To edit other field properties, refer to Editing design item properties.

Moving and deleting fields

You can easily rearrange the fields on the design space by moving them from one location to another. You can also quickly remove any fields that you no longer need.

Important Just as rows and columns can be added to a table when you add fields to the design space, the table's rows and columns will be deleted when you move or delete the only remaining field in the row or column.

To move a field on the design space

1 From the open workspace or script, click the field you want to move, keeping the left mouse button depressed.

2 Drag the field to its new location on the design space.

3 Release the mouse button to position the field in the new location.

To remove a field from the design space

1 From the open workspace or script, right-click the field and select Delete. The Delete Confirmation window opens.

Or

Select the field, click the Design tab, and then click the Delete button.

Caution The Delete Confirmation window displays a warning if the field you are deleting is used in a rule. If the rule checks or changes the value of the field you want to remove, the window will display a warning, but the rule will remain active once the field is removed. However, if the rule affects the required, visibility, or read-only properties of the field you want to remove, you will receive a warning and the rule will be disabled once the field is removed. Refer to Overview of workspace rules.

2 Click the Yes button to confirm the deletion.

Working with controls

In addition to fields, you can enhance your workspace or script by adding controls. Controls are used to place features, such as buttons, text labels, reports, tables, and tab sets, onto the design space. Depending on the control, you can modify its properties to change its appearance or add functionality. For example, you can add a title bar control to a design space and then edit the title text, font, size, and color. Most controls can be added to every type of workspace and script as many times as you want.

Note Controls are added to workspaces from the workspace designer's Insert Control tab. If your site is configured to use custom add-in components, they will also be displayed on this tab. (Your profile determines the custom add-ins you can access.) Custom add-ins can be added, moved, and deleted from workspaces in the same way as you would add, move, and deleted controls and relationship items. For information about custom add-ins, contact your Oracle account manager.

While some controls are used to increase general usefulness, others are required to edit certain information. For example, you have the option to add a workspace title with the Title Bar control, but you can use a workspace without a title bar just as easily. Alternately, it is necessary to add the Rich Text Incident Thread relationship item to a workspace to let staff members view or add incident threads. Refer to Relationship items.

Tip You can easily identify a control that has been placed on a workspace by double-clicking the control. The control's name will appear in the drop-down menu on the Design tab's Selected Object button group.

Table 163: Workspace and Script Controls Description

Control	Description
Answer Display	Displays an answer on a workspace or script. To select the answer you want, click the Answer ID button on the Design tab and type the answer ID number.
Browser	Adds a browser window to a workspace or script. Click the URL button on the Design tab to type a URL for the browser. You can also set a URL for the browser from a workspace rule or script rule. Refer to Working with browser controls.

Table 163: Workspace and Script Controls Description (Continued)

Control	Description
Button	Inserts a button control on a workspace or script. Workspace rules and script rules can be created to trigger an action when the button is clicked. For example, you can create a button that displays a hidden field when staff members click the button. Refer to Working with button and image controls.
Hyperlink	Places a hyperlink on the workspace or script. Click the URL button on the Design tab to type a URL for the link.
Image	Adds an image to your workspace or script to display a logo, a diagram, or other type of image. Properties for this control let you choose the image you want and specify how the image should be displayed. You can create workspace rules and script rules that trigger actions when images are clicked. Refer to Working with button and image controls.
List Box	Adds a list containing entries you specify that can be selected by the agent. You can create workspace rules and script rules that are triggered when one or more list items are selected. Refer to Working with list box, menu, radio button, and text box controls.
Menu	Adds a drop-down menu containing entries you specify that can be selected by the agent. You can create workspace rules and script rules that are triggered when a menu item is selected. Refer to Working with list box, menu, radio button, and text box controls.
Navigation Panel	Adds a script navigation panel that allows agents to access the beginning page, previous page, next page, or exit the script. Selection can be presented as buttons or links. By default, this control appears in button style in the script footer. You can create workspace rules and script rules that are triggered when the Exit button is clicked. Refer to Selecting rule triggers. **Note:** This control is available to scripts only.
Oracle Business Intelligence Report	Inserts a read-only Oracle Business Intelligence Report. The report path you enter must match the path used in OBIEE (Oracle Business Intelligence Enterprise Edition). Refer to Answer ID 4755 on our customer support site.

Table 163: Workspace and Script Controls Description (Continued)

Control	Description
Panel	Groups fields and controls and provides the ability to scroll within subsections of a workspace or script. You can nest a panel within a table and then add multiple fields to the panel. A scroll bar lets staff members view all fields on the panel. Refer to Working with panel controls.
Policy Automation	The Policy Automation control can be added to workspaces when Oracle Policy Automation is enabled on your site, providing access to policy administration tools for determining eligibility and tracking compliance for programs and services. For information about Oracle Policy Automation, refer to Oracle Policy Automation Cloud Service. **Note:** To enable Oracle Policy Automation with Oracle Service Cloud, contact your Oracle account manager.
Progress Label	Adds a simple progress indicator that displays the current page number and total number of pages in the script. By default, this control appears in the script header. **Note:** This control is available to scripts only.
Radio Buttons	Adds radio buttons to a workspace or script. You can create workspace rules and script rules that are triggered when a radio button is selected. Refer to Working with list box, menu, radio button, and text box controls.
Report	Places a report container on a workspace or script. Click the Report property and select the report you want to display on the workspace. Refer to Working with report controls.
Script	Adds agent scripts to a workspace. When you add this control, the Select a Script window opens where you can select the script you want to add. You can also select a different script by selecting the script control and clicking the Script button on the Design tab. Refer to Working with script controls. **Note:** This control is available to workspaces only.

Table 163: Workspace and Script Controls Description (Continued)

Control	Description
Spacer	Adds white space, fills gaps within a workspace or script, or holds a place for a field you want to insert later. When added to the design space, spacers have a light gray background to let you know where they are. However, when the workspace or script is viewed by an agent, the spacers are not visible because they are the same color as the background. You can move or delete a spacer just as you can move and delete other fields and controls.
Survey by Proxy	Adds a survey to a workspace or script that can be filled out by an agent on behalf of a customer. When this control is added, you choose the survey you want by clicking the Survey button on Design tab. If you select a survey that allows anonymous responses, you can select the Anonymous check box on the Design tab to permit survey responses to be entered when a valid contact is not associated with the record being viewed. The Survey by Proxy control is available when creating incident, opportunity, and contact workspaces and scripts. Refer to Proxy surveys. **Note:** This control is available only when Oracle RightNow Feedback Cloud Service is enabled. Polling surveys are not supported by this control. Refer to Offering customers a survey.
Tab Set	Adds a tab set to a workspace or script. Tabs can be added and renamed as desired, and multiple tab sets can be placed or nested on the design space. Refer to Working with tab controls.
Table	Adds a table to a workspace or script. Tables form a grid for aligning other fields and controls. They can also be nested in other tables. Refer to Working with tables.
Text	Adds a text block to a workspace or script. Using the buttons in the Label group on the Design tab, you can define the background color, text alignment, and content. You can also enter text, including variables, that will display when agents use the workspace. Refer to Adding text with the text control. **Note:** A text control's default background color and font match the workspace it is used on.
Text Box	Adds a text box to a workspace or script. You can create workspace rules that are triggered when agents type specific text in the text box. Refer to Working with list box, menu, radio button, and text box controls.

Table 163: Workspace and Script Controls Description (Continued)

Control	Description
Title Bar	Adds a text block to be used for headers or sections within tables. Using the buttons in the Label group on the Design tab, you can define the background color, text alignment, and content. By default, the title bar control uses a heading style font and a different background color than the rest of the workspace.

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Relationship items

In addition to the standard set of controls shared by workspaces and scripts, Oracle Service Cloud features a set of relationship items that provide functionality unique to certain workspaces. Relationship items are special controls, such as incident threads and audit logs, that are used when working with records and related objects. Many relationship items display a list of related objects and include basic functions for adding, editing, copying, and deleting related records, as well as removing record relationships.

Relationship items differ from the standard controls mainly in the types of workspaces they can be used on and the number of times they can be added to a workspace. While controls can be added numerous times on most types of workspaces, relationship items are specific to the type of workspace and can be added to a workspace only once.

In the standard workspaces, most relationship items appear on tabs, but you can place them anywhere on the workspace. The items you can add when you create a workspace depend on the type of workspace you create.

Tip You can easily identify a relationship item that has been placed on a workspace by double-clicking the item. The item's name will appear in the drop-down menu on the Design tab's Selected Object button group.

The following table describes the various relationship items and the types of workspaces they can be added to.

Table 164: Workspace Relationship Items Description

Relationship Item	Description
Answer Type Container	Displays the answer type options, tabs, and toolbars for adding and editing the question and answer, and a tab to preview the question and answer. This relationship item is available when creating answer workspaces.
Assets	Provides the ability to add, edit, print, copy, delete, and email assets, as well as remove their association with the primary record. The column headings for the list of assets include the asset's name, serial number, description, product, date purchased, date installed, date retired, status, and action options. The Assets relationship item is available on contact and organization workspaces.
Audit Log	Describes the actions that have been taken on the record, including when an action was taken, who performed it, what the action was, and any additional description of the action. This relationship item is available on the following types of workspaces. • Answer • Asset • Contact • Custom Object • Incident • Opportunity • Organization • Quote • Task **Note:** In answer workspaces, the **audit log** shows all actions taken on both the answer and its siblings.
Chat Control	Contains the area for composing a response to the customer and includes the buttons for adding SmartAssistant answers, searching the knowledge base, and inserting standard text. This relationship item is available on chat workspaces.
Chat Transcript Control	Contains all chat correspondence between the customer and agent, including a time stamp for each instance of sending text. This relationship item is available on chat workspaces.

Table 164: Workspace Relationship Items Description (Continued)

Relationship Item	Description
Co-browse	The co-browse relationship item can be added to incident and chat workspaces when co-browsing is enabled on your site. When using a workspace with this relationship item, agents can invite customers to a desktop-sharing session. Refer to Co-browsing with customers.
Community	The Community relationship item can be added to incident and contact workspaces when **Oracle RightNow Social Experience communities** are enabled on your site, providing access to contacts' community profiles, groups, posts, and comments within a single tabbed control.
Contacts	Provides the ability to add, edit, print, copy, delete, and email contacts, as well as remove their association with the primary record. The column headings for the list of contacts include the contact's name, email address, organization name, office phone, title, and action options. The Contacts relationship item is available on incident, opportunity, and organization workspaces.
[Custom Object] View	Provides the ability to add, edit, copy, print, and delete custom object records, as well as remove their association with the work-space's primary record. The column headings for the list of records include the object ID, labels, and action options. This relationship item is named for the custom object and is available when creating workspaces for standard objects that have been related to the custom object. Refer to Defining relationships.

Table 164: Workspace Relationship Items Description (Continued)

Relationship Item	Description
File Attachments	Provides the ability to attach, open, download, and delete files from records as well as view file properties. The relationship item displays a list of file attachments, including name, size, date created and updated, and a description. This relationship item is available on the following types of workspaces. • Answer • Contact • Custom Object • Incident • Opportunity • Organization • Task **Note:** In answer workspaces, files can be attached to the answer as well as all sibling answers.
Guided Assistance	Provides the ability to search for and open guided assistance guides to help agents quickly find answers or text explanations when working with customers. You can select properties for this relationship item to show buttons on the relationship item that agents can use to search for and select applicable guides. You can also use workspace rules to automatically open a guide on workspaces that include this relationship item, or trigger a workspace rule when a guide has been completed. Refer to Adding guided assistance to workspaces. **Note:** This relationship item can be added only to incident and chat workspaces. However, you can add the *answers.guided assistance* field to answer workspaces to associate a guide with an open answer.
Incident View	Provides the ability to view and work with incidents associated with a contact or organization. Toolbar buttons allow adding, editing, copying, deleting, forwarding, and proposing incidents and filling the inbox. The column headings for the list of incidents include the incident's status, response time, resolution time, source, reference number, and subject as well as action options. The Incident View relationship item is available when creating chat, contact, organization, and asset workspaces.
Label	Allows placement of a label on the chat workspace.

Table 164: Workspace Relationship Items Description (Continued)

Relationship Item	Description
Learned Links	Lists all answers linked to the currently open answer by visitors to your site as they browsed your knowledge base. These links are "learned" by the system as your visitors move from answer to answer. Toolbar buttons allow the ability to edit, print, preview, promote, and block and unblock links. This relationship item is available when creating answer workspaces.
Manually Related Answers	Lists all answers that have been manually linked by staff to the currently open answer. Toolbar buttons allow the ability to add, edit, copy, print, and delete answers, as well as remove their association with the primary record. This relationship item is available when creating answer workspaces.
Model Question	Provides the ability to associate an answer with a question template in Oracle RightNow Virtual Assistant Cloud Service. This relationship item is available when creating answer workspaces. Refer to Working with model questions.

Table 164: Workspace Relationship Items Description (Continued)

Relationship Item	Description
Notes	Notes relationship items can be specific to individual workspaces. • Answer Notes—Allows staff members to add notes, select the note's channel, and sort notes by date on answer workspaces. • Contact Notes—Allows staff members to add notes, select the note's channel, switch the view between contact and organization notes, and sort notes by date on contact workspaces. • Custom Object Notes—Allows staff members to add notes, select the note's channel, and sort notes by date on custom object workspaces. • Meta Answer Notes—Allows staff members to add notes that pertain to the answer's sibling answers. • Opportunity Notes—Allows staff members to add notes, select the note's channel, switch the views between opportunity, contact, and organization notes, and sort notes by date on opportunity workspaces. • Organization Notes—Allows staff members to add notes, select the channel, and sort notes by date on organization workspaces. • Task Notes—Allows staff members to add notes, select the note's channel, and sort notes by date on task workspaces. **Note:** If you want staff members to be able to edit or delete existing notes when copying records, you will need to assign Edit/ Delete Notes permissions in their profile for the appropriate record types. Refer to Customizing profiles.
Outreach Activity View	Displays a report of outreach activity associated with the contact, such as mailings that were viewed or tracked links that were clicked. If the report is populated (that is, if the contact has had outreach activity), the column headings include when the activity occurred, what the activity was, a description, the name of the mailing or tracked link, and any documents for each listed activity. The Outreach Activity View relationship item is available when creating contact workspaces.

Table 164: Workspace Relationship Items Description (Continued)

Relationship Item	Description
Opportunities View	Provides the ability to view and work with opportunities associated with a contact or organization. Toolbar buttons allow adding, editing, copying, printing, deleting, rejecting, and forwarding opportunities. The column headings for the list of opportunities include the opportunity's name, assigned staff member, status, stage, the sales representative's value, the manager's value, and the date updated, as well as action options. The Opportunities View relationship item is available when creating chat, contact, and organization workspaces.
Organization Hierarchy	Provides the ability to work with organizations to create a hierarchy in an organization workspace. Toolbar buttons allow adding, editing, printing, and deleting organizations, as well as removing their association with the primary record.
Page Peek	Displays a snapshot of the web page customers were viewing when they initiated the chat. This relationship item can be added only to chat workspaces.
Products and Categories	Displays product and category trees in order to view and define the links between products and categories for answers. The Products and Categories relationship item is available when creating answer and multi-edit answer workspaces.
Quote Products	Displays the list of products associated with a quote's selected price schedule and provides the ability to edit products for a quote. The Quote Products relationship item is available when creating quote workspaces.
Quotes	Provides the ability to view and work with quotes associated with an opportunity. Toolbar buttons allow adding, editing, printing, copying, deleting, and sending quotes. The column headings for a list of quotes include the quote's name and status, whether it was sent, the forecast, and action options. The Quotes relationship item is available when creating opportunity workspaces.

Table 164: Workspace Relationship Items Description (Continued)

Relationship Item	Description
Rich Text Incident Thread	Provides the ability to add responses, customer entries, and private notes to incidents with a variety of HTML formatting attributes, such as font, style, color, alignment, bullets, images, links, and indentation. This relationship item also includes buttons for accessing SmartAssistant, searching answers, inserting standard text, zooming in and out on thread contents, and undocking the relationship item. (The Messages tab of the standard incident workspace contains the Rich Text Incident Thread relationship item.) This relationship item is available when creating incident and incident multi-edit workspaces.
Sibling Relationships	Lists all answers that share the same product or category as the currently open answer and can also contain the same file attachments. Toolbar buttons allow adding, editing, printing, deleting, and previewing sibling answers, as well as removing their association with the primary record. This relationship item is available when creating answer workspaces.
SLA Instance View	Allows staff members to view a report of SLAs that have been associated with a contact or organization and provides the ability to add, open or disable an instance. The column headings include the SLA instance name, active date, expire date, self-service, total incidents, and action options. The SLA Instance View relationship item is available when creating contact and organization workspaces.
SLA Container	Provides the ability to select SLAs for contacts and organizations by displaying the SLA selection field, which opens the SLA Viewer for adding SLA instances. The SLA Container relationship item is available when creating contact and organization workspaces.
Survey History View	Allows staff members to view a report of surveys that have been sent to contacts. If the report is populated (that is, if the contact has received surveys), the column headings include when the survey was completed, the score, the type of survey, its name, and action options. The Survey History View relationship item is available when creating contact workspaces.

Table 164: Workspace Relationship Items Description (Continued)

Relationship Item	Description
Tasks	Provides the ability to view and work with tasks associated with a record. Toolbar buttons allow adding, editing, printing, copying, deleting, completing, and forwarding tasks, as well as removing their association with the record. The column headings for a list of tasks include the task's name, due date, completed date, assigned staff member, and priority, as well as action options. The Tasks relationship item is available when creating the following kinds of workspaces. • Answer • Contact • Incident • Mobile Contact • Mobile Incident • Opportunity • Organization
Time Billed	Provides the ability to view and enter the amount of time billed for an incident. Toolbar buttons allow adding, editing, and deleting a time billed entry. The column headings for a list of time billed entries include the starting date and time, the amount of time spent, the staff member who entered the time billed, and the task, as well as action options. The Time Billed relationship item is available when creating incident workspaces.

- ❖ Editing workspaces
- ❖ Desktop Overview

Question controls

In addition to the standard set of controls shared by scripts and workspaces, Oracle Service Cloud provides a set of question controls that are used to configure branching in scripts. Questions are available as buttons, radio buttons, lists, text fields, menus, and yes/no buttons. Most of these question types are similar to standard controls—for example, you add items to a menu question in the same way you add items to a menu control. However, questions differ from other controls in a few key ways.

- Questions include labels while other controls do not. The label can be used to present the text of the question being asked.

- Questions are required by default but can be set to non-required by using the Required property on the Design tab. This differs from other controls, which are never required.
- A question added to one script page can be used in the rules and branches created on other pages in the script. Conversely, a control can be used only in the rules and branches on the script page the control is added to.
- Some question types have different properties than their corresponding standard controls. For example, the image property cannot be defined for button questions as it can for button controls.

For information about using question controls in script branching, refer to Adding branches to scripts.

Note The values that agents enter in questions and their corresponding standard controls are available for use with the script's rules and branches. However, they are not saved in the database.

❖ Editing agent scripts

❖ Desktop Overview

Adding controls to workspaces and scripts

Placing controls on a workspace or script is similar to adding fields. Like fields, controls occupy cells on the design space's underlying table. Once you add a control, you can reposition it to display anywhere on the design space. Controls can be added to tables, panels, and tab set controls, and you can place them above, below, or next to fields and other controls.

Note When you add a control to a table that already contain fields or other items, the size of the table's rows and columns is adjusted to accommodate the new object.

To add a control to the design space

1 From an open workspace or script, click the Insert Control tab on the designer's ribbon.

2 Click the control you want to add.

3 Drag the control to the design space and hover over the location where you want to place the control. A vertical or horizontal line indicates where the control will be placed on the design space.

4 Release the mouse button.

5 To edit the properties of the added control, refer to Editing design item properties.

❖ Editing workspaces

❖ Editing agent scripts

❖ Desktop Overview

Moving and deleting controls

You can easily move controls to other locations on your design space or delete them if they are no longer needed.

Note As with fields, moving and deleting controls can cause the removal of a row or column from the design space table if the control was the only remaining item in the row or column.

To move a control on the design space

1 From the open workspace or script, select the control you want to move, keeping the left mouse button depressed.

2 Drag the control to its new location on the design space.

3 Release the mouse button to position the control in its new location.

To delete a control from the design space

1 From the open workspace or script, right-click the control and select Delete. The Delete Confirmation window opens.

Caution If the control you are deleting is referenced in a workspace rule, the Delete Confirmation window will display a warning including the name of the rule. If you click Yes to delete the control, the reference will be removed and the rule will be disabled. Refer to Workspace rules.

2 Click the Yes button to confirm the deletion.

Working with button and image controls

You can add buttons to workspaces and scripts that you can use with rules to trigger actions when clicked. For example, you could add a button to a workspace to display an additional tab set when a staff member clicks it. Image controls are used to display a logo, diagram, or any other graphic. Images can also be used to trigger rules when clicked, but their more common purpose is to visually enhance the design.

Because the agent desktop uses image rendering components of Internet Explorer installed on your workstation, we recommend that your browser be configured to check for newer versions of stored pages every time web pages are visited. In this way, any image updates you perform as you design your workspace will be displayed promptly without requiring you to log out and back in to Oracle Service Cloud.

When you add a button or image to a workspace or script, it will have no effect on your rules until you configure the rules to use it. For information about using buttons and images in workspace rules, refer to Selecting rule triggers.

Adding text and images to button controls

When you add a button to the design space, the button contains default text. You can easily change the text and add an image to the button by selecting it on the design space and changing the button's properties from the Design tab. You can also size the button and specify where it should be positioned.

To add content to button controls

1 From the open workspace or script, select the button control you added to the design space.

2 Click the Design tab.

3 To change the default text on the button, click the Text button.

  a Type the text you want on the button.
  b Press **Enter** to save the text.

Tip You can change the font attributes of text on a button by selecting the button and choosing from the options on the Design tab's Label group.

4 To add an image to the button, click the Image button. The Select Image window opens, showing the images you have added using the Client Workflow Images explorer.

a Select the image you want to add to the button.

b To add a new image to the list, click Add New Image.

c To remove an image that was previously added to the button, select the No Value check box.

d Click the OK button to add the image to the button.

e To position the image on the button in relation to text on the button, click the Image Align button and select where you want the image in relation to the text. The available options are Left, Right, Top, Bottom, and Center.

Note For information about adding images for use with workspaces and scripts, refer to Adding images for use on workspaces.

5 To manually define the width of the button's margins, click the Margin button. The available options are None, Narrow, Medium, Wide, and Custom.

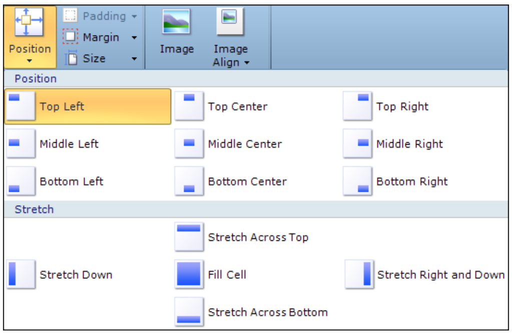
a To set custom margin widths, select Custom and enter the number of pixels you want for the button's margins in the Top, Bottom, Left, and Right fields.

6 To manually define the button's size, click the Size button on the Design tab and select Enable Auto Sizing to disable it.

a Click the Size button again and type the number of pixels you want for the button's size in the Width and Height fields.

b To re-enable auto sizing, click the Size button and select Enable Auto Sizing.

7 To position the button on the table cell that contains it, click the Position button on the Design tab to view available options.



a Select where you want the button placed on the table cell from the Position options.
b To stretch the button on the table cell, select how you want the button displayed from the Stretch options.

8 Click the Save button to save your changes.

Adding image controls

When you add an image to a workspace or script, you can specify options such as the size, position, and layout of the image.

To add an image control to a workspace or script

1 Drag the control to the design space (refer to Adding controls to workspaces and scripts). The Select Image window opens showing the images you have added using the Client Workflow Images explorer.

2 To add a new image to the list, click Add New Image.

3 Select the image you want to add and click the OK button. The image is added to the design space.

Note To select a different image, select the image you want to replace, click the Image button, and choose the new image from the Select Image window.

4 To manually define the image's size, click the Size button on the Design tab and select Enable Auto Sizing to disable it.
a Click the Size button again and type the number of pixels you want for the image's size in the Width and Height fields.
b To re-enable auto sizing, click the Size button and select Enable Auto Sizing.

5 To specify a layout for the image on the table cell, click the Image Layout button and select from None, Tile, Center, Stretch, and Zoom.

Note The Image Layout button is inactive when auto sizing is enabled.

6 To position the image on the table cell that contains it, click the Position button.
a Select where you want the image placed on the table cell from the Position options.

b To stretch the image on the table cell, select how you want the button displayed from the Stretch options.

Tip Stretch options from the Position button work best when a layout option is selected from the Image Layout button on the Design tab.

7 Click the Save button to save your changes.

Adding images for use on workspaces

Using the Client Workflow Images explorer, you can add images to use in workspaces and scripts. Once you have opened the explorer, you can add and manage images the same way you do in the Images explorer. Refer to Images explorer.

To open the Client Workflow Images explorer

Click the Configuration button on the navigation pane and double-click Client Workflow Images under Application Appearance.

Note You can add the Client Workflow Images explorer to **navigation lists** in the same way you can add other explorers. Refer to Modifying navigation sets.

Adding text with the text control

You can use text controls to add text that will display to your agents. You can also include variables to display values from the database. For example, you could add text, including the customer's name, that new agents can read when speaking with a customer who calls regarding an incident.

To add text with the text control

1 Click the Insert Control tab and add a text control to the design space.

2 Click the text control on the design space and type the text you want.

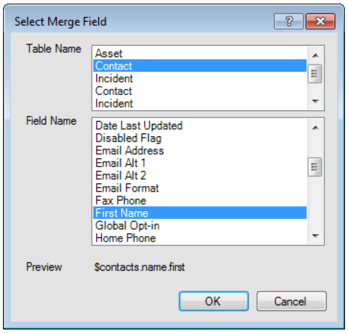
3 To change the font attributes for the text you entered, select the text you want to change and select options from the font attributes on the Design tab's Label group. Refer to Label properties for descriptions of these options.

4 To add a variable to the text, click the text control where you want to add the variable.

a Click the Insert Merge Field button on the Design tab.

Or

Right-click the control and select Insert Merge Field.



b Select the name of the database table with the field you want in the Table Name field.

Or

Select Current User to add a variable for the display information (such as the first name) of the staff member who is using the workspace or script.

Note Custom object workspaces and scripts can also use custom object fields as merge fields. However, workspaces and scripts for parent standard objects, such as contacts or incidents, cannot access these fields.

c Select the field you want to include on the text control on the Field Name field. The variable you define is displayed in the window's Preview field.

d Click the OK button to add the variable to the text control.

Working with list box, menu, radio button, and text box controls

List box, menu, radio button, and text box controls give you the ability to trigger workspace rules, script rules, script branches, or workflows from agent selections or text entries. These controls differ only in the type of input they accept from your agents and are added to workspaces in the same way you add any other control. However, with the exception of the text box control, you need to add entries to these controls that agents can select before the controls are useful.

Important The values entered in these controls are not saved in the record being edited. These controls are intended for use only with workspace rules, script rules, script branches, and workflows.

Once you add menu and list entries or radio buttons to the controls, you can create rules that are triggered when agents select the entries or buttons, or when they type certain text in a text box. You can also add rule conditions based on the value of these controls. Refer to Workspace rules.

Note You can specify options on the ribbon's Design tab for the list box, radio button, and text box controls to change their behavior or appearance. For definitions of the options for these and other controls, refer to Working with controls.

To add and edit items for list box, menu, and radio button controls

1 From an open workspace or script, click the Insert Control tab and add a list box, menu, or radio button control to the design space.

2 Select the control on the design space and click the Design tab.

Note Three default items are added to the control when you add it to the design space.

3 To change the text of an item in the control, select the item you want to edit on the items list and click the Edit Item button. The Edit Item window opens.

   a Type the text you want the item to display.

   b Click the OK button to save the new text.

Note For radio button controls, you can also edit the text of an item by simply clicking the item on the design space.

4 To add an item to the control, click the Add Item button on the Design tab to open the New Item window.

   a Type the text of the item you want to add to the control.

   b Click the OK button to add the new item to the control.

5 To change the order of an item on a control, select the item you want to move on the items list and click the Move Up or Move Down button to order the item as you want it.

6 To remove an item from the list, select the item you want to remove on the items list and click the Delete Item button.

7 To change the layout of a radio button control, select the control on the design space, click the Layout button on the Design tab, and select Horizontal or Vertical.

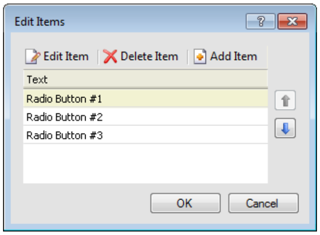
8 To allow staff members to make multiple selections from a list box, click the list box control on the design space, click the Design tab, and select the Allow Multiple Selections check box.

Managing items from the Edit Items window

If you want to add or edit several items on list, menu, or radio button controls, it can be faster to do so from the Edit Items window than from the ribbon's Design tab. You can reorder items from the window as well as add and edit items on the control.

To edit items from the Edit Items window

1 From an open workspace or script, right-click the control on the design space and select Edit List Items, Edit Items, or Edit Radio Buttons, depending on the type of control you select. The Edit Items window opens.



The window lists all the menu items, list items, or radio buttons on the control.

2 To add another item to the control, click the Add Item button and enter the item text.

3 To edit an item's text, select the item in the list and click the Edit Item button.

4 To remove an item from the list, select the item you want to remove and click the Delete Item button.

5 To reorder items in the list, select the item you want to reorder and click the up or down arrow to move the item where you want it.

6 Click the OK button to save the changes to the control's items and close the Edit Items window.

Working with report controls

Workspaces and scripts can include reports to let staff members view or access information related to the record they are editing. For example, the standard incidents workspace contains a tasks report to display the tasks associated with the incident. Most of the standard workspaces contain reports, and you can configure custom workspaces and scripts to show the reports you want to see.

Note Record command options are not applied when viewing reports in workspaces.

Using reports in standard workspaces

Many standard workspaces contain reports, most of which have row limits of 100 rows. The following table lists the reports on the standard workspaces. If you want to use a standard workspace but with a different report than the default one, you can copy the workspace and edit the copy to replace the default report with the report you want.

Table 165: Default Reports Used on Standard Workspaces

Standard Workspace/Tab or Control	Default Report
Answer	
Tasks	Tasks by Answer
Details	Answer Subscribers
Analytics	Answer Overview
Chat Sessions	
Incidents	Incidents by Contact
Contact	
Opportunities	Opportunities by Contact
Tasks	Tasks by Contact
Incidents	Incidents by Contact
Surveys	Survey History
Marketing Activity	Marketing Activity

Table 165: Default Reports Used on Standard Workspaces (Continued)

Standard Workspace/Tab or Control	Default Report
Incident	
Contacts/Contacts	Incident Contacts
Contacts/Incident History	Incidents by Contact
Tasks	Tasks by Incident
Organization/Incident History	Incidents by Organization
Organization/Contacts for Org	Organization Contacts
Web Visit	Incidents Web Visit Tab
Opportunity	
Contacts	Opportunity Contacts
Tasks	Tasks by Opportunity
Quotes	Quotes
Organization	
Contacts	Organization Contacts
Opportunities	Opportunities by Organization
Tasks	Tasks by Organization
Incidents	Incidents by Organization
Quote	
Quote Products	Quote Product List

Note Some standard workspaces also define default search reports for certain elements. For example, the Search Knowledge Base button on the Messages tab of the Incident workspace uses the Search Knowledge Base report. Refer to Selecting search reports.

Adding reports and relationship items to custom workspaces and scripts

When you add the report control to the design space, you need to select the report you want it to display. Reports used on workspaces and scripts may include run-time selectable filters and variables. However, with the exception of the reports used for search reports, these will not be available when the reports are viewed on workspaces or scripts.

Note By default, reports you add to workspaces do not run when you open the workspaces to create new records, since the records do not yet include data that can be filtered on. However, you can force reports to run for new records from the Design tab's Report Behavior button.

You can also select reports for **relationship items** to show information related to the record you are viewing. For example, the Contacts relationship item shows information about the contact related to an incident you are viewing. These relationship items are configured to use certain reports by default, but you can select different reports to use on your workspace if you want.

Note If the same object is added as a child in multiple relationships to the same parent (for example, if the contacts object is specified as the child of the incidents object in two relationships), the workspace designer's ribbon will still contain only one view item for the object. However, because new view reports are automatically created for each child relationship you define, when you add the view item to a workspace, you will be prompted to select which report to use. Refer to Defining relationships.

Reports used on report controls or relationship items automatically attempt to filter on the record being edited to display information related to the record. Therefore, these reports should contain at least one filter for the primary identification types for the kind of workspace or script you are using. For example, reports used in incident workspaces should filter on incident *(i_id)*, contact *(c_id)*, or organization *(org_id)*.

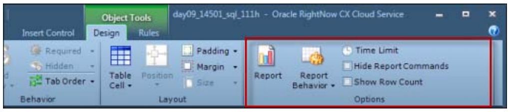
To add a report to a report control or change a report on a relationship item

1 From an open workspace or script, click the Insert Control tab.

2 Click the report control or the relationship item containing a report and drag it to the design space where you want it.

3 Select the control or relationship item on the workspace and click the Design tab. Configuration options for the report control are displayed on the Options button group.

Tip You can also double-click an object on the design space to select the Design tab and access properties related to the object.



4 Click the Report button to open the Select Report window.

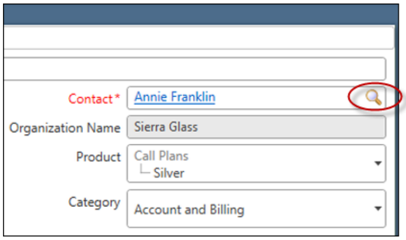
5 Select the report you want to add to the workspace and click the OK button.

6 Save the workspace.

Note If you add a report control to a workspace without selecting a report for the control, you will not be able to save the workspace.

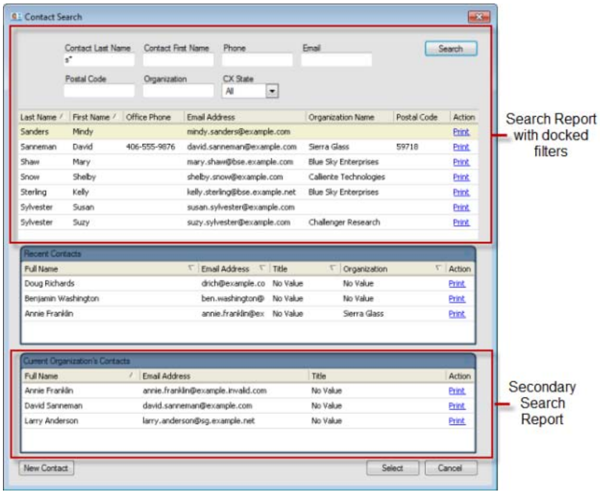
Selecting search reports

Some database fields and relationship items include search functionality that agents can use to find and associate records with the records being edited. When using a workspace or script, agents can access the search feature by clicking the Search button located next to the field or on the relationship item. For example, the button to open the Contact Search window from an incident workspace is located to the right of the contact field.



When you open a search window, the window displays a report and the report’s docked filters that are used to search for records. Some search windows also include secondary reports that are not searchable, but which can be used to display information below the primary search report. For example, a secondary search report can be used to display all contacts associated with an organization when you are searching for a contact in the primary search report.

Note Drill-down levels and report links can be used in search reports for database fields but are disabled on relationship items’ search reports.



The standard reports that are used by default with this functionality are designed to allow staff members to quickly locate the records they want. However, if the default reports do not meet your needs, you can specify the standard or custom reports you want to use for the primary and secondary search reports.

Note Searches are performed from workspaces’ search reports using docked filters. For this reason, the search reports you specify must include docked filters in order to search for records. Refer to [Docking variables and run-time selectable filters](#).

To select primary and secondary search reports for the Contacts Search window

1 From an open workspace or script, select the Contact field on the design space.
  Or
  Select the Contact relationship item on the design space.

2 Click the Design tab.

3 To change the primary search report, click the Search Report button. The Select Report window opens.

  Or

  To add a secondary search report, click the Secondary Search Report button.

Note To clear a secondary report from the Contact Search window, select the No Value check box on the lower left of the Select Report window. This check box displays only when selecting secondary search reports.

4 Select the report you want to use.

5 Click the OK button to close the Select Report window.

6 Click the Save and Close button to save your edits and close the workspace.

Report properties

In addition to selecting the report you want to appear on a workspace or script, you can modify the report's properties to enable certain behaviors and functions. The following report functions are available on the Design tab.

- **Time Limit**—Specifies the maximum amount of time a report can take to generate on the workspace. Refer to Specifying report time limits.
- **Hide Report Commands**—Hides and disables the report commands (for example, New, Open, Copy, Delete, Print, Forward, Assign, and Propose) on the workspace.
- **Show Row Count**—Displays the number of records in a report next to the tab title.

In addition, the following properties can be accessed by clicking the Report Behavior button on the Design tab.

Table 166: Report Behavior Properties

Property	Description
Delay Report Execution	Select this option if you want the report to run only when the tab the report is shown on is selected. If this option is not selected, the report runs when the workspace opens. This option is enabled by default. **Note:** If the report is visible when the workspace is opened (for example, it appears on the top tab), it will always run immediately even if the property is enabled.
Filter on Primary Key Only	Select this option if you want the report to filter only on the primary key. If this option is not selected, the report will also filter on any related objects. For example, when this option is enabled, an incidents report will use only the incident ID filter to filter the results. When the option is disabled, the report will also filter the report on the contact ID and organization ID values.
Open Existing Records in Separate Workgroup	Select this option if you want records opened from this report to be displayed in a new workgroup tab. This allows the opened record to be saved independently from the record the control is on. If this option is not selected, records will be opened on a sub-tab and edits are saved when any record in the sub-tab's workgroup is saved.
Delete Records Immediately	Select this option to delete records in the report when a staff member clicks Delete and confirms the deletion request. If this option is not selected, records will be queued for deletion and not actually deleted until the record being edited is saved.
Create New Records in Separate Workgroup	Select this option if you want new records created from a parent record to open in a new workgroup tab. This allows the new record to be saved without saving the parent record. If this option is not selected, new records will open on a sub-tab and edits are saved when any record in the sub-tab's workgroup is saved. **Note:** This property is available for the Incident View, Opportunity View, Task View, and Custom Object View relationship items.

Table 166: Report Behavior Properties (Continued)

Property	Description
Refresh Report When Data Changes	Select this option if you want the report to be run again when related data is changed. (For example, if a staff member is using a workspace that contains the Incidents by Organization or Contact report and changes the contact, the report refreshes to update with new information.) **Note:** This property is not available for the Manually Related Answers, Learned Link, Incident View, and Custom Object View relationship items.
Execute for New Records	Select this option if you want the report to run when you open the workspace to create a new record. This option is disabled by default to prevent reports that rely on data in the record from attempting to run when a new record is being created. **Note:** This property is not available for the Manually Related Answers, Learned Link, Incident View, and Custom Object View relationship items.

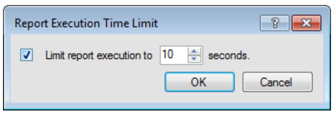
Specifying report time limits

You can specify the maximum amount of time a report can take to generate on a workspace using the Time Limit option. Specifying a time limit can improve workspace performance since workspaces are unavailable until reports on the workspace generate. If a report takes longer to generate than the time limit you specify, a warning message will display and the workspace will load without the report.

To set a time limit for a report control

1 From the open workspace or script, select the report control you want to modify.

2 Click the Design tab and click the Time Limit button.



3 Select the Limit Report Execution check box and then enter the maximum number of seconds you want to permit for a report to generate. You can select a value up to 240 seconds.

4 Click the OK button to save the time limit.

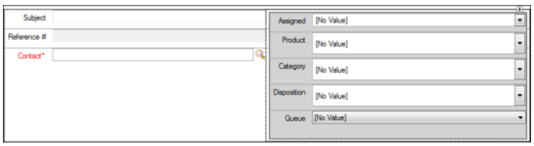
Important Reports placed on a workspace should be configured to return data that is related only to the record that is open. For example, a report on a Contact tab should return information about the contact rather than all contacts in the database. Reports that consistently time out in a workspace and cannot be further restricted should be removed from the workspace and run separately.

Working with panel controls

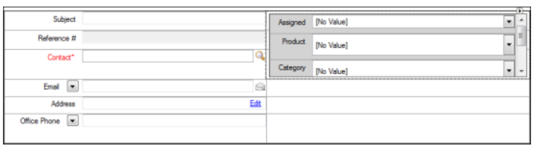
A panel is a special workspace control that provides grouping for fields and controls and lets you create scrolling subsections of the workspace. When you add more fields than the panel control can accommodate, a scroll bar appears automatically. This lets you add multiple fields to a panel even though the panel size is controlled.

You can customize each panel on your workspace to use different background colors, font colors, padding, and margins. This is helpful if you want to create distinct groupings of data on your workspace.

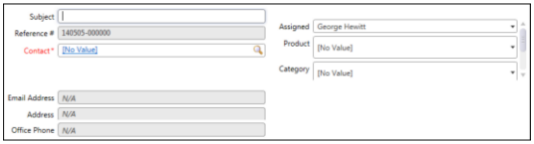
The following figure shows a panel control on the right. The panel has been defined to span three rows. The single panel contains the Assigned, Product, Category, Disposition, and Queue fields.



The next figure shows what happens to the panel control when more fields are added to the workspace, creating additional rows. Note that the panel still spans only three rows and now displays a scroll bar.



And this last figure shows how the panel is displayed to staff members using the workspace. They can scroll down on the panel to complete all fields.



Working with script controls

You can add scripts to workspaces to provide a sequence of steps and form elements for your agents to follow when working on records. Script controls can include the same fields and controls available for workspaces, and you can use the same script on as many workspaces as you want. If you want to place a set of fields and controls on several workspaces, you can add them to a script and then simply place the script on the workspaces.

Note Script controls are available only when scripting is enabled. For information about enabling scripts, contact your Oracle account manager.

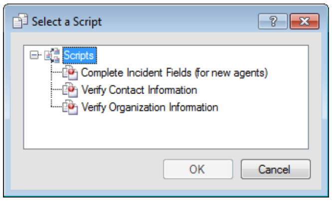
Scripts can also include pages and branching, so you can easily create a script to lead your agents through a procedure. For example, you could place a script control on an incident workspace to guide new agents through entering information for the record when a customer phones with a new incident. Refer to Creating and editing scripts.

As with workspaces, scripts are interface specific. In addition, the scripts that you can place on a workspace must be of the same type as the workspace. For example, you can place a control for an incident script on an incident workspace and you can place a control for a contact script on a contact workspace. For this reason, when you place a script control on a workspace, you can select only scripts that are of the same type as the workspace, and that were created on the same interface.

Note You can place multiple script controls on the same workspace.

To add a script control to the design space

1. From an open workspace, click the Insert Control tab and click the Script button.
2. Click the location on the design space where you want the script. The Select a Script window opens.



3 Select the script you want to use and then click the OK button.

4 To change the script used on the script control, click the script control and click the Script button on the Design tab to open the Select a Script window.

5 To change the size of the script control, select the control on the workspace, click the Design tab, select the Set Fixed Height check box, and click the Size button to type a size for the control. Refer to Design property descriptions.

Working with tables

You can add table controls to the design space to organize and align fields and controls within a set of content cells. By default, a newly placed table control features two rows and two columns containing spacers. You can adjust the number of rows and columns by editing the table properties or by inserting fields or controls around or between other fields and controls in the table. You can also enhance the appearance of a table by adjusting colors, borders, scroll bars, and size.

Tip Tables can be nested within the cells of other tables. However, for optimal workspace performance, we recommend limiting the number of nested tables as these can increase workspace processing time.

To add a table to the design space

1 From the open workspace or script, click the Insert Control tab and click the Table button.

2 Click the location on the design space where you want the table. The table contains two rows and columns by default.

3 To add columns or rows to the table, select the table on the design space, click the Design tab, and click the Add Column or Add Row button. The table updates to show the new columns and rows.

Tip If you find it difficult to select the table by clicking on its outer border, it may be easier to select it using the Current Selection drop-down menu. Refer to Selecting fields and controls using the ribbon.

4 To edit table properties, such as borders and background color, refer to Layout properties.

Working with tab controls

You can add, move, and delete individual tabs and tab sets, or groups of tabs. Tabs are moved and deleted with the same methods used to move and delete fields and controls on the upper section of the workspace.

To add tabs to the design space

1 From the open workspace or script, click the Insert Control tab on the ribbon, click the Tab Set button, and click the location on the design space where you want the tab set.

Tip You can nest tab sets within other tab sets.

2 To add tabs, right-click next to an existing tab and select Add Tab.

Or

Right-click an existing tab and select Add Tab Before or Add Tab After.

3 Rename the tab.

a Select the new tab.

b Click the Design tab on the ribbon.

c Click the Text button on the ribbon's Label group and type the name you want for the tab.

To move a tab

Note Staff members have the option of dragging the tabs to rearrange them on the workspace. If they do this, the tabs' positions are stored in their local settings. Your changes to the tab positions will not affect staff members who have customized their tab positions on the workspace. For an overview of account settings that can be customized by staff members, refer to Changing your personal settings.

Right-click the tab and select Move Left or Move Right.

Or

Click the tab's **action arrow** and select Move Left or Move Right. Refer to Accessing design properties from the actions list for a description of action arrows.

To delete a tab or tab set

1 Right-click the tab or tab set and select Delete.

2 Click the Yes button on the Delete Confirmation message.

Working with browser controls

By adding a browser control to a workspace or script, you can display a web browser inline with your records. You can specify the URL you want, and you can include variables in the URL to link Oracle Service Cloud data—such as record IDs, custom field values, or custom object field values—with the web page you open or through Oracle RightNow Connect APIs. Refer to Answer ID 2429 on our customer support site.

Also, the page loaded in the browser can contain RightNow Connect JavaScript code to view and edit information about the record being edited. Refer to the *Connect Desktop Integration (Javascript) API* documentation.

Best practices for adding browser controls

Browser controls use components of Microsoft Internet Explorer installed on the workstation. For this reason, your workspace load time may increase due to such factors as the complexity and size of page content, the connection to the site host, as well as the browser's version, settings, and memory usage. Any page that loads slowly or incorrectly in Internet Explorer will likely experience similar problems when loaded in a browser control on the same workstation.

However, there are a few practices you can follow to help reduce the impact of these effects.

- Keep the Delay Page Load property enabled for all browser controls to ensure its contents do not load until the control is visible.
- When loading pages developed by your organization, manage browser memory wisely by reducing the complexity of the pages you are loading. Be sure to thoroughly test and minimize the use of web development libraries to guard against memory leaks. Also, make sure that the connection to the page server is reliable.
- If agents often need to open specific web pages—especially those that take awhile to load—consider adding those pages as links for the workspace's Links button. Refer to Adding URL links to the Links button.
- Minimize the number of browser controls to reduce memory usage and performance. You can use workspace rules to change the URL of a browser control dynamically. Or you can combine multiple pages into a single control using an HTML frame set or create a single launch page with links to the other pages.

To add a browser to a workspace or script

1. Click the Insert Control tab and click the Browser button.
2. Click the location on the design space where you want the browser. The browser is added to the workspace.
3. Select the browser control and click the Design tab.

4 Click the URL button and type the URL you want the browser control to open when the workspace is opened.

Tip You can also set the URL of a browser control using a workspace rule. Refer to Adding and editing actions.

5 To delay the loading of the browser in a tab until the tab is active, select the Delay Page Load check box. The Delay Page Load check box is selected by default.

Note If you place a browser control on a tab that is not the active (or top) tab when the workspace opens, we recommend that you keep the control's Delay Page Load property set to its default enabled state. If this property is not enabled, the browser control will be activated when the workspace is opened, which may prevent other controls on the workspace from functioning as expected.

6 To change the size of the browser control, click the Design tab and select the Set Fixed Height check box.

   a Click the Size button to type a size for the control.

7 To open pop-up windows from the browser content in child browser controls, select the Open Pop-ups in New Browser Control check box.

Note If this check box is not selected, pop-ups will open in a full Internet Explorer browser, which can cause session variables to be lost. To ensure session variables are maintained, select the check box.

8 To suppress any warning prompts (such as script errors and authentication requests) that may occur in the browser control when a URL is loaded, select the Suppress Errors and Authentication Dialogs check box.

Field and control properties

Fields and controls (including relationship items and script questions) have attributes you can configure using the options on the Design tab of the designer ribbon. Many of these attributes are shared by numerous items such as size, label position, and read-only attributes. When you change the properties of a field or control, the design space is updated to reflect your changes.

The properties you can edit depend on the field or control you are editing. The following properties are explained in greater detail in this section.

- Using the Default Value property
- Custom field properties
- Setting hidden, required, and read-only properties
- Setting hidden and read-only properties for required fields

For a full list of all properties and their descriptions, refer to Design property descriptions.

❖ Editing workspaces

❖ Editing agent scripts

❖ Desktop Overview

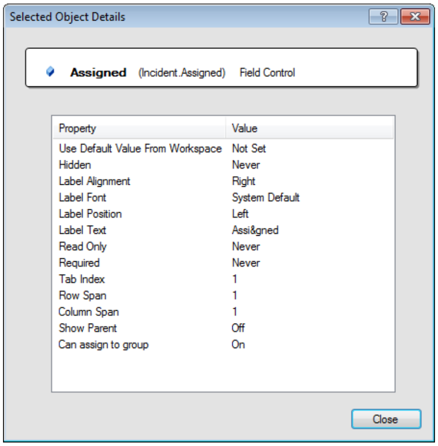
Viewing design item properties

You can quickly view all the properties for a field or control from the ribbon's Design and Rules tabs. This helps you see what properties are already applied to an item before you edit the item.

To view item properties

1 From an open workspace or script, select an item on the design space.

2 Click the Show Details button on the Design tab to open the Selected Object Details window.



The information that displays depends on the item you select and the properties that are applied to it. Any property applied to the item will be shown on the window, including the item's positioning on the workspace and any visibility, hidden, or read-only attributes. Refer to Field and control properties for descriptions of the properties that can be applied to items on workspaces.

3 Click the Close button.

Editing design item properties

When you select a field or control on the design space, the Design and Rules tabs are displayed on the ribbon with buttons appropriate for the selected item. To select an item, you can click it on the design space or you can select it from the Current Selection drop-down menu on the Design tab (refer to Selecting fields and controls using the ribbon). If you want to edit properties shared by a number of fields and controls, you can select them and then edit them simultaneously.

To edit a field or control

1 From an open workspace or script, select a field or control on the design space and click the Design tab. The options displayed on the tab vary depending on the item you select.

Tip You can also double-click an object on the design space to select the Design tab and access properties related to the object.

2 Click a button on the Design tab to adjust the property you want to change. Refer to Design property descriptions. The object is updated on the design space to reflect the change.

3 Click the Save and Close button to save your changes.

Selecting multiple fields and controls

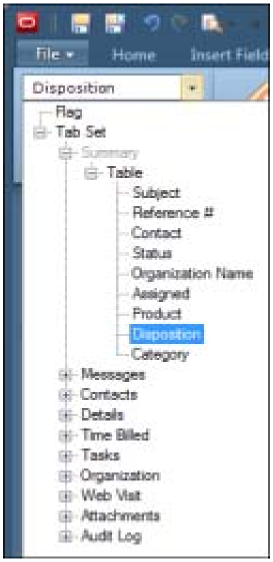
You can select multiple fields and controls on the design space to edit properties they share or remove them from your design space. When you select multiple fields and controls, the Delete button on the ribbon's Design tab will be available on the ribbon, along with buttons to edit common attributes of the selected fields and controls. For example, if you select two fields and a title bar, you will be able to click the Read Only button on the Design tab, since both fields and controls have this attribute.

To multi-select fields and controls

Press **Ctrl** while selecting the fields and controls on the design space that you want to edit or delete.

Selecting fields and controls using the ribbon

The Current Selection drop-down menu displays a tree structure showing all the fields and controls on the design space. You can use this menu to select items on the design space to view or edit. The figure to the right shows the expanded tree when the Disposition field is selected on an incident workspace.



When you navigate the tree structure and click a field or control, it is highlighted on the design space and the options on the Design tab are updated to reflect the actions you can take on the item. This allows you to quickly find and select a specific field or control on the design space and access its properties without having to locate it on the design space.

To access design space items using the ribbon

1. From an open workspace or script, click an item on the design space to activate the Design and Rules tabs on the ribbon.
2. Click the Design or Rules tab.
3. Click the Current Selection drop-down menu on the ribbon's Selected Object group. The tree opens listing the fields and controls on the design space. The item you selected in step 1 is automatically selected in the tree.
4. Expand or collapse the tree to navigate to the field or control you want to view.
5. Click the item in the tree to select it on the design space.

Accessing design properties from the actions list

In addition to using the buttons on the Design tab to edit fields and controls on the design space, you can open an actions list that is unique for each item. The actions list contains some of the same options accessed from the Design tab. Using the actions list can be helpful when the designer ribbon is collapsed.

You can access the actions list either by right-clicking an item on the design space or by selecting the item and clicking the action arrow. The action arrow appears on the upper right side of each selected item on the design space.

The list of action options for a tab control is shown in the following figure. To select an action, click it in the list.

Custom field properties

You can add custom fields to workspaces and scripts just like a standard database field. However, since you can modify certain properties of custom fields when you create them on the Custom Fields editor, there are some considerations to be aware of when editing custom fields you add to a workspace.

- If a default value was defined for the custom field when it was created, that default value will appear when you place the field onto the design space. To override the field's original default and set a different default value from the design space, you must enable the Default Value > From Workspace or From Script property. Refer to Using the Default Value property.
- If a mask was specified for the custom field when it was created, you can view the mask by clicking the RNT Mask button on the field's Design tab on the ribbon. You cannot specify masks for custom fields when you place them on the design space. Refer to Input masks.

- If you add a custom field that was configured to be required when it was created, the field's required property will be enabled on the design space by default. However, you can disable the field's required property if you do not want to require the field. Refer to Setting hidden, required, and read-only properties.

Note Custom field properties defined on the editor affect field behavior only on the workspace or script you are editing. Properties affecting the behavior of custom fields on the **customer portal** are defined on the Custom Fields editor and are not affected by field properties set in a workspace or script.

Using the Default Value property

When you edit a workspace or script, you can set a default value for some fields on the workspace. When a staff member creates a new record using the workspace or script, the field is automatically populated with the default value that you select.

Note The default value is applied only to new records created in the workspace or script. Records created from other channels, such as the **Ask a Question page**, are not impacted.

In addition to the Default Value property, there are a few other methods by which values can be set. When configuring your business processes in Oracle Service Cloud, carefully consider the following order in which these defaults are applied.

1. Values defined by Oracle Service Cloud itself, as described by the Data Dictionary.
2. Values applied by the workspace Default Value property.
3. Values applied when creating a record for a contact selected in a report.
4. Values applied from entering information in a search filter, such as when searching for a contact that is not found, then creating a new contact.
5. Values applied by rules triggered when the editor loads.

Staff members with appropriate permission can change a field's default value. For example, if you have a group of agents that generally handles incidents for a certain product, you can create an incident workspace that has a default product specified for the Product field. As a result, all incidents that the group creates will initially be set to the default product. However, if they need to associate a different product (and they have appropriate permissions), they can change the field to a different value.

When you add a field to the design space that can have a default value, the field's Default Value From Workspace property is initially disabled and must be enabled before you can define a default value.

To enable the Default Value property and set a default value for a field

1 From the open workspace or script, select a field on the design space.

2 Click the Design tab and click the Default Value button.

Note You will see the Default Value button only if the selected field accepts default values from the workspace.

3 Select From Workspace or From Script to enable the Default Value property. A check displays next to the property that you have enabled.

4 Click the field you want to add the default value to. Editing options are displayed according to the field type. For example, you can type text directly into a text field on the design space or select from a drop-down menu on a menu field.

5 Click the Save and Close button to save your changes.

Setting hidden, required, and read-only properties

You can apply the following properties to many of the items you add to a workspace or script.

- **Read Only**—Read Only items are displayed to agents, but agents cannot change the values in the fields or controls. This property is not available for multi-edit workspaces.
- **Required**—Required items are displayed to agents. When agents use the workspace or script to edit a record, they are required to enter a value for the field in order to save the record.
- **Hidden**—Hidden items are not displayed to agents.

When you set any of these properties, you can choose when the property should be applied to the item. You can choose to apply the property only when the workspace or script is used to create a record, only when it is used to open an existing record, or both.

Note Multi-edit workspaces do not include the option to apply the Required or Hidden properties when creating new records, since these workspaces are not used when creating records.

You can also apply these properties to the item on a per-profile basis, allowing you to use the same workspace or script for several profiles if you want different profiles to have different settings for these properties. For example, you can create a workspace that includes fields showing contacts' phone numbers and addresses. You can then set the fields' Hidden properties by profile so the fields are shown to staff members with one profile, but are not visible to staff members with a different profile.

To set the Read Only property

Important This procedure uses the Read Only property as an example, but applies to the Hidden and Required properties as well.

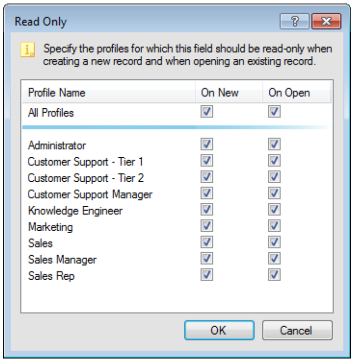
1 From the open workspace, select the item you want to make read-only.

2 Click the Design tab and click the Read Only button.

3 To make the item read-only for all profiles when creating a new record, select On New.

4 To make the item read-only for all profiles when opening an existing record, select On Open.

5 To make the item read-only on a per-profile basis, select Profile Based. The profile selection window opens.



a Select the check boxes in the On New column next to the profiles you want to apply the property to. Profiles you select will have read-only access to the item when staff members with the profile use the workspace or script to create a new record.

b Select the check boxes in the On Open column next to the profiles you want to apply the property to. Profiles you select will have read-only access to the item when staff members with the profile use the workspace or script to open an existing record.

6 Click the OK button to close the profile selection window.

7 Click the Save and Close button to save your changes.

Setting hidden and read-only properties for required fields

You can set the Hidden and Read Only properties for required fields when the combination of properties does not prevent a required field from being set. However, attempting to set certain combinations of the Hidden and Read Only properties on required items is not allowed. When setting these properties for required fields, you should consider the following limitations.

- Standard fields that are required for a workspace, such as the Contact field on incident workspaces, cannot have their Required properties disabled or Read Only properties enabled for new records.
- If you set a field's property to Read Only for new records, you cannot also enable the field's Required property for new records.
- If you set a field to be hidden when creating a record, you cannot also enable the field's Required property when creating a record.
- If you set a field to be required when opening a record, you can set the Hidden property for that field to any value.

- If you set a field to be required when creating a record, you can enable the Hidden property when opening an existing record.
- If you set a field to always be required, you can enable the Hidden property when opening an existing record.
- If you set a field to always be required, you can enable the Hidden property when creating a record if you also set a default value for the field on the design space. Refer to Using the Default Value property.

Design property descriptions

When editing fields or controls that you add to a workspace or script, you can adjust different properties depending on the element you select. When you add one of these items to the design space, you can select it and then edit its properties using the options available on the ribbon's Design tab.

The options on the Design tab are organized by groups and described in the following sections. Not all groups are available for all elements on workspaces or scripts.

Note For the sake of simplicity, descriptions that refer to fields may also apply to controls and relationship items.

Selected Object properties

The following table describes the properties on the Selected Object group. The options in this group let you select the element to edit and delete. Options for tab controls are also available here.

Table 167: Selected Object Properties Descriptions

Property	Description
Current Selection	This field shows the name of the item currently selected on the design space. Click this drop-down menu to view a tree listing the fields and controls currently on the design space. You can select items from the tree to edit them using the options on the Design tab.
Show Details	Click this button to display a list of the selected item's properties and corresponding values.
Delete	Click this button to delete the item currently selected on the design space.

Table 167: Selected Object Properties Descriptions (Continued)

Property	Description
Add Tab	Click this button to add a tab. This button displays only when a tab set is selected.
Add Tab After	Click this button to add a new tab after the tab that is currently selected.
Add Tab Before	Click this button to add a new tab before the tab that is currently selected.
Move Left	Click this button to move the tab that is currently selected one position to the left.
Move Right	Click this button to move the tab that is currently selected one position to the right.
Tab Indexes	Click this button to define the order in which the fields and controls on the currently selected tab can be tabbed through using the keyboard's Tab key.
Set Child Tab Indexes from Top to Bottom	Select this option to start the tabbing sequence with the upper left item on the selected tab, proceed down to the end of the column, continue at the top of the next column, and so on, ending with the item at the lower right.
Set Child Tab Indexes from Left to Right	Select this option to start the tabbing sequence with the upper left item on the selected tab, proceed across to the end of the row, continue at the left of the next row, and so on, ending with the item at the lower right.

Behavior properties

The following table describes the properties on the Behavior group. The options in this group let you modify read-only, required, and hidden properties for the selected element. You can also change the tab order of the selected element.

Table 168: Behavior Properties Descriptions

Property	Description
Read Only	Click this button to specify when this property should be applied to the selected element. • On New—The item will be read-only when the workspace or script is used to create a new record. Multi-edit workspaces do not have this option. • On Open—The item will be read-only when the workspace or script is used to open an existing record. • Profile Based—The item will be read-only for staff accounts using selected profiles. Each profile can have different On New and On Open options applied. Refer to Setting hidden, required, and read-only properties. **Note:** The Read Only property cannot be set to On New if the object's Required property is also set to On New for any or all profiles, and a default value is not set for the object.
Required	Click this button to specify when this property should be applied to the selected element. • On New—The item will be required when the workspace or script is used to create a new record. Multi-edit workspaces do not have this option. • On Open—The item will be required when the workspace or script is used to open an existing record. • Profile Based—The item will be required for staff accounts using selected profiles. Each profile can have different On New and On Open options applied. Refer to Setting hidden, required, and read-only properties. Oracle Service Cloud requires certain fields for certain record types. These fields are automatically set to On New and On Edit, and the property is disabled so that you cannot change it.

Table 168: Behavior Properties Descriptions (Continued)

Property	Description
Hidden	Click this button to specify when this property should be applied to the selected element. • On New—The item will be hidden when the workspace or script is used to create a new record. Multi-edit workspaces do not have this option. • On Open—The item will be hidden when the workspace or script is used to open an existing record. • Profile Based—The item will be hidden for staff accounts using selected profiles. Each profile can have different On New and On Open options applied. Refer to Setting hidden, required, and read-only properties. **Note:** Required fields cannot be hidden when creating records.
Tab Order	Click this button to define the order in which the fields and controls can be tabbed through on the parent table of the workspace or script, using the keyboard's Tab key. You can manually specify the tab order value for each item or you can assign the tab order automatically.
Set Parent Table's Tab Indexes from Top to Bottom	Select this option to automatically assign tab order values for all items. When you select this option, the tab ordering will start with the upper left item on the parent table, proceed down the column, then continue at the top of the next column, ending with the item at the lower right. **Note:** This selection will reset any numerical ordering that has been defined using the Value property.
Set Parent Table's Tab Indexes from Left to Right	Select this option to automatically assign tab order values for all items. When you select this option, the tab ordering will start with the upper left item on the parent table, proceed across the row, then continue at the left of the next row, ending with the item at the lower right. **Note:** This selection will reset any numerical ordering that has been defined using the Value property.

Table 168: Behavior Properties Descriptions (Continued)

Property	Description
Value	Type a value in the property to customize the order in which fields and controls can be tabbed through on the workspace or script. The first field or control is 0, and each subsequent press of the Tab key steps through the items in numerical order. **Note:** By specifying a numerical order, you can define whatever tab sequence you want. However, for ease of use, it is usually best to follow the order of the fields and controls as they are arranged on the design space.

Label properties

The following table describes the properties on the Label group. The options in this group let you adjust the fonts and placement of labels for fields you add to your workspace or script.

Table 169: Label Properties Descriptions

Property	Description
Font	Select the font you want to use for the label from this drop-down menu.
Font Size	Select the font size you want to use for the label from this drop-down menu.
Bold/Underline/Italic/Strikethrough	Click these buttons to toggle font style attributes for the label.
Font Color	Select the font color you want to use from this drop-down menu.
Background Color	Select the background color you want to use from this drop-down menu. **Note:** This option is enabled when editing an element that has a background, such as the panel control.
Align Text Left/Center/Right	Click these buttons to move the label to the leftmost, center, or rightmost side of the available space for the label.
Label Position	Click this drop-down menu to select the label's position in respect to the field. You can position the label at the right, left, top, or bottom of the field. The default label position is to the left of the field.

Table 169: Label Properties Descriptions (Continued)

Property	Description
Text	Click this button to change the text for the label of a field or control. When changing the label for a control, such as a tab, a text box will display. Type the text you want for the label in the text box and press **Enter**. When changing the label for a field, the label will be highlighted when you click the Text button and you can edit the label on the design space. You can also click the label on the design space without clicking the Text button. To allow the use of shortcut keys (Alt + <selected character>), type an ampersand (&) in front of the character you want to be the shortcut key. For example, to allow staff members to move the focus to a control with the label "Details" by pressing **Alt+t**, type `De&tails`. **Note:** Text fields used in scripts are limited to 1,000 characters.

Layout properties

The following table describes the properties on the Layout group. The options in this group let you change the padding, margins, and height of workspace or script elements. You can also increase or decrease the number of rows or columns used by the selected element.

Table 170: Layout Properties Descriptions

Property	Description
Table Cell	Click this button to change the number of rows or columns used by the field or control on the design space.
Increase/Decrease Row Span	Select these options to increase or decrease the number of table rows used by the selected field or control. The number of rows used is increased or decreased by one each time this option is selected.
Increase/Decrease Column Span	Select these options to increase or decrease the number of table columns used by the selected field or control. The number of columns used is increased or decreased by one each time this option is selected.

Table 170: Layout Properties Descriptions (Continued)

Property	Description
Position	Click this button to select the position of the selected object on the table cell that contains it. You can also select options to stretch the object on the table cell.
Padding	Click this button to define the amount of space between the boundaries of the selected control and its contents on the left, top, right, and bottom. For example, you can specify that the text in a panel will begin 50 pixels below the top of the panel. The available options are None, Narrow, Medium, Wide, and Custom. Select Custom to define a specific number of pixels to use for the top, bottom, left, and right padding.
Margin	Click this button to define the amount of space between the selected control and other fields and controls on the left, top, right, and bottom. The available options are None, Narrow, Medium, Wide, and Custom. Select Custom to define a specific number of pixels to use for the top, bottom, left, and right margins.
Size	Click this button to specify the size of the selected control. For some controls, you can select Enable Auto Sizing to automatically adjust the control's height and width to its natural size. If you disable auto sizing, you can type the height and width (in pixels) of the field or control on the workspace. **Note:** On some fields and controls, the MultiLine or Set Fixed Height properties on the Design tab's Options group must be enabled before you can edit the Height property.

Options properties

The following table describes the buttons available on the Options group. The properties you can edit depend on the element you select. This table lists all properties in alphabetical order so you can easily find specific properties.

Table 171: Options Properties Descriptions

Property	Description
Accepts Return	Select this check box if you want staff members to be able to press Enter in a multi-line field.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Accepts Tab	Select this check box if you want staff members to be able to tab to the field.
Activity Position	Click this button to set the position of the activity status indicator on the Chat Transcript Control relationship item.
Allow Delete	Select this check box to allow agents to delete files that have been attached and saved to a record. If this check box is not selected, attached files can be deleted only if the Save button has not yet been clicked.
Allow Multiple Selections	Select this check box to allow agents to select more than one item in a list box control.
Allow Tab Reordering	Select this check box to allow staff members to drag and reorder the tabs of the selected tab set. If this check box is not selected, the tabs cannot be reordered by staff members.
Always Show Parent with Visible Child	Select this check box for a hierarchal menu to display parent items in cases where the parent is hidden but one or more of its children are visible. A parent displayed in this manner cannot be selected.
Anonymous	Select this check box to permit survey responses to be entered when a valid contact is not associated with the record being viewed. This option is available only if the survey allows anony-mous responses.
Answer ID	Click this button and type an answer ID for an Answer Display control.
Auto Ellipsis	Select this check box if you want an ellipsis (…) automatically added when the text of the title bar exceeds the space allocated to it.
Auto Scroll Control Position	Click this button to set the position of the auto scroll control on the Chat Transcript Control relationship item.
Border Style	Click this button to select a border style for the selected table con-trol. The available options are None, Fixed Single, and Fixed 3D.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Can Assign to Group	Select this check box to permit staff members to assign the record to a group rather than a specific staff member. If this check box is not selected, staff members must assign the record to a staff member within a group.
Cell Border Style	Click this button to select a border style for the cells in the selected table control. The available options are None, Single, Inset, Inset Double, Outset, Outset Double, and Outset Partial.
Control Context	Click this drop-down menu and select an option that controls how names in the Assigned field for tasks are grouped. The options are: • Default—Names are displayed in a flat alphabetical list. • Sales—Names are displayed by Manager hierarchy. • Incident—Names are displayed by Group hierarchy. • Answer—Names are displayed by Group hierarchy. • Organization—Names are displayed by Manager hierarchy. • Campaign—Names are displayed by Group hierarchy. • Document—Names are displayed by Group hierarchy. • Mailing—Names are displayed by Group hierarchy. • Survey—Names are displayed by Group hierarchy.
Default Channel	Click this button to define the default channels for customer entries and notes.
Default Channel for Customer Entry	Select the default channel to use for the customer's entry on a record from this list. Options include No Default, Phone (the default value), Fax, Post, Web, and Email.
Default Channel for Note	Select the default channel to use for the note on an incident, contact, organization, or opportunity from this list. Options include No Default, Phone, Fax, Post, Web, and Email.
Default Font	Click a drop-down menu from this button group to select a default font and font size for the Rich Text Incident Thread control.
Default Notification Action	Click this button to specify when to notify subscribers when an answer is updated. Options include No Change, Do Not Notify, Hourly, Daily, Weekly, and Monthly.
Default Phone Type	Click this button to select the default phone type that should be displayed on the workspace. For example, you can choose Office Phone or Mobile Phone.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Default Thread	Click this button to define the default thread type for new incidents or incidents being edited.
Default Thread on Edit	Click this drop-down menu and select an option to define the default thread for an incident being edited. Options include No Default, Private Note, Response (the default value), and Customer Entry.
Default Thread on New	Click this drop-down menu and select an option to define the default thread for a new incident. Options include No Default, Private Note, Response, and Customer Entry (the default value).
Default Value	Click this button and select From Workspace or From Script if you want to specify a field's default value. When this option is enabled, you can edit the field on the design space to specify the default value that will be used when the workspace or script is used to create a record. The value can be changed by staff members who have permission to edit the field. Refer to Using the Default Value property. **Note:** The default value is applied only to new records created in the workspace or script. Records that were created from other channels, such as the **Ask a Question** page, are not impacted.
Delay Page Load	Select this check box to prevent the web page specified in the browser control from loading until the tab the control is on is selected. When this option is disabled, the web page will load as soon as the workspace or script opens, even if the browser control is not initially displayed. **Note:** If the browser is visible when the workspace or script page is opened (for example, it appears on the top tab), it will always open immediately even if this property is enabled.
Disable Email Icon	Select this check box to disable the Send Email envelope button that appears next to the Email Addresses field. When this check box is cleared, clicking the Send Email button opens the contact email address in a new message in the workstation's default mail client, outside of Oracle Service Cloud.
Display Options	Click this button to select toolbar options for the Chat Control relationship item.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Show Toolbar	Select this option to display the Chat Control toolbar.
SmartAssistant	Select this option to display the SmartAssistant button on the Chat Control toolbar.
Search Knowledgebase	Select this option to display the Search Knowledgebase button on the Chat Control toolbar.
Standard Text	Select this option to display the Standard Text button on the Chat Control toolbar.
Filter Type	Click this button to select filter options for custom object or system attribute menus that are populated by the Accounts by Group or Accounts by Manager menu. The option you select will be used to filter the accounts listed in the menu based on account status. Available options include All Accounts, Enabled Accounts, or Accounts Enabled for Assignment.
Hide Report Commands	Select this check box to hide and disable the report commands (New, Open, Copy, Delete, Print, Forward, Assign, and Propose) on the workspace.
Image	Click this button to select the image you want to place on button or image controls. Refer to Working with button and image controls.
Image Align	Click this button to position an image added to a button in relation to the button text. Refer to Working with button and image controls.
Image Layout	Click this button to select how you want the button or image control sized. Refer to Working with button and image controls.
Increment	Type a number that defines the value an integer field is increased or decreased when the up or down arrow is clicked. The default value is 1.
Layout	Click this button to select whether the items in a radio button control are displayed vertically or horizontally.
Legacy Status Mode	Click this button to enable the legacy status indicator on the Chat Transcript Control relationship item.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Limit By Profile Interface(s)	Click this button to limit products and categories displayed on the Products and Categories relationship item to those that have administration visibility on the interfaces to which the staff member's profile has access.
Locale	Click this button to select a locale for the Policy Automation control. For information about Oracle Policy Automation, refer to Oracle Policy Automation Cloud Service. **Note:** To enable Oracle Policy Automation with Oracle Service Cloud, contact your Oracle account manager.
Max Length	Click this button and type the maximum number of characters the field can contain. You can enter values from 1 to 4,000.
Minimum Level	Click this button and type the minimum number of levels of products, categories, or dispositions that staff members must enter when working on incidents. The acceptable range is between 0 and 6.
Multiline	Select this check box to allow multiple lines in the field. If this option is not enabled, the field will be restricted to a single line.
No Time Portion	Select this check box to hide the time portion of date/time fields, such as the Date Created field. **Note:** If this option is selected for fields that can be edited, staff members will not be able to enter exact times. You may want exact times for reporting purposes.
Open Pop-ups in New Browser Control	Select this check box to open pop-up windows from the browser content in child browser controls. When this option is not selected, the control will fill the maximum allowed space. **Note:** If this check box is not selected, pop-ups will open in a full Internet Explorer browser, which can cause session variables to be lost. To ensure session variables are maintained, select the check box.
Password Cover	Type the character you want to use to hide the password when it is typed on the workspace. The default is an asterisk (*). **Note:** This option is available for use with the organization password field. You cannot add the contact password field to workspaces.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Permissions	Click this button to manage individual options available on the Rich Text Incident Thread control. Refer to Responding to incidents. **Note:** All permissions—except Always Default to Plain Text and Always Use Plain Text—are selected by default. Also, these permissions are enforced only for staff members using the workspace, and do not affect actions performed by workflow or script rules.
Follow Links	Select this option to allow agents to navigate to a linked URL in a web browser when they click the link in a committed thread. When this option is not selected, the function is not available and an error message is displayed when the agent clicks a link in a committed thread.
Follow Incident Reference # Links	Select this option to allow agents to open an incident when they click the incident reference number in a committed thread. When this option is not selected, the function is not available.
Allow Using Send On Save	Select this option to display the Send On Save check box on the Messages tab toolbar on an incident thread. When this option is not selected, the check box is hidden.
Allow Using SmartAssistant	Select this option to display the SmartAssistant button on the Messages tab toolbar on an incident thread. When this option is not selected, the button is hidden.
Allow Using Search Knowledgebase	Select this option to display the Search Knowledgebase button on the Messages tab toolbar on an incident thread. When this option is not selected, the button is hidden.
Allow Adding Standard Text	Select this option to display the Standard Text button on the Messages tab toolbar on an incident thread. When this option is not selected, the button is hidden.
Allow Toggling Thread Content to Plain Text	Select this option to allow an agent to toggle between using Plain Text and Rich Text format modes in incident thread entries. **Note:** When this option is selected, the Always Use Plain Text option is cleared.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Always Default to Plain Text	Select this option to use Plain Text format mode for a new incident thread entry. **Note:** When this option is selected, agents will be able to switch to Rich Text format mode if the Allow Toggling Thread Context to Plain Text option is also selected.
Always Use Plain Text	Select this option to allow only Plain Text format mode in incident thread entries. The Rich Text format mode will not be available to agents. **Note:** When this option is selected, the Allow Toggling Thread Content to Plain Text option is cleared and the Always Default to Plain Text option is selected.
Allow Adding Responses	Select this option to enable the Response item in the Add button drop-down menu on the Messages tab toolbar. When this option is not selected, the Response item is not displayed. **Note:** At least one of Allow Adding Responses, Allow Adding Customer Entries, or Allow Adding Notes options must be selected for the Add button to display on the Messages tab toolbar.
Allow Adding Customer Entries	Select this option to enable the Customer Entry item in the Add button drop-down menu on the Messages tab toolbar. When this option is not selected, the Customer Entry item is not displayed. **Note:** At least one of Allow Adding Responses, Allow Adding Customer Entries, or Allow Adding Notes options must be selected for the Add button to display on the Messages tab toolbar.
Allow Adding Notes	Select this option to enable the Private Note item in the Add button drop-down menu on the Messages tab toolbar. When this option is not selected, the Private Note item is not displayed. **Note:** At least one of Allow Adding Responses, Allow Adding Customer Entries, or Allow Adding Notes options must be selected for the Add button to display on the Messages tab toolbar.
Allow Adding CC Recipients	Select this option to allow display of the CC field in the Response title bar when the Send on Save check box is selected by an agent. The agent can show or hide the CC field by clicking the Options button on the Messages tab toolbar and selecting or clearing the Show CC check box.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Allow Adding BCC Recipients	Select this option to allow display of the BCC field in the Response title bar when the Send on Save check box is selected by an agent. The agent can show or hide the BCC field by clicking the Options button on the Messages tab toolbar and selecting or clearing the Show BCC check box.
Policy Model	Click this button to select a policy model to display on the Policy Automation control. For information about Oracle Policy Automation, refer to Oracle Policy Automation Cloud Service. **Note:** To enable Oracle Policy Automation with Oracle Service Cloud, contact your Oracle account manager.
Report	Click this button to open the Select Report window to select a report for the control. Refer to Adding reports and relationship items to custom workspaces and scripts. **Caution:** The Select Report window displays all reports, not just those that apply to the selected workspace. Be sure to select a report that applies to the workspace. For example, do not select an opportunity search report to appear in the Organization field of a contact record.
Report Behavior	Click this button to configure report behavior properties. Refer to Report properties.
Required for Solved/Waiting	Select this check box if staff members must select a value for the item before they can set a record's status to Solved or Waiting.
Response Options	Click this button to select options for the Rich Text Incident Thread control on incident workspaces or the Chat Control control on chat workspaces.
Allow Encoding Choice	Select this option to allow agents to choose between rendering chat comments as HTML or plain text.
Always Leave as Plain Text	Select this option to always render chat comments as plain text.
Always Send as HTML	Select this option to always render chat comments as HTML.
Confirm Response When Saving and Send On Save is Selected	Select this option if you want the staff member to confirm that the incident response should be sent.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Commit Response When Incident is Saved	Select this option if you want the staff response to be committed to the incident thread when the response is saved.
Add a Response When Selecting Send On Save if No Response Already Exists	Select this option to automatically display the response options panel when you select the Send on Save check box on the Rich Text Incident Thread control. Clearing the check box closes the response options. Additionally, when this property is enabled, clicking the slider on the Messages tab to open the response options panel automatically selects the Send on Save check box, and closing the response options clears the check box. If this option is disabled, then expanding the response options panel enables the Send on Save box, but clicking the Send on Save box does not automatically expand the panel. Clearing the Send on Save check box automatically collapses the panel, but collapsing the panel does not automatically clear the Send on Save check box.
Reassign the Incident When Send On Save is Selected	Click this drop-down menu and select one of the following options for reassigning an incident when a response is sent. • No Change—The incident's Assigned field does not change. • To Current Agent—The Assigned field changes to the staff member working the incident. • To Unassigned—The Assigned field is set to No Value.
Automatically Select Send On Save When Opening an Incident	Click this drop-down menu and select an option that indicates when an incident response should be sent automatically. The options are: • Never—A response is never sent automatically. • On New—A response is sent for a new incident. • On Edit—A response is sent when an incident is edited. • On New and Edit—A response is sent whenever an incident is added or edited. **Note:** To automatically select the Send on Save check box only when sending a response, an agent can click the slider bar at the left of the incident thread and enter the response using the response options section. Refer to Sending responses.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Change the Incident's Status when Send On Save is Selected	Click this drop-down menu and select an option for changing an incident's status when a response is sent. The options are: • No Change—The incident's status does not change when a response is sent. • To Waiting—The incident's status changes to Waiting when a response is sent. • To Solved—The incident's status changes to Solved when a response is sent.
RNT Mask	Click this button to view the mask for the selected custom field. Standard fields do not have mask properties. Refer to Adding and editing custom fields for information about specifying masks for custom fields.
Script	Click this button to open the Select a Script window to change the script used in a script control. Refer to Working with script controls.
Search Report	Click this button to open the Select Report window to select a search report. Refer to Adding reports and relationship items to custom workspaces and scripts. **Note:** This property is used for items that include a search report, such as the Contacts, Tasks, Guided Assistance, and Custom Object View relationship items.
Secondary Search Report	Click this button to open the Select Report window to select a secondary search report. Refer to Adding reports and relationship items to custom workspaces and scripts. **Note:** This property is used for relationship items that can include a secondary search report, such as the Contacts and Tasks relationship items.
Set Fixed Height	Select this check box to enable the Height layout property. When this option is not selected, the control will fill the maximum allowed space.
Show Categories	Click this button to show or hide the categories tree on the Products and Categories relationship item. The categories tree is visible by default.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Show Image	Select this check box to display the paper clip icon for file attachment and quote controls when files are attached to the record.
Show Navigation	Select this check box if you want the workspace to display the navigation controls for the selected guide.
Show Parent	Select this check box if you want the workspace to display the parent of the selected item (for example, a staff account's group in the Assigned field or the main product for a sub-product).
Show Products	Click this button to show or hide the products tree on the Products and Categories relationship item. The products tree is visible by default.
Show Row Count	Select this check box to display the number of records in a report. The number is displayed in parentheses next to the tab title.
Show Search Button	Select this check box to add the Search for a Guide button on the Guided Assistance relationship item. Clicking this button on a workspace opens a window where you can enter search criteria to find the guide you want. Refer to Adding guided assistance to workspaces. **Note:** If this check box is not selected on the workspace designer, the Search window can still be opened from a ribbon button on the workspace.
Show Search Inline	Select this check box to display search fields on the workspace to search for a guided assistance guide. Refer to Adding guided assistance to workspaces. **Note:** Selecting this check box prevents the Search for a Guide and Select a Guide buttons from displaying on the workspace, though these can still be accessed from a ribbon button.
Show Select Button	Select this check box to add the Select a Guide button on the Guided Assistance relationship item. Clicking this button on a workspace opens a window where you can select the guide you want from a list of available guides. Refer to Adding guided assistance to workspaces. **Note:** If this check box is not selected on the workspace designer, the Search window can still be opened from a ribbon button.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Siblings Visible	Click this drop-down menu and select True if you want the File Attachments controls to display information for the answer and all the answer's siblings. Select False if you want to display only the information for the answer.
Sort Provinces Alphabetically	Select this check box if you want the State/Province field to display in alphabetical order on the Address control. Clear this check box to display states and provinces in the sequence specified on the Countries editor. Refer to Adding and editing countries and provinces.
Spell Check	Select this check box to enable spell checking for the field or object when the workspace is spell checked.
Spell Check (for the Rich Text Incident Thread control)	Click this drop-down menu and select a spell check option from the following list. • True—The field's spelling is checked when a staff member clicks the Spell Check button on the ribbon. • False—The field's spelling is never checked. • As You Type—The field's spelling is checked automatically as the staff member types information in the field.
Summary Panel Height	Click this button to type the height of the summary panel in pixels. **Note:** This button is available only when the workspace's base tab set is selected.
Suppress Errors and Authentication Dialogs	Select this check box to suppress any warning prompts (such as script errors and authentication requests) that may occur in the browser control when a URL is loaded.
Survey	Click this button to select a survey for the Survey by Proxy control.
Tab Alignment	Click this button to select where you want tab sets placed on the dashboard. The available options are Left, Right, Top, and Bottom.
Thousands Separator	Select this check box to add a thousands separator to an integer when the value is typed on a workspace (for example, "10000" becomes "10,000").

Table 171: Options Properties Descriptions (Continued)

Property	Description
Thread Orientation	Click this drop-down menu to select a thread orientation for the Rich Text Incident Thread control. The available options are Vertical, Horizontal, or Horizontal with Splitter. By default, a vertical thread orientation is used. Refer to Responding to incidents.
Threshold Height	Click this button to type the threshold height for the summary panel in pixels. If the space available for the summary panel is less than this value, the summary panel becomes the first tab on the tab set. **Note:** The minimum value of the threshold height is 100 pixels greater than the value specified in the Summary Panel Height control.
Time Limit	Click this button to select the maximum amount of time that the report specified in the report control should take to generate. You can select a value up to 240 seconds. Specifying a time limit can improve performance since workspaces are unavailable until reports on the workspace generate. Reports that take longer than the specified time limit to generate will not be displayed on the workspace. Refer to Specifying report time limits.
Time Required	Click this button to select time requirements. This property is used with the Time Billed control.
Time Required for Edit	Select Time Required for Edit if you want staff members to be required to add a time billed entry each time they edit an incident. **Note:** An entry will not be required if the Time Billed relationship item is hidden on the workspace.
Time Required for Solved	Select Time Required for Solved if you want staff members to be required to add a time billed entry each time they solve an incident. **Note:** An entry will not be required if the Time Billed relationship item is hidden on the workspace.
Timer Position	Click this button to set the position of the timer status indicator on the Chat Transcript Control relationship item.
Trim Whitespace	Select this check box to trim leading and trailing white space on text fields.

Table 171: Options Properties Descriptions (Continued)

Property	Description
Up Down Align	Click this drop-down menu and select Left to position the up/ down arrows (for incrementing an integer field) on the left side of the field. Select Right to place the arrows on the right.
URL	Type the URL that should be accessed when the browser control is accessed on the workspace. You can also open files on your workstation or network by specifying a format of `file://<file path>`. **Note:** For information about passing variables through this URL, refer to Working with browser controls.
Visible	Select this check box if you do not want the flag control on the workspace to be visible.
Wrap Tabs	Select this check box if you want tabs in a tab group to wrap across multiple lines when there is insufficient space to display them all on a single line. Clear this check box if you want the tabs to be on a single line, requiring tab scrolling.
Wrap Text	Select this check box to wrap the text of the item's label if needed to fit the label in the space provided.

Customizing ribbons and Quick Access toolbars

When designing a workspace, or a script that will be used in a **workflow**, you can select which buttons to place on the ribbon and the Quick Access toolbar. Most of the buttons you can place on the ribbon can also be placed on the Quick Access toolbar. Staff members see only the buttons you select, which vary by the type of workspace or script you are creating.

Note Ribbon and Quick Access toolbar configuration options are available for scripts only when desktop workflows are enabled for your site. Contact your Oracle account manager to enable desktop workflows.

The following table lists the ribbon buttons available for each type of workspace. Buttons available to each script type are the same as those available to the corresponding workspace type, with the exception of the Expand button, which is not supported by scripts.

Button \ Workspace Type	Answer	Assets	Chat	Contact	Custom Object	Incident	Opportunity	Organization	Quote	Quote Product	Task	Multi Edit Workspaces
Add to Incident			•									
Add to New Incident			•									
Appointment				•		•	•	•			•	
Change Lead Role			•									
Check Links	•											
Collaborate						•						
Complete											•	X
Conference			•									
Copy	•	•		•	•	•	•	•			•	
Delete	•	•		•	•	•	•	•			•	
Expand/Collapse	•	•	•	•	•	•	•	•	•	•	•	•
Forward						•	•				•	
Guided Assistance						•						
Info	•	•		•	•	•	•	•	•	•	•	
Join			•									
Leave			•									
Links	•	•		•	•	•	•	•	•	•	•	•
New	•	•		•	•	•	•	•			•	
New Opportunity			•			•						
Offer Advisor			•			•						
Preview	•											
Print	•			•		•	•	•	•		•	
Propose						•						
Refresh	•	•		•	•	•	•	•			•	
Reject							•					Y
Reset Password				•		•	•				•	
Save	•	•		•	•	•	•	•	•	•	•	
Save and Close	•	•		•	•	•	•	•	•	•	•	•
Screen Sharing			•									
Send						•			•			
Send and Close						•						
Spell Check	•	•	•	•	•	•	•	•	•	•	•	•
Terminate			•									
Transfer			•									
Validate Category Links	•											Z
Wrap-up			•									

X: Only on Task Multi-Edit workspaces
Y: Only on Opportunity Multi-Edit workspaces
Z: Only on Answer Multi-Edit workspaces

- Editing workspaces
- Editing agent scripts
- Desktop Overview

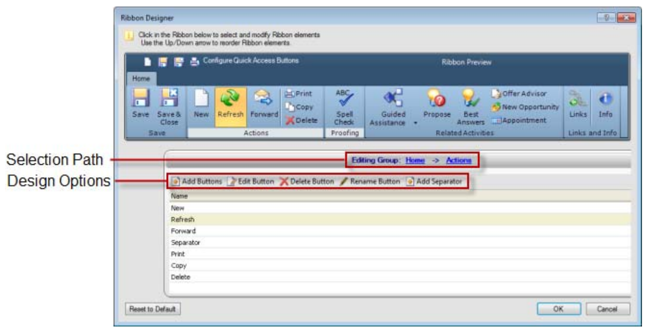
Working with ribbon and Quick Access toolbar buttons

Buttons are added and removed from the ribbon and Quick Access toolbar using the ribbon designer. You can add tabs and tab groups to your ribbon to organize the buttons on the ribbon, and you can arrange tabs, groups, and buttons in any order you want. You can also change buttons' display options to help optimize the ribbon's display. Certain ribbon buttons include special features you can use to access record information and links to web pages.

Note By default, the ribbon and Quick Access toolbar for a new workspace or script contain the same buttons as the standard workspace for the corresponding workspace type. Therefore, it is not necessary to edit the ribbon or Quick Access toolbar if the standard buttons are adequate. Also, if you have made changes, you can restore the default content at any time by clicking the Reset to Default button on the ribbon designer window.

To open the ribbon designer

From the open workspace or script, click the Home tab and click the Ribbon button.



The top of the ribbon designer features a ribbon preview that shows the tabs, button groups, and buttons currently on the ribbon as well as the buttons on the Quick Access toolbar. The bottom part of the ribbon designer includes a clickable path to the ribbon item currently selected on the preview, design options for customizing the selected item, and a list of ribbon items editable from the same path. The path, design options, and list change dynamically as different items are selected on the ribbon preview.

For instance, when you select the Save button group on the default Home tab, the ribbon designer displays the path of the selected group (Editing Tab: Home), a list of the button groups currently defined at that location, and design options for customizing the button groups. Clicking a group or a button on the ribbon preview changes the design options and list to reflect the item you have selected.

Customizing ribbon content

Ribbon tabs contain button groups, which contain buttons. You can easily add, remove, or rename any of these items using the ribbon designer. You can also add vertical separators to organize buttons within a group for clarity. To select an item you want to edit, simply click it on the preview ribbon shown on the designer.

Tip You can right-click items on the ribbon designer to access a list of actions you can take on each item. This gives you a shortcut to many of the same functions described in the following procedures.

To customize the ribbon

1 To add a tab to the ribbon, click the Add Tab button on the bottom of the ribbon designer.

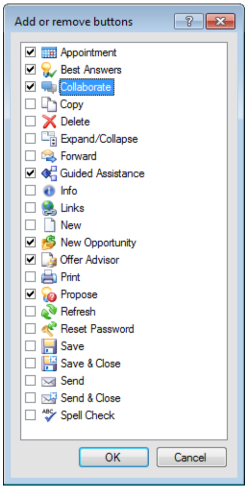
- **a** Type a name for the new tab in the Ribbon Tab Name field.
- **b** Click the OK button.

2 To add a button group to a tab, click the tab you want to add the group to (either on the ribbon preview or in the item list).

- **a** Click the Edit Tab button.
- **b** Click the Add Group button.
- **c** Type a name for the new group in the Group Name field.
- **d** Click the OK button.

3 To add a button to a button group, click the button group you want to add the button to (either on the ribbon preview or in the item list).

- **a** Click the Edit Group button.
- **b** Click the Add Buttons button to open the Add or Remove Buttons window.



c Select the check boxes next to the buttons you want to add to the button group.
d Click the OK button.

When adding buttons to the ribbon, be sure to include only buttons that agents actually need to use. If a button group contains numerous buttons, you can either create another group to make the ribbon easier to navigate, or you can edit the group and click the Add Separator button to add a vertical line to the group to break up buttons in the group.

4 Click the OK button on the ribbon designer to save the changes to the ribbon.

To rename a tab, group, or button

1 To rename a tab, click the tab you want to rename (either on the ribbon preview or in the item list).

Note The Home tab cannot be renamed.

a Click the Rename Tab button. The Rename Tab window opens.
b Type a new name for the tab in the Tab Name field.
c Click the OK button to save the new name.

2 To rename a button group, click the button group you want to rename.

a Click the Rename Group button. The Rename Group window opens.
b Type a new name for the group in the Group Name field.
c Click the OK button to save the new name.

3 To rename a button, click the button you want to rename.
a Click the Rename Button button. The Rename Button window opens.
b Type a new name for the button in the Button Name field.
c Click the OK button to save the new name.

4 Click the OK button to close the ribbon designer.

To move tabs, groups, buttons, and separators

1 Click the tab, group, button, or separator you want to move.

2 Click the up or down arrow at the right of the item list to move the item where you want it.

3 Click the OK button to close the ribbon designer.

To delete tabs, groups, buttons, and separators

Caution If you delete a tab, all the groups and buttons on the tab are also deleted. If you delete a button group, all the buttons in the group are deleted. The Home tab cannot be deleted.

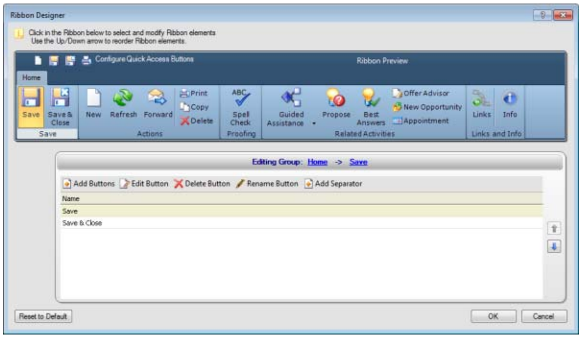
1 Click the tab, group, button, or separator you want to delete.

2 Click the Delete Tab, Delete Group, or Delete Button button.

3 Click the Yes button to confirm the deletion.

Editing ribbon button display options

You can edit buttons on the ribbon to change their size and to specify if text should be included with the icons. The following figure shows a ribbon with the available button display options.

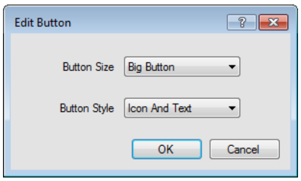


To edit ribbon buttons

Tip You can also right-click tabs, groups, and buttons on the ribbon preview to access Edit, Delete, and Rename options.

1 On the ribbon preview, select the button you want to edit.

2 Click the Edit Button button to open the Edit Button window.



3 To select a different size for the button, select Big Button or Small Button from the Button Size drop-down menu.

4 To select a different style for the button, select Icon and Text or Icon Only from the Button Style drop-down menu.

5 Click the OK button to close the Edit Button window.

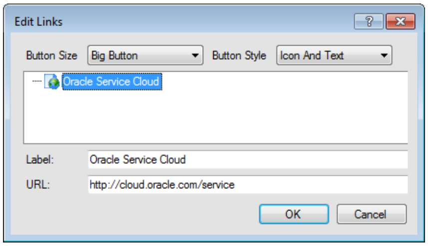
Adding URL links to the Links button

The Links button is added to the ribbon in the same manner as other ribbon buttons. However, this button has unique functionality. You can edit the Links button to create a menu of links to URLs. When staff members click the Links button drop-down menu, they will see the list of links you defined. Selecting one of the links takes them to the specified URL.

To set a link to a URL on the Links button

1 Click the Links button (either on the ribbon preview or in the item list). Refer to Customizing ribbon content for the procedure to add buttons to the ribbon.

2 Click the Edit Button button to open the Edit Links window.



3 Select the size of the Links button from the Button Size drop-down menu.

4 Select whether to display the button with an icon and text or only an icon from the Button Style drop-down menu.

5 Right-click the link browse tree and select Add Link.

6 Type the name of the link (what staff members will see on the menu) in the Label field.

7 Type the URL in the URL field that will open when staff members click the link.

8 To remove a link, right-click the link you want to remove and select Remove Link.

9 To add a folder, right-click the link browse tree and select Add Folder.

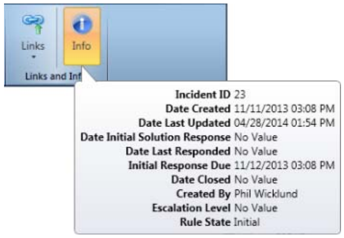
   a Type the name of the folder in the Label field.

10 To add a separator, right-click the link browse tree and select Add Separator.

11 Click the OK button to save the changes to the Links button.

Adding information to the Info button

The Info button is added to the ribbon in the same manner as other ribbon buttons. However, the Info button has unique functionality. You can edit this button to add information about the record being edited on the workspace or script. When staff members hover over the button or click it, they can view the information you want to display. An example of the information displayed on the Info button follows.

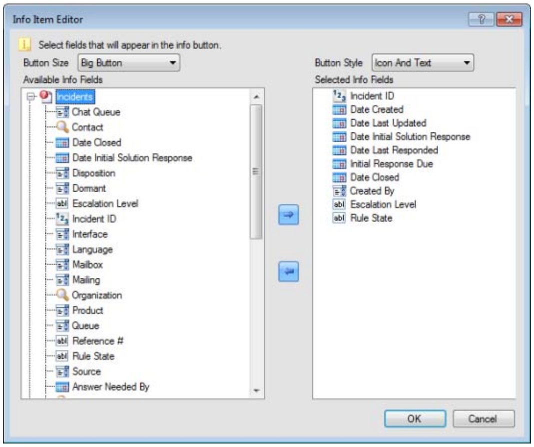


To reduce clutter on your workspace, consider configuring the Info ribbon button to show fields that are always read only, such as an incident's Date Created and Date Updated fields.

To set information options on the Info button

1 Click the Info button, either on the ribbon preview or on the bottom of the designer. Refer to Customizing ribbon content for the procedure to add buttons to the ribbon.

2 Click the Edit Button button to open the Info Item Editor.



3 Select the size of the Info button from the Button Size drop-down menu.

4 Select whether to display the button with an icon and text or only an icon from the Button Style drop-down menu.

5 Expand the field tree in the Available Info Fields column and select the fields you want to add to the Info button.

6 Click the right arrow to place the fields in the Selected Info Fields column.

Note Fields are displayed on the Info button in the order they are added.

7 To remove fields from the Info button, select the fields in the Selected Info Fields column and click the left arrow to remove the fields.

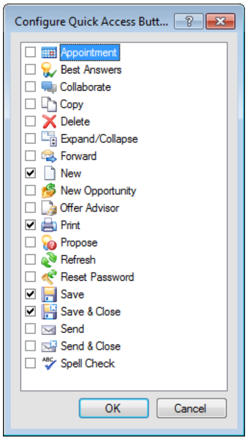
8 Click the OK button to save the changes to the Info button.

Customizing the Quick Access toolbar

In addition to the tabs, button groups, and buttons on the ribbon, you can customize the Quick Access toolbar to add buttons that are commonly used by your staff members. For example, the Save button is often added to the Quick Access toolbar so records can quickly be saved without having to select a tab on the ribbon to access the Save button.

To add or remove Quick Access toolbar buttons

1 Click Configure Quick Access Buttons on the ribbon preview's Quick Access toolbar. The Configure Quick Access Buttons window opens.



2 Select the check boxes next to the buttons you want to add to the Quick Access toolbar.

Tip Buttons will appear on the Quick Access toolbar in the order you select them.

3 Clear the check boxes next to the buttons you do not want.

4 Click the OK button to close the window. The buttons on the Quick Access toolbar shown on the ribbon designer are updated to reflect the changes you made.

Restoring default content

After you edit a ribbon, you may decide you want to restore the ribbon's default content. The ribbon's defaults can be restored at any time. When you restore the defaults, the content on the ribbon's Quick Access toolbar is also reset. In addition, buttons on the ribbon will be reset to use their default size and style.

To restore default content on the ribbon and Quick Access toolbar

1 On the lower left corner of the ribbon designer, click the Reset to Default button.

2 Click the Yes button to reset the ribbon's default content.

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Desktop Workflows

When following elaborate business processes, staff members must often evaluate critical information and perform a variety of actions across multiple **records**. To help promote efficiency and reduce the chances for human error, Oracle Service Cloud lets you create highly customized desktop workflows that guide agents through complex customer interactions and data updates.

A desktop workflow is a sequence of **workspaces**, **scripts**, **decisions**, and **actions**—even other embedded workflows—that supports a business process. Using an intuitive design interface, you define a workflow by assembling a set of elements into a logical order to form a **flow diagram**, then adding decision logic to advance the flow.

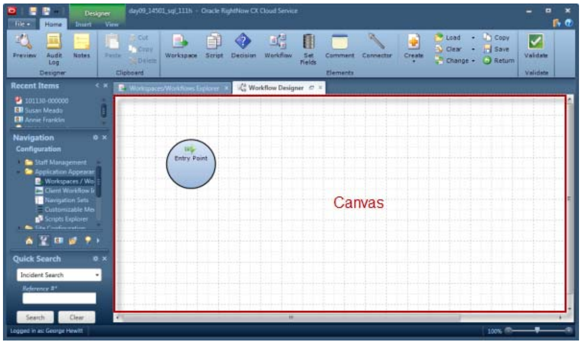
Once you have designed a workflow, you can provide staff members access to it by selecting it in place of a workspace for an editor within their **profile**. When a record is opened into that editor (an incident, for example), the staff member is guided dynamically through the workflow, starting at the entry point. **Events** and **conditions** are evaluated and executed in the sequence you have specified. (For instance, when a staff member updates the value of a field, the workflow can evaluate the update and open a related record in a different workspace.)

In this way, you can provide your staff with an environment tailored to their skills and responsibilities. When their activities are supported by an optimized workflow, staff members can worry less about remembering the details of your complex business processes and focus more on completing them accurately.

Note Before designing desktop workflows, it is important to first become familiar with workspaces, **workspace rules**, **guides**, agent scripts, and **script rules**—and the strengths and benefits of each—to better understand how workflows are used to integrate them. Refer to Desktop Overview.

Desktop workflow design canvas and ribbon

When editing a desktop workflow, you perform most tasks using the ribbon and canvas. These resources provide all of the tools and elements you need to design any workflow, simple or complex.



The workflow design ribbon includes three standard tabs (Home, Insert, and View) as well as two contextual tabs (Element Tools and Path Tools) that become visible when an element or connector is selected. Each tab has one or more groups containing buttons you can use to modify the desktop workflow or its elements on the canvas.

Home tab

The Home tab gives you access to options that impact the entire desktop workflow. For example, you can select workflow elements, perform basic editing functions, add notes, and validate and preview the workflow.

The groups and buttons on the Home tab are described in the following table.

Table 172: Home Tab Description

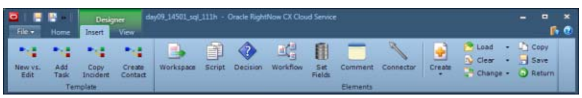
Group/Button	Description
Designer	The buttons in this group provide access to basic design functions.

Table 172: Home Tab Description (Continued)

Group/Button	Description
Preview	Click this button to preview the desktop workflow. Refer to Previewing workflows.
Audit Log	Click this button to view a history of all actions taken on the desktop workflow, such as when it was created and edited and by whom.
Notes	Click this button to add notes about the desktop workflow.
Clipboard	The buttons in this group provide access to basic editing commands when working with components on the canvas. **Note:** Clipboard functions are restricted to the open workspace. They cannot be used to copy elements from one workflow to another.
Paste	Click this button to paste the contents of the clipboard.
Cut	Click this button to cut selected elements from the canvas to the clipboard.
Copy	Click this button to copy selected elements from the canvas to the clipboard.
Delete	Click this button to delete selected elements from the canvas.
Elements	The buttons in this group allow you to add elements to your flow diagram. For a description of available elements, refer to Designing a flow diagram. **Note:** Elements can also be accessed from the Insert tab.
Validate	Click this button to check the flow diagram for errors. Refer to Workflow validation.

Insert tab

The Insert tab allows you to add components to your flow diagram, either one at a time or in predefined workflow templates.



The groups and buttons on the Insert tab are described in the following table.

Table 173: Insert Tab Description

Group/Button	Description
Template	The buttons in this group allow you to select a predefined flow template to apply to your desktop workflow. Refer to Workflow templates. **Caution:** When you add a template, any content you previously added is deleted from the canvas.
New vs. Edit	Hover over this button to see a preview of the New vs. Edit workflow template. Click the button to add the template to the canvas. Refer to New vs. Edit.
Add Task	Hover over this button to see a preview of the Add Task workflow template. Click the button to add the template to the canvas. Refer to Add Task.
Copy Incident	Hover over this button to see a preview of the Copy Incident workflow template. Click the button to add the template to the canvas. Refer to Copy Incident.
Create Contact	Hover over this button to see a preview of the Create Contact workflow template. Click the button to add the template to the canvas. Refer to Create Contact.
Elements	The buttons in this group allow you to select elements to add to your flow diagram. For a description of available elements, refer to Designing a flow diagram. **Note:** Elements can also be accessed from the Home tab.

View tab

The View tab provides options for changing your view of the design canvas.

The groups and buttons on the View tab are described in the following table.

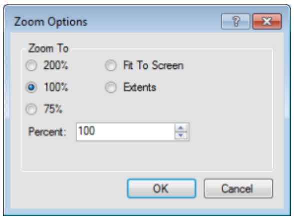
Table 174: View Tab Description

Group/Button	Description
Canvas	The settings in this group allow you to select canvas options. **Note:** Oracle Service Cloud remembers any changes you make to these settings to give you a consistent, personalized design experience.
Element Labels	Select this check box to display labels for elements in the diagram. Name labels are displayed by default.
Connector Labels	Select this check box to display labels for connectors in the diagram. Labels are displayed by default.
Validation Results	Select this check box to display validation icons in the diagram. Validation results are hidden by default. Refer to Workflow validation.
Working Record	Select this check box to display **working record** labels for elements in the diagram. Labels are displayed by default.
Grid	Select this check box to display the design grid. The grid is displayed by default.
Grid Size	Click this drop-down menu to select the size of the canvas grid.
Zoom	The buttons in this group allow you to select a zoom level for the canvas.
Zoom	Click this button to access the Zoom Options window. Refer to To select zoom options.
100 percent	Click this button to view the canvas at its normal size.
Fit To Screen	Click this button to adjust the zoom level to show all elements.
Extents	Click this button to show the entire canvas.

As described in the previous table, you can change the view of the design canvas from the View tab to more easily review and edit your flow diagram. Included in these controls is the ability to adjust the zoom level.

To select zoom options

1 From an open workflow, click the Zoom button on the View tab. The Zoom Options window opens.



2 To specify a desired zoom level, select a radio button in the Zoom To section.

  a To adjust the zoom level to show all components, select the Fit to Screen radio button.

  b To show the entire canvas, select the Extents radio button.

3 Type a zoom percentage in the Percent field. Click the up or down arrow to increase or decrease the value.

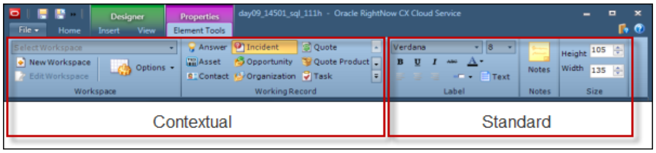
Tip You can also change the magnification of the canvas using the zoom slider located on the bottom right corner.

4 Click the OK button to close the window.

Contextual tabs

When you select an element or connector on the canvas, the ribbon displays a fourth contextual tab. When an element is selected, the Element Tools tab appears. This tab is divided into two sections. On the left are contextual groups and buttons, meaning they change depending on the element selected. On the right are standard groups and buttons, meaning they display no matter what element is selected.

The following figure displays the Element Tools tab and shows the contextual group of buttons for the Workspace element on the left and the standard group of buttons on the right.

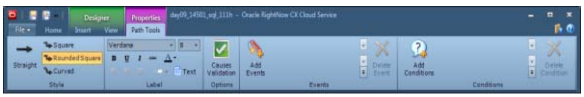


The contextual groups and buttons are described in procedures later in this document. The standard groups and buttons on the Element Tools tab are described in the following table.

Table 175: Element Tools Tab Description

Group/Button	Description
Label	The buttons in this group let you change the font style, size, and color of the element labels. You can select font attributes, such as bold and italic, and change the text's alignment.
(Label Position)	Click this button to select the position of the label relative to the element. The default label position of a new element is Inside.
Text	Click this button to type the text of the element label.
Notes	Click this button to type notes about the element.
Size	The buttons in this group allow you to change the height and width of the element.

Another contextual tab that will display on the ribbon is the Path Tools tab. This tab displays when you select a connector. The buttons on this tab allow you to format the connector and change the connector type.



The standard groups and buttons on the Path Tools tab are described in the following table. Refer also to Linking elements with connectors.

Table 176: Path Tools Tab Description

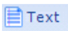
Group/Button	Description
Style	The buttons in this group allow you to change the line style of the selected connector. Available styles include straight, square, rounded square, and curved. Rounded square is the default connector style.
Label	The buttons in this group let you change the font style, size, and color of the connector label. You can select font attributes, such as bold and italic, and change the text's alignment.
 (Label Position)	Click this button to select the position of the label relative to the element. The default label position of a new element is Inside.
	Click this button to type the text of the element label.
Options	The button in this group lets you enable or disable forced validation for preceding script or workspace elements.
Causes Validation	Click this button to force a preceding script or workspace to be validated before the path is followed.
Events	The buttons in this group allow you to add and delete events that cause the path to be followed. Refer to Defining connector events and conditions. **Note:** At least one event must be defined when connecting from a workspace, script, or workflow element.
Add Events	Click this button to add events to the connector.
Events List	This list displays events that have been added to the connector.
Delete Event	Click this button to delete an event selected in the list.
Conditions	The buttons in this group allow you to add and delete conditions associated with the connector.
Add Conditions	Click this button to add conditions to the connector. Refer to Defining connector events and conditions.
Conditions List	This list displays conditions that have been added to the connector.

Table 176: Path Tools Tab Description (Continued)

Group/Button	Description
Delete Condition	Click this button to delete a condition selected in the list.

Creating workflows

Oracle Service Cloud provides an intuitive graphical interface for creating and editing desktop workflows. When designing a workflow, you can drag elements from the Home or Insert tab and order them on the canvas.

To create a desktop workflow

1 Click the Configuration button on the navigation pane.

2 Double-click Workspaces/Workflows under Application Appearance. The Workspaces/Workflows explorer opens on the content pane.

Note If the Desktop Workflow feature is not enabled on your site, you will see only Workspaces listed under Application Appearance. To enable desktop workflows, contact your Oracle account manager.

3 Click the New Workflow button on the ribbon to open a new desktop workflow with a blank design canvas.

4 To design the flow diagram, refer to Designing a flow diagram.

5 Click the Save and Close button on the Quick Access toolbar to save the desktop workflow. The Save As window opens.

Note You can also click the Save button to save the workflow without closing it.

Before saving, Oracle Service Cloud automatically validates your flow diagram and reports any errors. Click the Cancel button to correct errors before saving or click the Continue button to save the flow in its current state. However, the workflow will not function properly until all validation errors are corrected.

6 Select the folder you want to save the desktop workflow in and type the name of the desktop workflow in the Name field.

7 Click the Save button to save the desktop workflow.

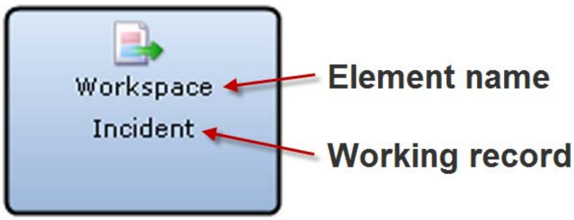
Designing a flow diagram

A desktop workflow is defined by dragging elements to the canvas, ordering them, and connecting them to form a flow diagram. The flow diagram is a graphical representation of the actions and decisions your workflow will perform and the order in which it will perform them. Your flow diagram can be as simple as a single path connecting a few workspaces or it can be complex, routing your staff members through dozens of workspaces, scripts, actions, and decisions. The intuitive graphical interface accommodates most business processes, extending access to advanced features and functions found throughout the application.

When an element is selected on the canvas, an Element Tools ribbon tab appears, allowing you to define its attributes, which vary by element type. For example, Workspace elements are used in workflows to display records using a designated workspace. Therefore, when adding a Workspace element, you must specify the workspace you want to use and the record you want to display.

When a record is opened in a staff member's workflow session, it is loaded into a memory space called the record pool, along with all of its associated records (such as contact and organization). As additional records are opened in the same workflow session, those records are added to the same record pool. Because many records are often open in the record pool at once, the term "working record" is used to describe the record being acted on by a specific element.

Each element on the canvas displays an icon and two labels that help to identify its function. The top label contains the element's name. The bottom label identifies the element's working record. The icon varies by element type as well as the working record's record type.



When an element is selected on the canvas, you can select a working record from the Working Record button group on the Element Tools tab. If multiple records of the same record type are open in the record pool, the Working Record button group will expand with additional buttons so you can select the specific record you want the element to act on. For example, if several incidents are open in the record pool, you can set a Workspace element to display the incident that was opened to initiate the workflow (the initial record), the most recent incident opened in the workflow (the last record), or an incident that has been named elsewhere in the workflow (a named record).

For a menu of available working records, select an element on the workspace, click the Element Tools tab, and then click the Expand Working Records button below the scroll bar in the Working Record button group.

Important If a workflow is unable to locate an open record that matches the designated working record, Oracle Service Cloud will display a workflow execution error and end the workflow session.

The function of the working record varies by element type, as described in the table in the following procedure.

To create a flow diagram

1 From the open workflow, drag and drop an element from the ribbon onto the canvas. Refer to the following table for a description of the available elements.

Table 177: Desktop Workflow Elements

Element/Menu	Description
Workspace	Drag and drop this element to open the working record in a workspace. Refer to Editing Workspace attributes.
Script	Drag and drop this element to initiate a script. Refer to Editing Script attributes. **Note:** Script elements are only available when scripting is enabled. For information about enabling scripts, contact your Oracle account manager.
Decision	Drag and drop this element to branch the workflow based on conditions that you define. The working record defines the record and fields available for conditions. Refer to Editing Decision attributes.
Workflow	Drag and drop this element to nest another workflow into the open workflow. The working record defines the record that opens in the embedded workflow. Refer to Editing Workflow element attributes.

Table 177: Desktop Workflow Elements (Continued)

Element/Menu	Description
Set Fields	Drag and drop this element to set values for one or more fields in the working record. Refer to Editing Set Fields attributes.
Comment	Drag and drop this element to add comments or notes to the workflow. Refer to Adding comments to a workflow.
Connector	Drag and drop this element to add a connector to the workflow. Refer to Linking elements with connectors.
Create	Click this drop-down menu and drag and drop a record type to create a new record in your workflow. You can choose to create an answer, contact, incident, opportunity, organization, quote, quote product, or task. Refer to Editing Create attributes.
Load	Click this drop-down menu and drag and drop a record type to load a record into your workflow based on a report query. You can choose to load an answer, contact, incident, opportunity, organization, quote, quote product, or task. Refer to Editing Load attributes.
Clear	Click this drop-down menu and drag and drop a record type to clear the association between the working record and an organization, contact, answer, incident, or opportunity. Refer to Editing Clear attributes.
Change	Click this drop-down menu and drag and drop a record type to associate the working record to a different organization, contact, answer, incident, or opportunity. Refer to Editing Change attributes.
Copy	Drag and drop this element to copy the working record and give it a name that can be referenced later in the workflow. Refer to Editing Copy attributes.
Save	Drag and drop this element to save all records open in the workflow. To close the records after saving, click the Close After Save button on the ribbon. Refer to Editing Save attributes. **Note:** Business rules will be run on all open records at the time the Save element is triggered.

Table 177: Desktop Workflow Elements (Continued)

Element/Menu	Description
Return	Drag and drop this element to return to a parent workflow from a nested workflow. Edit the element label text to define a return event name that can be referenced in the subsequent connector in the parent workflow. Refer to Editing Return attributes.

Important A quote product created and saved by automation elements cannot be edited afterward in the same workflow. If need arises, the Save element should be moved to occur after the edit in the sequence, or the Save element should be omitted and staff should be directed to click the Save button instead.

2 To connect one element to another, click an anchor on the first element and drag the connector to an anchor on the second element. The anchor is highlighted when the connector is able to link to it. The connector arrow will point from the first element to the second. Refer to Linking elements with connectors.

3 To change the formatting of an element, select the element and refer to the following table.

Table 178: Element Tools Tab Description

Group/Button	Description
Label	The buttons in this group let you change the font style, size, and color of the element labels. You can select font attributes, such as bold and italic, and change the text's alignment.
(Label Position)	Click this button to select the position of the label relative to the element. The default label position of a new element is Inside.
Text	Click this button to type the text of the element label.
Notes	Click this button to type notes about the element.
Size	The buttons in this group allow you to change the height and width of the element.

4 To cut, copy, or paste one or more elements, click the appropriate button on the Clipboard group of the Home tab.

5 To undo an action on the canvas, click the Undo button on the Quick Access toolbar.

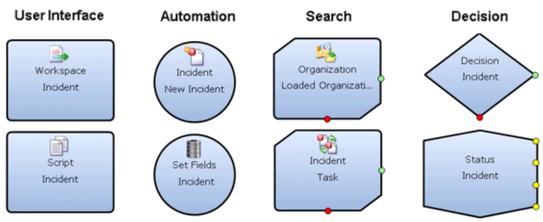
6 To redo an action on the canvas, click the Redo button on the Quick Access toolbar.

Editing element attributes

Once you have added an element to the canvas, you must edit its attributes to make it functional. You can hover over any element on the canvas to see its type, name, and other information.

Important You must define attributes for each element added or a validation error will occur when attempting to save the workflow. Refer to Workflow validation.

Elements vary by shape according to their functions.



- **User Interface**—Rectangular elements used to denote items that display to staff members, such as workspaces, scripts, and other embedded workflows.
- **Automation**—Circular elements used to denote automated events that run in the background, such as setting field values and creating and saving records.
- **Search**—Polygonal elements that require staff members to perform a search, such as loading a record or associating a record with another record.
- **Decision**—Diamond-shaped and polygonal elements that denote logical evaluations that are used to branch the flow across two or more paths based on conditions that you define.

Editing Workspace attributes

The Workspace element is used to display the **working record** in a workspace. Once you add this element to your flow diagram, you must edit its attributes to associate it with a new or existing workspace. You must also select the working record that the workspace will display.

Note Multi-edit and chat workspaces cannot be associated to a Workspaces element.

To edit Workspace attributes

1 From your open workflow, select a Workspace element on the canvas. The Element Tools tab displays on the ribbon.

2 Click a button in the Workspace button group described in the following table. The element's name label is updated with the name of the selected workspace.

Table 179: Workspace Attributes Description

Button	Description
Select Workspace	Click this drop-down menu to select a workspace to use in the workflow.
New Workspace	Click this button to select a new workspace type or import a workspace definition. For information about creating a new workspace, refer to Editing workspaces. For information about importing a workspace, refer to Exporting and importing workflows.
Edit Workspace	Click this button to edit the selected workspace. Refer to Editing workspaces.
Options	Click this drop-down menu to access workspace attribute options.
Enable Save	Select this option to include the Save button group when displaying a record with the workspace. To hide the Save button group, clear this option. This button is enabled by default.

3 Click a button in the Working Record button group to select the record you want to display using the workspace. The element's working record label is updated with the name of the selected working record.

4 If more than one record of the selected type is open in the record pool, click a button on the right of the Working Record button group to select the record you want to display using the workspace.

Tip For a menu of available records, click the Expand Working Records button below the scroll bar in the Working Record button group.

Editing Script attributes

The Script element is used to open the **working record** in a **script**. Once you add this element to your flow diagram, you must edit its attributes to associate it with a new or existing script. You must also select the working record that will be passed to the script.

Note When a script is included in a workflow, be sure it includes a field, an exit script event, a finish script event, or a rule containing a named event so that the flow can be advanced. Field changes, exit script events, and finish script events can be used to advance the flow, as can a script rule that fires a named event. Refer to Using events in workspace and script rules.

To edit Script attributes

1 From your open workflow, select a Script element on the canvas. The Element Tools tab displays on the ribbon.

2 Click a button in the Script button group described in the following table. The element's name label is updated with the name of the selected script.

Table 180: Script Attributes Description

Button	Description
Select Script	Click this drop-down menu to select a script to use in the workflow.
New Script	Click this button to select a new script type or import a script definition. For information about creating a new script, refer to Creating agent scripts. For information about importing a script, refer to Exporting and importing scripts.
Edit Script	Click this button to edit the selected script. Refer to Editing agent scripts.
Options	Click this drop-down menu to access workspace attribute options.
Enable Save	Select this option to include the Save button group when displaying a record in the script. To hide the Save button group, clear this option. This button is enabled by default.

3 Click a button in the Working Record button group to select the record you want to pass to the script. The element's working record label is updated with the name of the selected working record.

Note Because quotes and quote products have no corresponding script type, they are not available as working records for Script elements.

4 If more than one record of the selected type is open in the record pool, click a button on the right of the Working Record button group to select the record you want to pass to the script.

Tip For a menu of available records, click the Expand Working Records button below the scroll bar in the Working Record button group.

Editing Decision attributes

The Decision element is used to branch your workflow based on conditions that you define. Once you add this element to your flow diagram, you can edit its attributes to branch your flow to different paths based on whether certain conditions are met.

The decision can be based on a simple "yes/no" evaluation of one or more conditions, such as the identity and profile of the logged-in account, the **working record's** creation state, and the value of a specified field. If all conditions are met, the Yes path is followed. If any conditions are not met, the No path is followed.

Alternately, you can base a decision on a single field that has multiple possible values, with each selected value having its own outgoing path. For example, by basing a decision on the incident Status field, you can route incidents down different paths based on their status.

Note The fields available for evaluation in a condition will vary based on the working record type selected for the decision.

To define Decision attributes

1 From your open workflow, select a Decision element on the canvas.

2 From the Working Record button group on the Element Tools tab, select a working record to associate to the decision. The element's working record label is updated with the name of the selected working record.

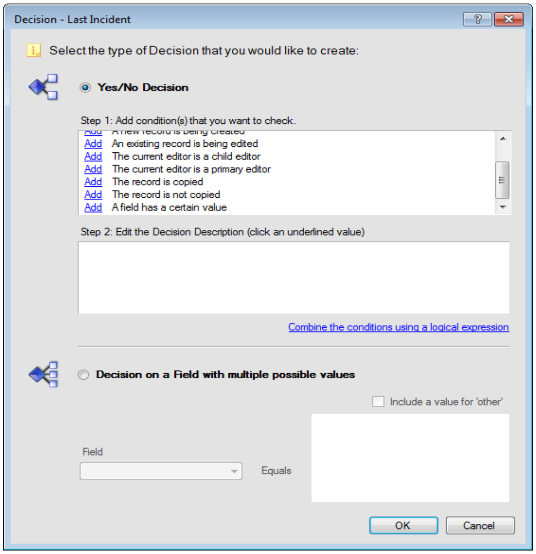
3 If more than one record of the selected type is open in the record pool, click a button on the right of the Working Record button group to select the record you want to associate to the decision.

Tip For a menu of available records, click the Expand Working Records button below the scroll bar in the Working Record button group.

4 Click the Edit button on the ribbon. The Decision window opens.

Or

Double-click the Decision element.



5 To define conditions for a yes/no decision, refer to [To define conditions for a Yes/No decision](#).

6 To define conditions based on a field with multiple possible values, refer to [To define conditions based on a field with multiple possible values](#).

7 Click the OK button to save the decision attributes.

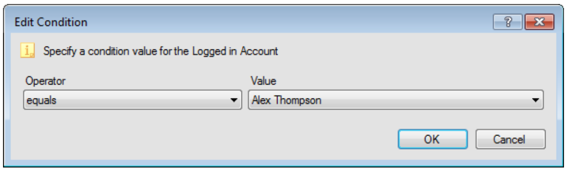
To define conditions for a Yes/No decision

1 On the Decision window, click Add next to the condition you want to add to the decision description. Available conditions are described in the following table.

Table 181: Decision Conditions Description

Condition	Description
The logged in account has a certain value	Add this condition to verify the identity of the logged-in account.
The logged in account's profile has a certain value	Add this condition to verify the profile of the logged-in account.
A new record is being created	Add this condition to verify that the working record is being created.
An existing record is being edited	Add this condition to verify that the existing record is being edited.
The current editor is a child editor	Add this condition to verify that the working record is displayed in a child editor.
The current editor is a primary editor	Add this condition to verify that the working record is displayed in a parent editor.
The record is copied	Add this condition to verify that the working record is being copied from another record.
The record is not copied	Add this condition to verify that the working record is not being copied from another record.
A field has a certain value	Add this condition to verify the value of a certain field.

2 If the condition you have added to the decision description contains an underlined link, click the link to edit the condition.



3 If specifying a condition value for a field, click the Field drop-down menu and select a field.

4 Click the Operator drop-down menu and select an operator.

5 Enter a value in the Value field.

6 Click the OK button.

7 To edit the logical expression used to evaluate two or more conditions, click Combine the Conditions Using a Logical Expression and refer to Defining logical expressions for workspace rule conditions.

8 Click the OK button to close the window.

To define conditions based on a field with multiple possible values

1 On the Decision window, select the Decision on a Field with Multiple Possible Values radio button.

2 Click the Field drop-down menu and select a field to evaluate.

3 To verify a value in a menu field, select the check box next to the value you want to use in the decision.

4 To remove a menu field value from the decision, clear its check box.

5 To verify a value in a date field, click the Add Choice button and then click the calendar button in the Choice column to select a date.

6 To verify a value in a text field, click the Add Choice button and type the value in the Choice column.

7 To remove a date or text value you have added, click Remove in the Action column.

8 To include an option for all other values, select the Include a Value for Other check box.

9 Click the OK button to close the window. An outgoing anchor is added to the element for each value selected.

Editing Workflow element attributes

The Workflow element is used to open the **working record** in an embedded workflow. Once you add this element to your flow diagram, you must edit its attributes to associate it with a new or existing workflow. You must also select the working record that will be opened in the embedded workflow.

Important If you want an embedded workflow to return to the primary flow, it must contain at least one Return element. Refer to Editing Return attributes.

To edit Workflow attributes

1. From your open workflow, select a Workflow element on the canvas. The Element Tools tab displays on the ribbon.
2. Click a button in the Workflow button group described in the following table. The element's name label is updated with the name of the selected workflow.

Table 182: Workflow Attributes Description

Button	Description
Select Workflow	Click this drop-down menu to select a workflow to embed in the current workflow.
New Workflow	Click this button to create a new workflow.
Edit Workflow	Click this button to edit the selected workflow.

3. Click a button in the Working Record button group to select the record you want to open in the workflow. The element's working record label is updated with the name of the selected working record.
4. If more than one record of the selected type is open in the record pool, click a button on the right of the Working Record button group to select the record you want to open in the workflow.

Tip For a menu of available records, click the Expand Working Records button below the scroll bar in the Working Record button group.

Editing Set Fields attributes

The Set Fields element is used to set values for one or more fields in the **working record**. Once you add this element to your flow diagram, you must edit its attributes to select the working record containing the field you want to update and the value you want to set it to.

Best practices for avoiding field conflicts

When setting multiple field values, pay close attention to the order in which you are setting them. Remember that some fields in the record you are updating may also change dynamically due to rule configuration or a functional dependency on other fields.

This consideration is particularly important when updating certain key fields in Oracle RightNow Opportunity Tracking Cloud Service. The following fields should be set in this specific order based on how the values are related to one another.

1. Schedule
2. Quote Total
3. Grand Total
4. Discount
5. Forecast

For example, quote totals often vary based on the schedule that has been selected. If you change the value of the Schedule field, the Quote Total field value will be reset. So, if you are setting values for these two fields, be sure to apply the schedule before setting the quote total. Also, the discount value and the forecast should be specified after the grand total has been set. By setting these fields in the correct order, you can avoid setting fields incorrectly due to overriding functional dependency.

To edit Set Fields attributes

1. From your open workflow, select a Set Fields element on the canvas. The Element Tools tab displays on the ribbon.

2 Click a button in the Working Record button group to select the record containing the field you want to set. The element's working record label is updated with the name of the selected working record.

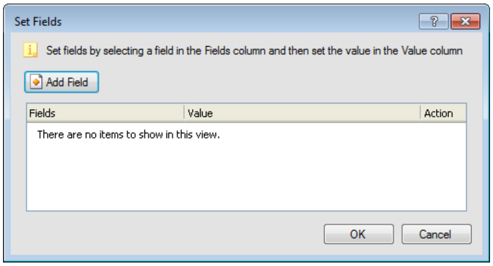
3 If more than one record of the selected type is open in the record pool, click a button on the right of the Working Record button group to select the record containing the field you want to set.

Tip For a menu of available records, click the Expand Working Records button below the scroll bar in the Working Record button group.

4 Click the Edit button. The Set Fields window opens.

Or

Double-click the Set Fields element.



5 Click the Add Field button to add a field to the element.

6 In the Fields column, click the Select a Field drop-down menu, expand the appropriate table, and select the field you want to set.

7 In the Value column, enter the value that you want to set the field to.

Note In addition to setting explicit (absolute) values, you can set relative values for some field types by adding or subtracting (or appending or prepending) a value to the field's previous value. Refer to Setting relative field values.

8 To remove a field you have added, click Remove in the Action column.

9 Click the OK button. The field and value you selected are displayed in the text box next to the Edit button.

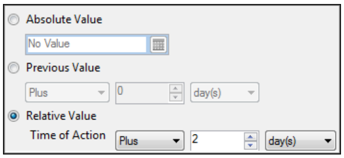
10 To display a confirmation message when the field is set, click the Confirmation Message button and type the message.

a Click the OK button to close the Confirmation Message window.

Setting relative field values

In addition to setting absolute field values for date, date/time, integer, text, and text area fields, you can set relative values. When setting a value for one of these field types, clicking the Value drop-down menu presents additional options for adding or subtracting (or appending or prepending) a value to the field's previous value. For example, you can increment the value of an integer field by 1 or prepend text to an incident's subject line.

For date and date/time fields, you can also set a value relative to the time of action, such as adding two days to the current date and time, shown here.



Options for setting relative field values vary by field type and are described in the following table.

Table 183: Relative Field Value Options

Field Type	Value Options
Date	Add or subtract a number of days or weeks to or from the previous value or the current date.
Date/Time	Add or subtract a number of minutes, hours, days, or weeks to or from the previous value or the current date and time.
Integer	Add or subtract an integer value to or from the current value. **Note:** The resulting value cannot be greater than the maximum value defined for the field or less than the minimum. Therefore, the maximum value you can add or subtract is the field's maximum value minus the field's minimum value. For example, if the field maximum is 8 and the field minimum is -8, the maximum value you can add or subtract from the current value is 16.
Text Field	Prepend or append a text value to the current text value.

Table 183: Relative Field Value Options (Continued)

Field Type	Value Options
Text Area	Prepend or append a text value to the current text value.

Editing Create attributes

The Create element is used to create a new record in the workflow. Once you add this element to your flow diagram, you can edit its attributes to specify the field values, a confirmation message, and a name for the record you are creating.

Important Workflows that contain Create elements can create records even when used by staff members who do not have permission in their profile to create records of the same type. For example, a staff member who does not have permission to create an incident can still be associated with a workflow that results in the creation of an incident, and the incident's **audit log** will show the staff member as the creator of the incident.

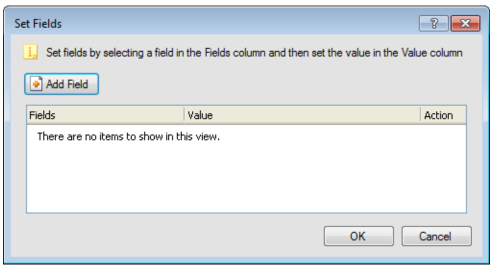
To edit Create attributes

1 From your open workflow, select a Create element on the canvas. The Element Tools tab displays on the ribbon.

2 Click the Set Fields button. The Set Fields window opens.

Or

Double-click the Set Fields element.



3 Click the Add Field button to add a field to the element.

4 In the Fields column, click the Select a Field drop-down menu and select the field you want to set.

5 In the Value column, enter the value that you want to set the field to.

Note In addition to setting explicit (absolute) values, you can set relative values for some field types by adding or subtracting (or appending or prepending) a value to the field's previous value. Refer to Setting relative field values.

6 To remove a field you have added, click Remove in the Action column.

7 Click the OK button. The field and value you selected are displayed in the text box next to the Set Fields button.

8 To display a confirmation message when the field is set, click the Confirmation Message button and type the message.

   a Click the OK button to close the Confirmation Message window.

9 To name the record, click the New Record Name button and type the name in the element's working record label. The new record name appears in the Working Record button group for elements of the same record type.

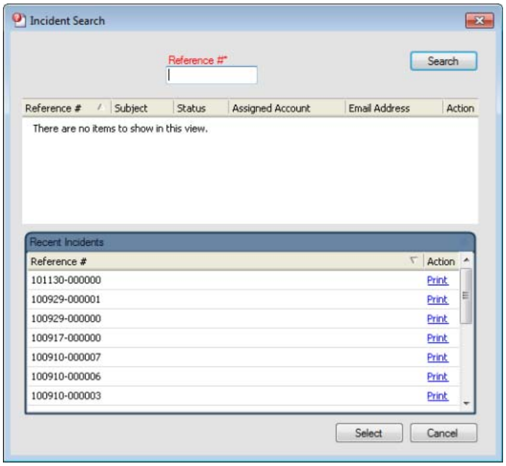
Important When a new record is created with the Create element, it is not yet saved to the database. To ensure the record is saved, be sure to open the working record in a workspace that has the Save button enabled or follow the Create element with a Save element. Refer to Editing Save attributes.

Editing Load attributes

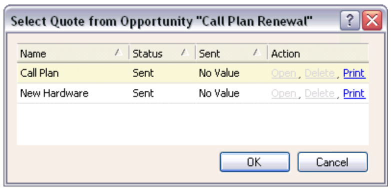
The Load element is used to find and load an existing record into the record pool. Once you add this element to your flow diagram, you can use it to prompt the agent to search for a record, or you can select a specific record to load every time.

Note The option to load a specific record is not available when loading quotes or quote products.

If you want to prompt agents to perform a search, you must select the primary search report that will be used to find the record to be loaded. You may also select an optional secondary search report. The Load element can have two outgoing connectors to branch the flow based on the button clicked by staff on the search window (OK/Select or Cancel). In most cases, the Load element will prompt staff members to search for a record using a primary and secondary search report.



However, when using the Load element to open a quote, quote product, or task, the Secondary Search Report button is replaced on the ribbon with a Parent Record button group. When you select a parent record for these record types, the Load element will prompt staff members to select from a list of records associated to the parent. For example, to load a quote, staff members select from a list of quotes associated with the specified parent opportunity, as shown here.



Important Records opened with the Load element are simply loaded into memory and are not automatically displayed in workspaces. To display a loaded record to your staff members, you will need to follow the Load element with a workspace or workflow associated with the appropriate **working record**.

To prompt agents to search for a record to load

1 From your open workflow, select a Load element on the canvas. The Element Tools tab displays on the ribbon.

2 Click the Search Report button. The Select Report window opens.

   By default, the system's standard report for searching the designated record type is selected. For example, if you are loading an incident, the Incident Search report is selected by default.

3 Select a primary report to display in the search window.

4 Click the OK button to close the window.

5 To select a secondary search report to display in the search window, click the Secondary Search Report button. The Select Report window opens.

   a Select a secondary report.

   b Click the OK button to close the window.

   c Select a secondary search record from the Secondary Search Record button group.

6 To load a quote, quote product, or task, click a button in the Parent Record button group to select the parent of the record you want to load.

7 To name the record, click the New Record Name button and type the name in the element's working record label. The new record name appears in the Working Record button group for elements of the same record type.

To load a specific record

1 From your open workflow, select a Load element on the canvas. The Element Tools tab displays on the ribbon.

2 Click the Load Type button and select Constant Record. The Load element changes to a circular automation element and the ribbon buttons refresh to display the attributes for this load type.

3 Click the Record button.

4 Search for and select the record you want the element to load.

5 Click the Select button.

6 Click the OK button to close the window.

7 To rename the record, click the New Record Name button and type the new name in the element's working record label. The new record name appears in the Working Record button group for elements of the same record type.

Editing Clear attributes

The Clear element is used to clear the **working record's** association with any organization, contact, answer, incident, or opportunity. Once you add a Clear element to your flow diagram, you must edit its attributes to select the working record you want to disassociate.

Tip You can also clear a record association by using a Set Fields element to set the value to No Value, but using the Clear element can make the flow diagram easier to understand.

To edit Clear attributes

1 From your open workflow, select a Clear element on the canvas. The Element Tools tab displays on the ribbon.

2 Click a button in the Working Record button group to select the record you want to clear the association from. The element's working record label is updated with the name of the selected working record.

3 If more than one record of the selected type is open in the record pool, click a button on the right of the Working Record button group to select the record you want to clear the association from.

Tip For a menu of available records, click the Expand Working Records button below the scroll bar in the Working Record button group.

4 To display a confirmation message when the record association is cleared, click the Confirmation Message button and type the message.

a Click the OK button to close the Confirmation Message window.

Important When an association is cleared by a Clear element, the update is not automatically saved in the database. To save the change made by the Clear element, be sure to open the working record in a workspace that has the Save button enabled or follow the Clear element with a Save element. Refer to Editing Save attributes.

Editing Change attributes

The Change element is used to find and load an existing record to associate with the **working record**. Once you add this element to your flow diagram, you must edit its attributes to select the primary and secondary search reports that will be used to find the record to be associated. The Load element can have two outgoing connectors to branch the flow based on the button clicked by staff on the search window (OK or Cancel).

Note When using a Change element to change the contact associated with an incident, the behavior is the same as when you click the Search button on the Contact field in an incident workspace. If the new primary contact is not already associated to the incident (as a secondary contact, for example), the previous primary contact becomes disassociated from the incident. If the new primary contact is already associated to the incident as a secondary contact, the previous primary contact becomes a secondary contact. The same behavior applies to contacts associated with opportunities.

To edit Change attributes

1 From your open workflow, select a Change element on the canvas. The Element Tools tab displays on the ribbon.

2 Click the Search Report button. The Select Report window opens.

By default, the system's standard report for searching the designated record type is selected. For example, if you are associating an incident, the Incident Search report is selected by default.

3 Select a primary report to display in the search window.

4 Click the OK button to close the window.

5 To select a secondary search report to display in the search window, click the Secondary Search Report. The Select Report window opens where you can select a secondary report.

a To select no secondary search report, select the No Value check box.

6 Click the OK button to close the window.

Important When you associate records with the Change element, neither record is automatically saved or displayed to staff members. To save the change made by the Change element, be sure to open the working record in a workspace that has the Save button enabled or follow the Change element with a Save element. Refer to Editing Save attributes.

To display the working record or associated record to staff members, you will also need to follow the Change element with a workspace or workflow of the same record type and specify the record you want to display.

Editing Copy attributes

The Copy element is used to create a new record in the workflow. Once you add this element to your flow diagram, you can edit its attributes to specify the field values, a confirmation message, and a name for the record you are creating.

Important When a new record is created with the Copy element, it is not automatically saved to the database or displayed to staff members. To ensure the new record is saved, be sure to open the **working record** in a workspace that has the Save button enabled or follow the Copy element with a Save element. Refer to Editing Save attributes.

To display the copied record to staff members, you will need to follow the Copy element with a workspace or workflow of the same record type and specify the copy as the working record you want to display.

To edit Copy attributes

1 From your open workflow, select a Copy element on the canvas. The Element Tools tab displays on the ribbon.

2 Click a button on the left of the Working Record button group to select the type of record you want to copy. The last record of that type is selected by default and the element's working record label is updated with the name of the selected working record.

3 To select a different record of the selected type, click a button on the right of the Working Record button group to select the record you want to copy.

Tip For a menu of available records, click the Expand Working Records button below the scroll bar in the Working Record button group.

4 To select the parts of the original record to include in the record copy, click the Copy Details drop-down menu and select the parts you want to copy. Available options vary by record type.

Table 184: Copy Detail Options by Record Type

Record Type	Copyable Details
Incident	Threads, incident contacts, and file attachments.
Contact	Contact lists, file attachments, and notes.
Answer	Sibling relationships, file attachments, and notes.
Opportunity	Opportunity contacts, opportunity competitors, quotes, quote products, file attachments, and notes.
Organization	Organization addresses, file attachments, and notes.
Task	File attachments and notes.

Note Quotes and quote products can be copied but have no copy detail options.

5 To display a confirmation message when the record is copied, click the Confirmation Message button and type the message.

a Click the OK button to close the Confirmation Message window.

6 To name the copied record, click the New Record Name button and type the name in the element's new record label. The new record name appears in the Working Record button group for elements of the same record type.

Editing Save attributes

The Save element is used to save all records that are open in the record pool. To close the records after saving, click to highlight the Close After Save button on the ribbon.

Once you add a Save element to your flow diagram, you can edit its attributes to change its appearance.

Important When the record pool is saved with a Save element, each record update triggers business rules immediately in the background. Because business rules introduce another layer of complexity, it is important to use the Save element only when necessary and to keep your business rule processes separate and distinct from your desktop workflows.

Editing Return attributes

The Return element is used to return an embedded workflow to the primary workflow to resume the flow of action. Refer to Editing Workflow element attributes.

Once you add a Return element to your flow diagram, you can change its label name to define an event name that can be used in the primary workflow. By ending different branches of an embedded workflow with Return elements having unique names, you can advance the primary flow in different directions based on the route that was followed. If you create multiple Return elements with the same label name, any one of them will fire that named event.

Note A Return element added to a workflow that is not embedded in another workflow will have no effect.

Linking elements with connectors

Connectors are used to link elements and indicate flow direction. Some connectors are followed immediately upon performing an action in the originating element. Others are triggered only by events and conditions that you define. Connectors leading from Decision elements are followed only if the decision's conditions are met.

To connect an element

To connect one element to another, click an anchor on the first element and drag the connector to an anchor on the second element. The anchor is highlighted when the connector is able to link to it. The connector arrow will point from the first element to the second.

Other ways to connect elements include:

- Hover over the first element and click a blue arrow to link to an adjoining element.
- Drag one element over another, hover over its blue arrow until it turns dark blue, and then drop to automatically connect the elements.

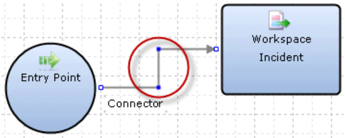
- Click an element from the ribbon, and then hover over an element on the canvas and click its blue arrow to drop and auto-link the new element.
- Drag and drop a connector from the ribbon to the canvas, and then drag the ends of the connector to the elements you want to link.

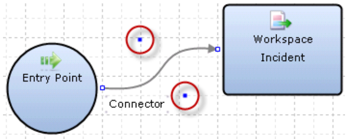
To connect to a different element

From your open workflow, click a midpoint on the connector to select it and drag one of its ends to an anchor on a different element to create a different connection.

To edit a square or curved connector

From your open workflow, click a midpoint on a square or curved connector to select it and drag the calibration points to adjust the shape of the connection. The following figures show the calibration points on square and curved connectors.





To delete a connector

From your open workflow, click a midpoint on the connector to select it and press **Delete**.

Defining connector events and conditions

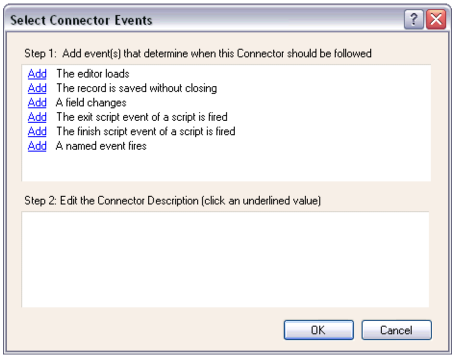
When a record or script is displayed to a staff member, it must remain open long enough for your staff members to complete their work before advancing to the next element in the workflow. Therefore, when connecting from a Workspace, Script, or Workflow element, you must define one or more triggering events (such as a field value change) that will cause the path to be followed. You can also specify conditions under which the event will cause the path to be followed.

In addition, Workspace elements can have more than one outgoing connection, each triggered by a different set of events and conditions. In this way, a single workspace can route staff members through different sequences of actions and decisions based on the event that was triggered.

Note If a connector is triggered by an event in a workspace rule or script rule, the flow will advance without running any subsequent rules in that workspace or script.

To add a connector event

1. From your open workflow, select the connector on the canvas. The Path Tools tab displays on the ribbon.
2. Click the Add Events button. The Select Connector Events window opens.



3. Click Add next to the event you want to add to the connector. Available events are described in the following table, but vary based on the type of element you are connecting from.

Table 185: Connector Events Description

Event	Description
The editor loads	Add this event to follow the path when a record is loaded using the workspace. **Note:** When using this event, the connector conditions are evaluated at the time a record is opened. If any of the conditions require that items be changed after the record is opened, the path will not be followed.

Table 185: Connector Events Description (Continued)

Event	Description
The record is saved without closing	Add this event to follow the path when an open record is saved without closing. **Note:** This event is not triggered if records are closed when saved, or closed without being saved. This includes records opened in child editor windows that do not feature Save buttons.
A field changes	Add this event to follow the path when the value of a field is changed. Once added, click the event's underlined text to select a field that will trigger the event. Available fields vary depending on the type of workspace you are connecting from. For example, when connecting from an incident workspace, you can select fields from the *incidents, contacts,* and *organizations* tables. However, not every field in these tables is available for use in connector events. **Note:** When using this event, connector conditions are evaluated at the time any change is made to the selected field. If the selected field is a text field, the conditions will be evaluated the moment any character in the field is changed.
An input control value changes	Add this event to follow the path when the value of an input control is changed to another value or to no value. Once added, click the event's underlined text to select an input control that will trigger the path. Available input controls include any menus, radio buttons, list boxes, and text boxes that are not used to trigger other paths. **Note:** This event is available only when an input control has been added to the workspace. When using this trigger, conditions are evaluated at the time any change is made to the input control. If you want to verify that a specific value was selected, add An Input Control Has a Certain Value as a condition.
An input control value is selected	Add this event to follow the path when an input control value is selected. Once added, click the event's underlined text to select an input control that will trigger the path. Available input controls include any menus, radio buttons, and list boxes that are not used to trigger other paths. **Note:** This event is available only when an input control has been added to the script. When using this trigger, conditions are evaluated at the time a value is selected from the input control. If you want to verify that a specific value was selected, add An Input Control Has a Certain Value as a condition.

Table 185: Connector Events Description (Continued)

Event	Description
A button is clicked	Add this event to follow the path when a specified button is clicked. Once added, click the event's underlined text to select a button from the workspace that will trigger the event.
An image is clicked	Add this event to follow the path when an image is clicked. Once added, click the underlined text to select an image from the workspace that will trigger the event. **Note:** This trigger is available only when an image has been added to the workspace.
A hyperlink control is clicked	Add this event to follow the path when a hyperlink is clicked. Once added, click the underlined text to select a link from the workspace that will trigger the event. **Note:** This trigger is available only when a hyperlink has been added to the workspace.
The exit script event fires	Add this event to follow the path when the Exit button is clicked, an exit script event is fired by a rule from a script called in a workflow, or from a script placed on a workspace called in a workflow. Connector conditions are evaluated at the time that the event is fired. Refer to Using events in workspace and script rules.
The finish script event fires	Add this event to follow the path when the Finish button is clicked, a finish script event is fired by a rule from a script called in a workflow, or from a script placed on a workspace called in a workflow. Connector conditions are evaluated at the time that the event is fired. Refer to Using events in workspace and script rules.
A named event fires	Add this event to follow the path when a specified named event fires from a workspace rule or from a rule in a script that has been placed on the workspace. Click the underlined text to type the name of the event that will be used to trigger the connector event. Connector conditions are evaluated at the time that the event is fired. Refer to Using events in workspace and script rules. **Note:** When a connector is triggered from a workspace or script rule by a named event, the rule will stop running and any actions that follow the event in the rule will not be performed.

4 Click any underlined text in the Edit the Connector Description section to open a window where you can specify the source of the event action (such as the field, control, or event name).

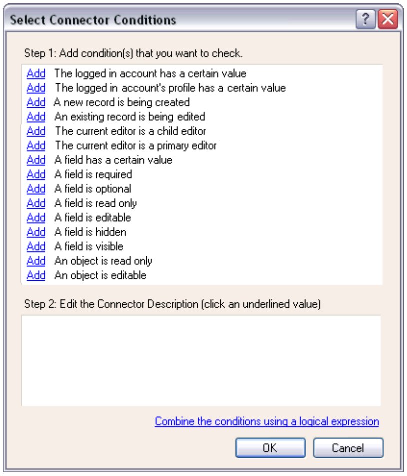
5 To remove an event from the connector description, hover over the event and click Remove.

6 Click the OK button to add the event to the connector.

To add a connector condition

1 From your open workflow, select the connector on the canvas. The Path Tools tab displays on the ribbon.

2 Click the Add Conditions button. The Select Connector Conditions window opens.



3 Click Add next to the conditions you want to add to the connector. Available conditions are described in the following table, but vary based on the type of element you are connecting from.

Table 186: Connector Conditions Description

Condition	Description
The logged in account has a certain value	Add this condition to follow the path if the logged-in account has a certain value. Click the underlined text to select the account to be evaluated.
The logged in account's profile has a certain value	Add this condition to follow the path if the logged-in account's profile has a certain value. Click the underlined text to select the profile to be evaluated.
A new record is being created	Add this condition to follow the path if a new record is being created by the originating workspace.
An existing record is being edited	Add this condition to follow the path if an existing record is being edited in the originating workspace.
The current editor is a child editor	Add this condition to follow the path if the record is open in a child editor.
The current editor is a primary editor	Add this condition to follow the path if the record is open in a primary (non-child) editor.
The record is copied	Add this condition to follow the path if the record is being copied from another record. **Tip:** This condition can be useful if you want to automatically set field values when records are copied.
The record is not copied	Add this condition to follow the path if the record is not being copied from another record.
A field has a certain value	Add this condition to follow the path if a field has been set to a specified value in the originating workspace. Click the underlined text to select the field to be evaluated.
A field is required	Add this condition to follow the path if a field is required in the originating workspace. Click the underlined text to select the field to be evaluated.

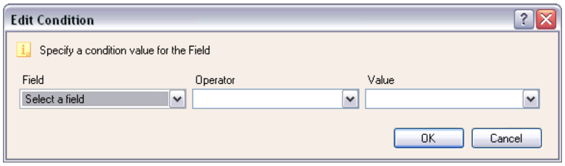
Table 186: Connector Conditions Description (Continued)

Condition	Description
A field is optional	Add this condition to follow the path if a field is optional (not required) in the originating workspace. Click the underlined text to select the field to be evaluated.
A field is read only	Add this condition to follow the path if a field is read-only in the originating workspace. Click the underlined text to select the field to be evaluated.
A field is editable	Add this condition to follow the path if a field is editable in the originating workspace. Click the underlined text to select the field to be evaluated.
A field is hidden	Add this condition to follow the path if a field is hidden in the originating workspace. Click the underlined text to select the field to be evaluated.
A field is visible	Add this condition to follow the path if a field is visible in the originating workspace. Click the underlined text to select the field to be evaluated.
An object is read only	Add this condition to follow the path if a control is read-only in the originating workspace. Click the underlined text to select the control to be evaluated.
An object is editable	Add this condition to follow the path if a control is editable in the originating workspace. Click the underlined text to select the control to be evaluated.
An object is hidden	Add this condition to follow the path if a control is hidden in the originating workspace. Click the underlined text to select the control to be evaluated.
An object is visible	Add this condition to follow the path if a control is visible in the originating workspace. Click the underlined text to select the control to be evaluated.
An input control has a certain value	Add this condition to follow the path if a specified question control value has been selected in the originating script element. Click the underlined text to select the control to be evaluated.

Table 186: Connector Conditions Description (Continued)

Condition	Description
An add-in control condition returns a certain value	Add this condition to follow the path based on whether an add-in control returns a certain value. Click the underlined text to select the add-in control and the parameters to be evaluated. Refer to Add-ins in scripts and workspaces.

4 If a condition you have added to the description contains underlined text, click the underlined text to open the Edit Condition window. The following figure shows the Edit Condition window as it appears when defining a condition based on a field value.



a If defining a condition based on a value for a field, select the Field drop-down menu and select a field.
b Click the Operator drop-down menu and select an operator.
c Enter a value in the Value field.
d Click the OK button to close the window.

5 To remove a condition from the connector description, hover over the condition and click Remove.

6 To evaluate the conditions using a logical expression, click Combine the Events Using a Logical Expression.

7 Click the OK button to add the condition to the connector.

Adding comments to a workflow

The Elements button group provides a Comment element that allows you to add comments to your diagram without impeding the flow of action. Comment elements can be connected to other elements but they do not accept incoming connections. Used to convey information only, comments have no impact on the actions or events that comprise the workflow.

To add a comment

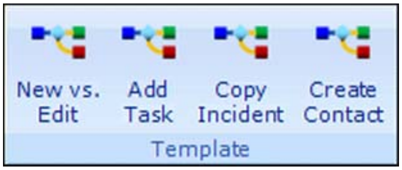
1 From your open workflow, drag and drop a Comment element from the ribbon onto the canvas.

2 Click the element to type your comments.

3 To connect the Comment element to another element, click an anchor on the Comment element and drag to the element. The element is highlighted when the connector is able to link to it.

Note Connectors from Comment elements are dashed lines, indicating that they do not impact the flow of action.

Workflow templates



The Template button group on the Insert tab of the workflow designer provides several predefined templates as a starting point for creating your workflow's flow diagram. When you choose a template, the elements and connectors associated with that template are added to your diagram. You can add and remove elements to further customize your workflow, then edit each element's attributes to meet your business needs.

To apply a workflow template

1 From the Template group of the Insert tab, hover over a template button to see it previewed on the canvas.

- **New vs. Edit**—This template directs staff members to one workspace if they are creating a new incident and to a different workspace if they are opening an existing incident. Refer to New vs. Edit.
- **Add Task**—This template displays an incident in a workspace and then automatically creates a new task for the incident. Refer to Add Task.
- **Copy Incident**—This template displays an incident in a workspace, and then copies the incident, sets fields in the copy, and displays the copy in another workspace. Refer to Copy Incident.

- **Create Contact**—This template checks whether an open incident is associated with a contact record. If no contact is associated, it automatically creates a new contact for the incident and sets contact fields before displaying the incident in a workspace. Refer to Create Contact.

2 Click a template button to add the template to the canvas. A message opens warning you that selecting a template will overwrite the existing content on the canvas.

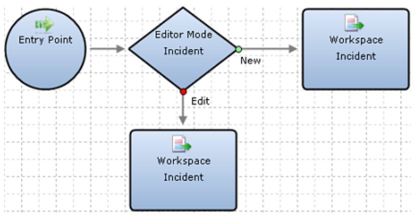
3 Click the OK button. The template is inserted in the diagram.

4 Select each element and edit its attributes. Refer to Designing a flow diagram.

5 Click the Save button to save the workflow.

New vs. Edit

This template uses a decision element to determine if the staff member is creating a new incident or opening an existing incident. Based on the decision, the staff member is either directed to a workspace designed for new incident creation or a workspace designed for editing existing incidents.



Each element in the template is described in the following table.

Table 187: New vs. Edit Description

Element	Description
Entry Point	This element indicates the starting point of the workflow.
Editor Mode Incident	This Decision element checks whether the incident open in the workflow is a new incident or an existing incident. The **working record** is set to Incident, referring to the incident being created or opened.

Table 187: New vs. Edit Description (Continued)

Element	Description
Workspace Incident (New Path)	This Workspace element displays a new incident in a workspace. The working record is set to Incident, referring to the incident being created.
Workspace Incident (Edit Path)	This Workspace element displays an existing incident in a workspace. The working record is set to Incident, referring to the incident being opened.

Add Task

This template opens an incident in a workspace. Then, based on an event you define in the outgoing connector, a task is automatically added to the incident.

Each element in the template is described in the following table.

Table 188: Add Task Description

Element	Description
Entry Point	This element indicates the starting point of the workflow.
Workspace Incident	This Workspace element displays the opening incident in a workspace. The **working record** is set to Incident, referring to the incident that is being opened in the workspace.
Task New Task	This Create element automatically creates a new task associated with the incident and names the task “New Task.”

Copy Incident

This template opens an incident in a workspace. Then, based on an event you define in the outgoing connector, the incident is copied, fields are set in the copy, and the copy is displayed in another workspace.

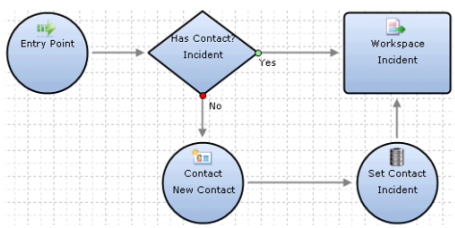
Each element in the template is described in the following table.

Table 189: Copy Incident Description

Element	Description
Entry Point	This element indicates the starting point of the workflow.
Workspace Initial Incident	This Workspace element displays the opening incident in a workspace. The **working record** is set to Initial Incident, or the incident that is initiating the workflow.
Copy Last Incident The Copy	This Copy element copies the incident to a new incident and names the copy “The Copy.” The working record is set to Last Incident so the element will copy the incident last opened in the workflow.
Set Fields The Copy	This Set Fields element updates incident fields. The working record is set to The Copy so the element will update fields in the incident copy.
Workspace The Copy	This Workspace element displays an incident in a workspace. The working record is set to The Copy so the element will display the incident copy.

Create Contact

This template uses a Decision element to determine if the incident being opened is associated with a contact record. If no contact is associated, it automatically creates a new contact for the incident and sets contact fields before displaying the incident in a workspace.



Each element in the template is described in the following table.

Table 190: Create Contact Description

Element	Description
Entry Point	This element indicates the starting point of the workflow.
Has Contact? Incident	This Decision element checks whether the incident being opened is associated with a contact record. If so, the flow is forwarded to the Workspace element. If not, the flow is directed to the Create element. The **working record** is set to Incident, referring to the incident being opened in the workflow.
Contact New Contact	This Create element automatically creates a new contact and names the contact "New Contact."
Set Contact Incident	This Set Fields element updates the incident's Contact field to the new contact, associating the two records. The working record is set to Incident so the element will make the update to the incident opened earlier in the workflow.
Workspace Incident	This Workspace element displays the opening incident in a workspace. The working record is set to Incident so the element displays the incident opened earlier in the workflow.

Testing workflows

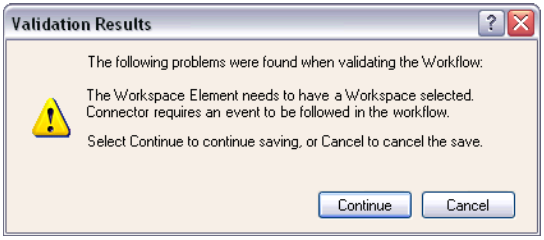
Because even basic workflows can contain many components that must be configured correctly in order to function properly, it is important to test your workflows thoroughly before you take them to production. For this reason, Oracle Service Cloud provides features to help you validate and preview workflows as you create them.

Workflow validation

As you create a flow diagram for your workflow, Oracle Service Cloud validates all flow elements to ensure all required attributes have been specified. Although validation occurs in real time as you add and update elements, you can review validation errors manually at any time by clicking the Validate button on the Home tab.

You can also choose to display validation flags to help quickly identify invalid elements. When you select the Validation Results check box on the View tab, valid elements are flagged with a green check mark, while those found to be invalid are flagged with a red exclamation point and a small button you can click to view the validation error.

If you attempt to save a workflow without first addressing its validation errors, you will receive a message summarizing the errors.



Important You can save a workflow without first correcting validation errors by clicking the Continue button on the Validation Results window. However, the workflow will not function properly until all validation errors have been corrected.

Previewing workflows

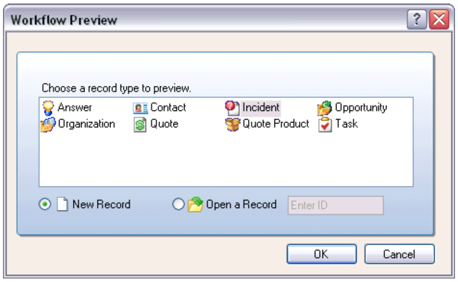
In order to thoroughly test the workflows you create, the Preview feature simulate the effects of the workflow you are editing, without altering your own profile settings or updating your production data.

Once you select a record type and choose a new or existing record, a preview window opens to display the Service Console as it would appear to a staff member opening the same record in the live workflow. Except for saving records (which is disabled), the full functionality of your workflow is available for you to test in a read-only environment.

Note Because record saving is disabled, you will not be able to test "The record is saved without closing" events in preview mode. To test subsequent elements in the flow, you must temporarily select a different event.

To preview a workflow

1 From the open workflow, click the Preview button on the ribbon's Home tab. The Workflow Preview window opens.



2 Select the type of record you want to preview in the workflow.

3 To simulate the workflow using a new record, select the New Record radio button.

4 To simulate the workflow using an existing record, select the Open a Record radio button and type the record ID in the Enter ID field.

5 Click the OK button. A preview window opens where you can test the workflow.

Tip Elements such as Create, Clear, Copy, and Set Fields perform automated actions in the background that advance the flow without visual indication. To verify these elements during testing, you can use the Confirmation Message button to add a visual indicator that an action has been performed.

Exporting and importing workflows

If you have a workflow that you want to copy to another interface, you can export the workflow and then import it on the other interface. Exported workflows contain all included workspaces (with all elements, fields, controls, layout, and rules), decisions, actions, and other embedded workflows. Alternately, you can export the contents of your canvas as an image file for use as a visual reference.

To export a workflow

1 On the Workspaces/Workflows explorer, right-click the workflow you want to export and select Open. The workflow opens.

2 Click File and select Export > Export Definition. The Export Workflow window opens.

Note You can also export an image of the canvas to your workstation by selecting Export > Export Image.

3 If the workflow contains embedded workspaces, scripts, or nested workflows, select the Export Workflow Definition Only radio button to export the workflow definition only. By default, the workflow definition will be exported along with any contained workspaces, scripts, and workflows.

4 Click the OK button. The Save As window opens.

5 Select the location where you want to save the workflow definition file and type the file name.

6 Click the Save button to save the file.

Note Workflow definition files are saved with a hash value that is used when the file is imported to determine if the file has been modified externally. If the file has been modified, it will not be available for importing and an error message will notify you that the file is invalid.

To import a workflow

1 On the Home tab of the Workspaces/Workflows explorer, click New Workflow. A new workflow opens.

2 Click File and select Import Definition. A message appears indicating that the import process will overwrite the current open workflow.

3 Click the Yes button to allow the import to overwrite the current open workflow. The Import Workflow wizard opens.

4 Click the Next button.

5 Type the path and name of the workflow definition file you want to import.

Or

Click the Browse button to find the file on your workstation and click the Open button.

If the workflow contains workspaces, scripts, or nested workflows, you will be prompted to select whether to include them in your import.

6 To import the workflow definition along with any contained workspaces, scripts, and workflows, click the Next button.

  a Select the folder you want to save the workspaces and workflows in and click the Next button.

  b Click the Map To Type drop-down menu to select a record type for each workspace and script you are importing.

  c If a contained workspace includes records from a custom object, click the Map To Record Type drop-down menu and select the record type you want to map the records to. If Oracle Service Cloud detects a record type of the same name already in the site, it is selected by default.

  d Click the Next button.

7 To import only the workflow definition, select the Import Workflow Definition Only radio button and click the Next button.

8 If the workflow contains fields that do not exist in the database, they are listed in the wizard as invalid. To remove invalid field references from the workflow, click the Next button.

9 Click the Finish button. The desktop workflow canvas opens with the imported workflow.

Best practices for desktop workflows

Desktop workflows can meet a broad range of needs, some simple and some complex. Complex workflows can be challenging to manage, but keeping your flow diagram elements grouped intuitively on your canvas can help make it easier to understand, in case the workflow needs to be revised later. To view an example of a well organized, complex desktop workflow, click the tutorial link to the right.

The following practices can also be helpful when creating and updating workflows.

- **Apply logic prudently**—Desktop workflows contain many points where logic may be used, such as script elements, workspace elements, decision elements, and connectors. The best places to incorporate logic will depend on your use case, but be sure to consider the full impact and scalability of the workflow when adding these functions. Creating logic that is simple and distinct with minimal overlap is much easier to maintain and modify over time.

- **Track and advance your flows**—Record updates made by workflows are tracked in record audit logs, but sometimes tracking the path a record has taken through a complex flow can be challenging. To make this easier, you can add a custom field to manage the workflow "state." For example, if an agent completes a key step in a workflow, consider running a rule action to update an easily reviewed custom field signifying that the step was completed. With this information tracked by a field, you could even check its value in an initial decision point to bypass steps completed in previous edits of the record.

For more best practices for using the various features that comprise the dynamic agent desktop, refer to Desktop Overview.

Analytics

The following sections are intended for administrators and staff members. They contain information and procedures for configuring and using Oracle RightNow Analytics Cloud Service.

- Management Reports
- Analytics Explorers
- Creating Basic Reports
- Custom Reports
- Report Management
- Dashboards
- Data Dictionary
- Analytics Configuration Settings
- Transaction Descriptions

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Analytics Explorers

The reporting features in Oracle Service Cloud are accessed through the Oracle RightNow Analytics Cloud Service (Analytics) explorers. From these explorers, you can create **custom reports** and **dashboards**, view **standard** and custom reports, and edit **report styles**, **chart styles**, **color schemes**, images, and **text fields** to use with reports and dashboards. Refer to Explorers.

Working with explorers

The Analytics explorers are accessed from the Analytics button on the navigation pane. Your access to Analytics explorers is determined by your navigation set and profile permissions.

- Overview of navigation sets
- Customizing profiles
- Explorers

You can search from all Analytics explorers to quickly locate items you want to view or edit. You can also copy and save items you create in custom folders.

To display Analytics explorers

Click the Analytics button on the navigation pane. The explorers you have access to display.

Searching in explorers

You can search for reports, **styles**, images, or other types of items specific to the explorer you are working in. For instance, you can search for reports and dashboards from the Reports explorer and **text fields** from the Text Fields explorer.

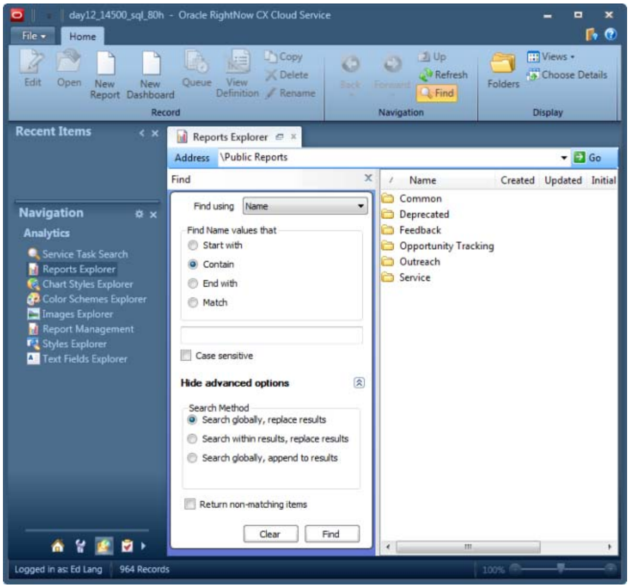
Note A separate Quick Search feature is available that enables you to search for a specific file or record no matter where you are in the product. Refer to Searching for records with Quick Search.

The following procedure describes how to search for reports from the Reports explorer. However, the basic procedure is the same for all explorers—only the columns available for searching change between explorers.

To search for a report

1. Click the Analytics button on the navigation pane and then double-click Reports Explorer.
2. Click the Find button on the ribbon. The left side of the content pane displays a Find menu, hiding the folders tree.

Note All of the Analytics explorers include a **ribbon** for working with items shown in the explorers.



3 Enter the following field information.

Table 191: Reports Explorer Find Menu Description

Field	Description
Find Using	Click this drop down menu to select a column in the reports list to search on. You can search by the report's name, ID number, dates created or updated, the report's initial run (opening report without prompting for search parameters) status, or the refresh on edit status. Each column is associated with one of three data types which determine the available search options: • Strings—Search for strings that start with, contain, end with, or match the value you enter in the text box. • Dates—Search for dates before, on, or after today's date. You can also click the calendar to display the current month's calendar and select another day, or click the arrows at the top of the calendar to change months. • Integers—Search for values that are less than, equal to, or greater than a number.
Search text box	Type your search text in this field.

Table 191: Reports Explorer Find Menu Description (Continued)

Field	Description
Case Sensitive	When searching a string column, select this check box if you want to match the case.
Show Advanced Options	Click Show Advanced Options to display additional search options.
Search globally, replace results	Select this radio button to remove the results from the previous search and replace them with results from this search. **Note:** This is the default option.
Search globally, append to results	Select this radio button to keep results from the previous search and add results to them from this search.
Search within results, replace results	Select this radio button to search the current search results and keep only those results that match the new search.
Return Non-matching Items	Select this check box to return all reports that do *not* match your search criteria.

4 Click the Find button. The search results display on the right pane. A message displays if no results are found.

5 To remove the text entered for the previous search, click the Clear button on the bottom of the Find menu.

6 To replace the search results with the original reports list, click the Refresh button on the ribbon.

7 To remove the Find menu and display the folders list, click the Folders button on the ribbon.

Creating custom folders

You can create custom folders in any explorer to store new or copied reports, **styles**, **chart styles**, **color schemes**, images, and **text fields**. You can also rename custom folders and files.

To create a custom folder

1 Open the appropriate explorer.

2 Right-click the parent folder you want to add the custom folder to.

Note Not all standard folders accept custom folders.

3 Select New Folder.

4 Type a name for the folder.

5 Click outside the folder name, or press **Enter**, to save the folder.

To rename a custom folder

1 Open the appropriate explorer.

2 Right-click the custom folder.

3 Select Rename.

4 Type a new name for the folder.

5 Click outside the folder name, or press **Enter**, to save the name.

Tip You can also use right-click functionality to rename custom folders when you are saving or copying items.

Copying items

The **standard reports**, **styles**, **chart styles**, and **color schemes** in the Analytics explorers cannot be edited, renamed, or deleted. However, you can copy any of these predefined items and use the copy as a starting point when you want to create a customized version. You can also use the same method to copy custom items that were created in any of the Analytics explorers.

To copy an item

1 Open the appropriate explorer.

2 Right-click the item you want to copy.

3 Select Copy to open the Copy <name> As window.

4 To store the new item in a custom folder, navigate to the folder.

Note Custom files cannot be stored in the Reports explorer's or Images explorer's standard folders.

5 Type a name for the new item in the Name field.

6 Click the OK button to save the new item.

Saving items

The procedure to save **custom reports**, **report styles**, **chart styles**, **color schemes**, images, and **text fields** is similar, no matter what type of item you are saving.

To save an item

1 After editing the item, select the appropriate save option on the ribbon's Home tab:
   - **a** To save changes to the item without closing it, select Save.
   - **b** To save a new item, or to save a copy of the item you are editing with a different name, select Save As.
   - **c** To save changes to the item and close it, select Save and Close. This option is faster than saving a change and then manually closing the window.

Note Options for saving a custom report are accessed by clicking the arrow on the Save button on the report design center's **Quick Access toolbar**.

When you select Save As, or attempt to save a new item for the first time, the Save As window opens to name the item.

2 To store the new item in a custom folder, navigate to the folder.

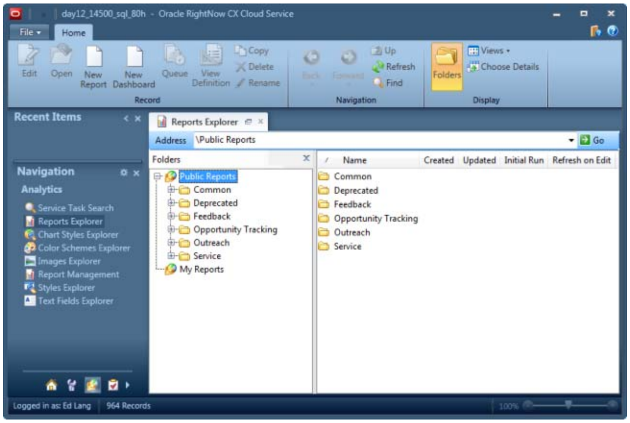
Note Custom files cannot be stored in the Reports explorer's or Images explorer's standard folders.

3 Type a name for the new item in the Name field.

4 Click the OK button to save the item.

Reports explorer

The Reports explorer provides you with one location to view and organize reports, and edit and create **custom reports** and **dashboards**. The content created in the other Analytics explorers is applied to reports using the Reports explorer.



Reports are contained in folders in the Reports explorer. These folders are in a tree structure and can be expanded or collapsed to hide or display their contents. Reports that are accessible by multiple staff members are contained in the Public Reports folder, and private reports that are accessible only to the staff member who created them are stored in the My Reports folder.

Note Other staff members' My Reports folders are not displayed in the Reports explorer. However, **administrators** can log in with the **administrator account** to access every account's folders. This ensures that private reports can be edited, moved, and deleted if necessary.

Clicking a folder in the Reports explorer's tree displays the folder's contents in the list on the right. A folder's contents can include reports, dashboards, and subfolders. Reports and dashboards contained in the same folder are automatically sorted in alphabetical order and cannot be reordered. However, you can drag items from one folder to another.

Right-clicking a folder or report displays a list of actions you can take on the item, such as opening a report for editing or queuing a report.

❖ Report Management

- ❖ Custom Reports
- ❖ Dashboards

Styles explorer

Report styles allow you to quickly apply custom display settings to your reports without editing the underlying report. Styles can also help staff members use the same display settings for their reports so that all reports generated by your staff share the same appearance. For information about applying a style to a report, refer to Changing report displays with styles.

A number of default styles are available, which may be all you need. However, you can easily create and edit styles to define the specific fonts, colors, borders, and margins which are most appropriate for your target audience. You can then apply your custom styles to reports just as you would the default styles.

You can edit style options for various components used in reports, such as **text fields**, column headers, **exceptions** descriptions, or entire report sections. You can also associate a custom chart style with your report style that will be applied to charts added to reports.

The style options vary depending on the type of component you are editing. For example, the options for a text component include a Font tab, whereas the options for a non-text component do not, since font settings do not apply. Refer to Report elements for descriptions of the various components that can be added to reports.

Using the style editor

The style editor displays examples of the various report components that you can create custom styles for. This helps you identify the component you want to modify. You can also select the component you want to modify from a list if you know its name.

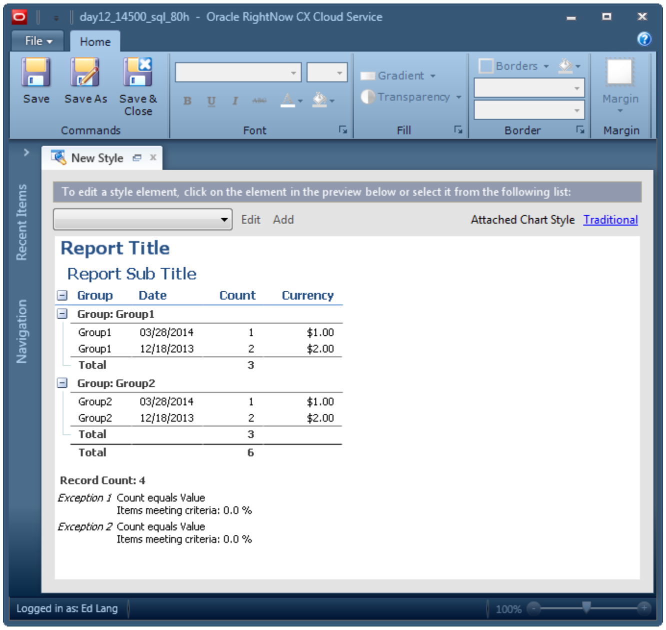
To create a style

1. Click the Analytics button on the navigation pane.
2. Double-click Styles Explorer. The Styles explorer opens, displaying the current styles.
3. To create a style, click the New button on the ribbon.

   Or

   To edit an existing custom style, right-click the style and select Edit.

   The style editor opens.



4 Select the component whose style you want to modify from the drop-down menu at the top of the editor and click Edit.

Or

Double-click the component on the style editor. A window opens for selecting style options.

5 Select the style options you want for the selected component. Refer to [Selecting style options](#).

6 To associate a custom chart style with the report style, click the name of the **chart style** that is currently associated with the report style, shown next to Attached Chart Style. The Select Chart Style window opens.

a Select the chart style you want to associate with the report style.

b Click the OK button.

Note The associated chart style is used by default for charts added to reports that use the report style. However, different chart styles can be selected when creating charts. Refer to Chart Styles explorer for information about chart style options. For information about adding charts to reports, refer to Adding and editing charts.

7 Click the Save and Close button on the ribbon to save the style.

Selecting style options

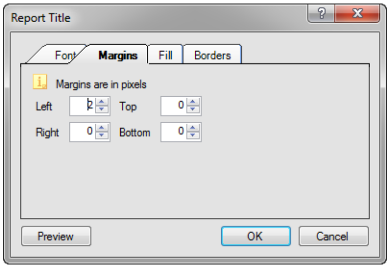
Once you select the component you want to modify from the style editor, you can define options for the component's font, margins, background colors, and borders.

Note You can access all the style options for the selected component from the window that displays when you select a component and click Edit. However, you can also select common style options for the selected component using the buttons on the explorer's **ribbon**, which provide shortcuts to many of the same options available on the window. In this procedure, we show you how to change options from the window.

To select style options

1 Open the style editor window for the component you have selected. By default, the window opens on the Font tab if the selected component includes text. Refer to Choosing font attributes for information about this tab.

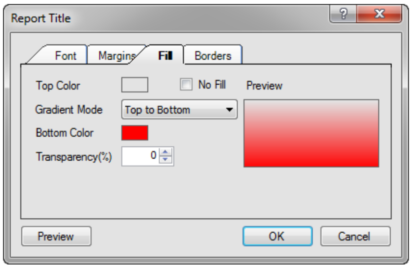
2 Click the Margins tab to define the amount of space surrounding the component when used in reports.



3 Enter the number of pixels between the text and the left, right, top, and bottom margins.

4 If you are editing a style for a report section, such as the report header, enter the number of pixels you want between the section's contents in the Spacing field.

5 Click the Fill tab to modify the background fill colors for the selected component.



6 Enter the following field information.

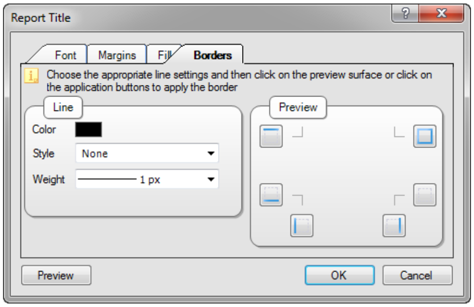
Table 192: Fill Tab Description

Field	Description
Color/Top Color/Left Color	Click this box to select a primary color as the background. The text description for this option varies depending on the Gradient Mode you select. Refer to Choosing colors.
No Fill	Select this check box to clear any fill colors previously selected. If this check box is selected, the other options on the Fill tab are disabled, except Color. Selecting a color automatically clears the No Fill check box, enabling the other options.
Gradient Mode	Select the positioning of the primary and secondary colors for the background from the Gradient Mode drop-down menu. Using gradient coloring lets you merge two colors. The following options are available. • **None**—Select this option to use only the primary color as the fill color. If you select None, the Gradient Color field is disabled. • **Top to Bottom**—Select this option to merge the colors from the top of the background to the bottom. • **Left to Right**—Select this option to merge the colors from the left of the background to the right.

Table 192: Fill Tab Description (Continued)

Field	Description
Gradient Color/Bottom Color/Right Color	Click this box to select a secondary color to merge with the primary color. The fill colors then merge using the method defined in the Gradient Mode menu. The text description for this option varies depending on the gradient mode you select. Refer to Choosing colors.
Transparency (%)	Select a percentage to define how intense the fill colors are. A setting of 100% is completely transparent, which prevents the fill colors from displaying. A setting of 0% has no transparency, resulting in intense background colors. The selected percentage is immediately reflected in the Preview field, so you can easily scroll through the transparency percentages to find a value that best suits your needs.
Preview	This area provides a sample of how the fill colors you select will appear on the report background.

7 Click the Borders tab to modify the borders of a component.



8 Enter the following field information.

Table 193: Borders Tab Description

Field	Description
Color	Click this box to select a color for the border. Refer to Choosing colors.

Table 193: Borders Tab Description (Continued)

Field	Description
Style	Click this drop-down menu to select one of the following border styles: Solid, Dashed, Dotted, Inset, Outset, Double, Groove, Ridge, Rounded, or Separator. The Separator option lets you add space around the component.
Weight	Click this drop-down menu to select the pixel size of the border. You can choose a number between 1 and 10 pixels.
Preview	Use this area to define the placement of the borders. Select any of the following buttons to place the borders, or click the area in the Preview white space where you want the border.
 Borders	Click a button to add the selected border attributes to the top, bottom, left, right, or all sides of the component. You can also add or remove borders from all sides of the component.

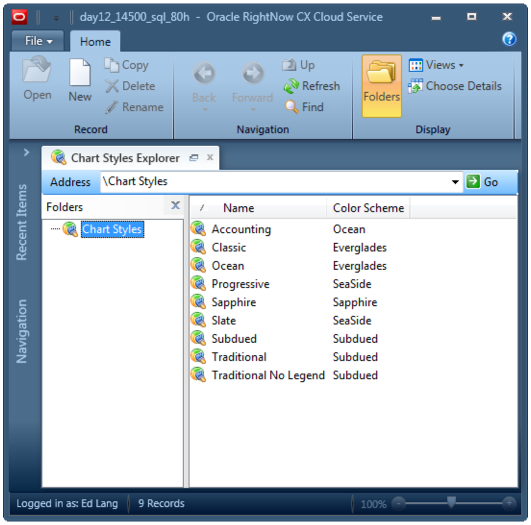
9 Click the Preview button to preview the style with the changes you have made to fonts, margins, fill, and borders.

10 Click the OK button to save your changes to the selected component.

11 Select other components on the style editor and repeat steps 1 through 10 to edit the style options for the selected component.

Chart Styles explorer

You can create chart styles to define the appearance of charts shown on reports. By applying a chart style, you can immediately change a chart's fonts, colors, scales, gridlines, backgrounds, and other display attributes. The Chart Styles explorer includes several predefined chart styles, which you can apply to charts, and allows you to create custom chart styles. You can then apply the same chart style to charts in different reports to ensure that all the charts have a similar appearance.



The attributes defined in chart styles vary depending on the type of chart used in a report. Likewise, the chart style options vary depending on the type of chart the style should be applied to. The chart types available are described in the following table.

Table 194: Chart Types Description

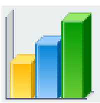
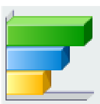
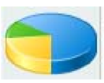
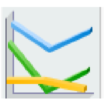
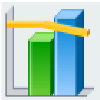
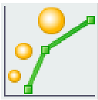
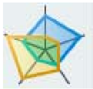
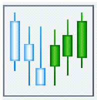
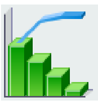
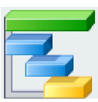
Chart Type	Description
 Vertical Bar	Vertical bar charts display data as a series of vertical bars. Subtype options can display the chart with single or stacked bars and as two- or three-dimensional.
 Horizontal Bar	Horizontal bar charts display data as a series of horizontal bars. Subtype options can display the chart with single or stacked bars and as two- or three-dimensional.
 Pie	Pie charts display data as a percentage of a whole. Subtype options can display two- or three-dimensional pie charts or doughnut charts.
 Line	Line charts display data as a series of points connected by a line. Subtype options can display the chart as two- or three-dimensional.

Table 194: Chart Types Description (Continued)

Chart Type	Description
 Line/Bar Combo	Line/bar combo charts display both a line chart and a vertical bar chart. Subtype options can display the chart with single or stacked bars and as two- or three-dimensional.
 Area	Area charts display data as areas on an x- and y-axis. Subtype options can display the chart as two- or three-dimensional.
 X-Y	X-Y charts display data as a series of plotted points. Subtype options can display the plotted points as points, lines, or bubbles and as two- or three-dimensional.
 Radar	Radar charts display data in a radar format. Numeric values are plotted at markers on the perimeter.
 Stock	Stock charts display the minimum and maximum values for data. Subtype options can display the chart using squares or lines to represent the high and low points of each plot.
 Pareto	Pareto charts display data in descending order with an ascending plot line for cumulative percentage. Subtype options can display the chart as two- or three-dimensional.
 Gauge	Gauge charts display a numeric value as a percentage of a whole. Subtype options can display the chart as a gradation bar or a simple color meter. **Note:** Gauge charts cannot be used in reports that contain non-aggregate columns.
 Funnel	Funnel charts display data as areas shown in ascending or descending order. Subtype options can display two- or three-dimensional funnel or pyramid charts.
 Gantt	Gantt charts display time lines for completion of scheduled tasks. Subtype options can display the chart as two- or three-dimensional.

For procedures on applying a chart style to a chart, refer to Adding and editing charts.

Creating and editing chart styles

Chart styles are customized using options available on the chart styles editor's **ribbon**. When you edit a chart style and select a chart type, different buttons are enabled based on the new chart type. For example, the Bar Settings button is enabled on the ribbon when editing a style for a vertical bar chart, whereas it is not enabled when creating a style for a pie chart. The chart subtype, such as two- or three-dimensional and stacked or not stacked, also impacts options enabled on the ribbon.

Tip The same ribbon options available on the chart styles editor are also available when you add a chart to a custom report. This allows you to customize the display of an individual chart used in a report without creating or modifying a chart style.

When creating a chart style, a sample of the currently selected chart type and subtype is shown on the content pane. The sample chart's display changes depending on the options you select so you can quickly see how a chart that uses the selected settings will appear.

Note Once you select a chart type and subtype, you can follow the steps in this procedure in any order you want. The steps in this procedure are listed according to the order of their associated buttons on the ribbon.

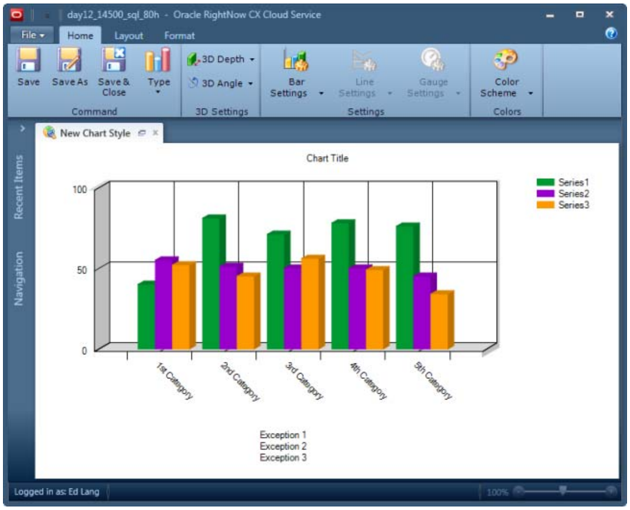
To create or edit a chart style

1 Click the Analytics button on the navigation pane and then double-click Chart Styles Explorer.

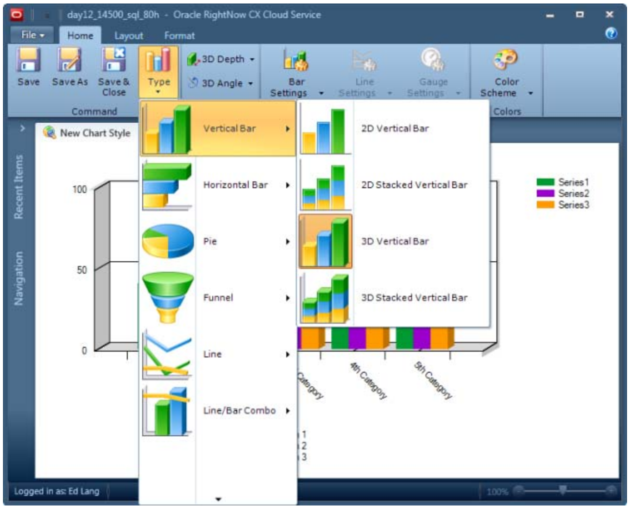
2 To create a new chart style, click the New button on the ribbon.

Or

To edit a chart style, right-click the chart style and select Edit. The chart styles editor displays a default chart type.



3 Click the Type button on the Home tab to display the chart type menu.



4 Select the chart and chart subtype you want to configure for the chart style.

Note Once you configure your chart style for the selected chart type and subtype, you can select other types to configure your chart style for use with those types. This allows you to use the same chart style regardless of the types of charts you add to reports, while ensuring the charts' colors, fonts, and other attributes are consistent.

5 To configure three-dimensional settings for a chart style with a 3D subtype, click the 3D Depth and 3D Angle buttons on the Home tab to enter values that impact how three-dimensional charts display.

Tip You can modify the three-dimensional settings for charts with 3D subtypes by right-clicking the chart on the content pane and selecting Rotate. When you do so, your cursor changes and you can move your mouse or other pointing device horizontally and vertically to change the chart's three-dimensional values. Click the left mouse button to quit rotating the chart. The right-click menu also gives you options to convert three-dimensional charts to two-dimensional charts, or two-dimensional charts to three-dimensional charts, as long as the chart type includes 3D subtypes. This right-click menu is also available when creating or viewing reports.

The following table describes the settings you can access from these buttons.

Table 195: Three-Dimensional Chart Subtype Settings Description

Button	Description
3D Depth	Click this button and enter a number for the extent of the chart's three-dimensional effect. A value of 0 removes the 3D appearance from the chart, where as a setting of 125 maximizes the effect.
3D Angle	Click this button to enter values for the chart's horizontal and vertical angles.
X Angle	Enter a value from 0 to 180 degrees in this field. This value determines the vertical rotation of the chart.
Y Angle	Enter a value from 0 to 180 degrees in this field. This value determines the horizontal rotation of the chart.

6 To configure colors, styles, borders, and other settings for the bar, line, or gauge elements in charts, click the Home tab and click the Bar Settings, Line Settings, or Gauge Settings button.

The following table describes the settings you can access from these buttons.

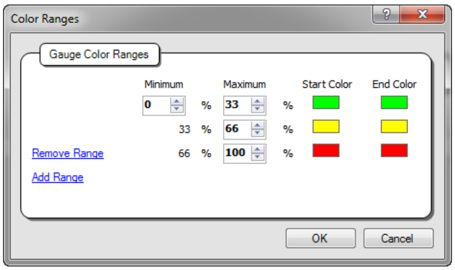
Table 196: Bar, Line, and Gauge Settings Buttons Description

Button	Description
Bar Settings	Click this button to customize the display of the bar elements for chart types that include bars.
Bar Outline	Select this option and then select the type of outline you want around the individual bars in the chart. You can choose from the following options: • None—The bars have no outline. • Lighter—The bar outline is a lighter shade of the bar's color. • Darker—The bar outline is a darker shade of the bar's color. • Color—The bar outline is a specified color. Choosing Color enables the Outline Color option. Select this to open the color menu where you can select a color for the outline. Refer to Choosing colors.
Bar Style	Select this option and then select the style you want for the bars in the chart. You can choose Block, Cylinder, Wedge, Emboss, or Light to Dark.
Multicolor Series	Select this option to make the bars in different series use different colors. When this option is not enabled, the bars in different series are shown using the same set of colors.
Line Settings	Click this button to customize the display of the line elements for chart types and subtypes that include lines.
Line Width	Select this option and then select the number of pixels you want for the line's width. Options include widths from one to ten pixels.
Symbols	Select this option and then select the symbol you want to place on the line to mark data points. You can choose None, Square, Circle, or Triangle.

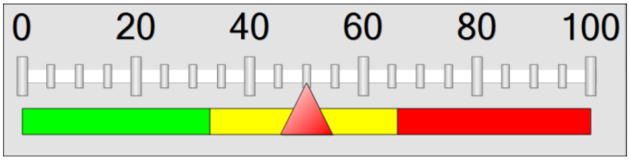
Table 196: Bar, Line, and Gauge Settings Buttons Description (Continued)

Button	Description
Gauge Settings	Click this button to customize the display of the gauge for gauge chart types.
Gauge Color	Select this option to open the color menu to select a color for the gauge. Refer to Choosing colors. You can also select No Value from the menu to use the default color.
Border Color	Select this option to open the color menu to select a color for the gauge's outline. Refer to Choosing colors. You can also select No Value from the menu to use the default color.
Show Numeric Identifier	Select this option to display a numeric indicator on the gauge which shows the actual value represented on the gauge.
Color Ranges	Select this option to open the Color Range window where you can define different colors to use for different value ranges on the gauge. Refer to step 7 for information on defining color ranges for gauge charts.

7 To define color ranges for a gauge chart, click the Gauge Settings button on the Home tab and select Color Ranges. Sample ranges are shown in the Color Ranges window here.



Color ranges are unique to gauge charts and let you show ranges of different values on the chart in different colors. The following figure shows a gauge chart with three color ranges.



a Click Add Range to add a color range.
b Enter the following field information

Table 197: Color Ranges Window Description

Field	Description
Add Range	Click this text to add a range. Before you add a range, the Color Ranges window does not show any ranges and Add Range is the only option available.
Minimum	Enter the percentage value the range should begin at. For example, a gauge with three color ranges could have a range that begins at 34%.
Maximum	Enter the percentage value the range should end at. For example, a gauge with three color ranges could have a range that ends at 66%.
Start Color	Click this box to open the Color window and select a color for the beginning of the range. Refer to Choosing colors.
End Color	Click this box to open the Color window and select a color for the end of the range. Refer to Choosing colors.
Remove Range	Click this text to remove the range shown next to the text.

c Click the OK button to save the color ranges.

8 To select a color scheme for the chart style, click the Color Scheme button on the Home tab and select the item you want from the color scheme menu.

Customizable color schemes are available for all chart types except gauge charts. Color schemes can be used to define the colors used for the chart. Refer to Color Schemes explorer.

9 To define the placement of labels, such as titles and legends, click the Layout tab and click the button on the ribbon's Labels group that corresponds to the label you want to configure.

The following table describes the labels you can configure from these buttons.

Table 198: Labels Buttons Description

Label	Description
Title	Click this button to select options for the chart's title. This label displays the chart's title defined when you add a chart to a report. You can choose not to show this label, or you can show it at the left, right, top, or bottom of the chart.
Legend	Click this button to select options for the chart's legend. This label displays a legend to identify the chart's contents. You can choose not to show this label, or you can show it at the left, right, top, or bottom of the chart.
Category Axis Title	Click this button to select options for the chart's category axis title. This label identifies the chart's category axis. You can choose to show it or not show it.

Table 198: Labels Buttons Description (Continued)

Label	Description
Value Axis Title	Click this button to select options for the chart's value axis title. This label identifies the chart's value axis. You can choose to show it or not show it.
Data Labels	Click this button to select options for the chart's data labels. Data labels can be displayed on the chart's bars, lines, and other display components to show the actual values represented in the chart. You can choose to show data labels or not show them.
Exception Box	Click this button to select options for the chart's exception box. This label describes the exceptions shown in the chart if the chart's data includes exceptions and the report is configured to show exceptions on the chart. You can choose to show this label at the left, right, top, or bottom of the chart.

10 To configure scale options for the chart style, click the Value Scale button on the Layout tab and select from the options described in the following table.

Table 199: Value Scale Button Description

Option	Description
Primary Scale	The options in this section let you show the primary scale, rotate the scale's labels, and choose whether to configure the scale's range manually. You can also choose to have these options configured automatically.
Show	Select this option to display the primary scale on the chart. By default, the primary scale is displayed.
Automatic	Select this option to automatically determine the range of the scale based on the range of values in the data shown on the chart.
Manual	Select this option to manually configure the range shown on the primary scale. When you select this option and hover over it, Scale Start and Scale End fields appear. Enter the minimum value you want for the scale in the Scale Start field and the maximum value you want in the Scale End field.
Rotate Labels	Select this option and then select a degree to rotate the label text. Your choices are None, 15, 30, 45, 0, -15, -30, and -45 degrees (clockwise).

Table 199: Value Scale Button Description (Continued)

Option	Description
Secondary Scale	The options in this section let you configure the secondary scale for the line values shown on line/bar chart types.
Show	Select this option to display the secondary scale on the chart. By default, the secondary scale is not displayed.
Automatic	Select this option to automatically determine the range of the scale based on the range of values in the data shown on the chart.
Manual	Select this option to manually configure the range shown on the secondary scale. When you select this option, Scale Start and Scale End fields appear. Enter the minimum value you want for the scale in the Scale Start field and the maximum value you want in the Scale End field.
Rotate Labels	Select this option and then select a degree to rotate the label text. Your choices are None, 15, 30, 45, 0, -15, -30, and -45 degrees (clockwise).
Position	The options in this section let you choose where to place the primary scale on the chart.
Primary Scale Right Primary Scale Left	Select one of these options to place the primary scale on the right or left side of the chart. By default, the primary scale is displayed to the left of the chart. **Note:** These options are enabled only for chart types that display data vertically.
Primary Scale Top Primary Scale Bottom	Select one of these options to place the primary scale at the top or bottom of the chart. By default, the primary scale is displayed at the bottom of the chart. **Note:** These options are enabled only for chart types that display data horizontally.
Use Logarithmic Scale	Select this check box to use a logarithmic scale based on your report data.

11 To configure category and value grid lines shown on the chart, click the Category Grid Lines or Value Grid Lines button on the Layout tab. The following table describes the options you can configure from these buttons.

Table 200: Category Grid Lines and Value Grid Lines Buttons Description

Option	**Description**
Scale	The options in this section let you choose whether to use automatic or manual offsets for the major and minor grid lines shown on the chart. The offsets determine the spacing between the grid lines.
Automatic	Select this option if you want the offsets between the major and minor grid lines shown on the chart to be configured automatically.
Manual	Select this option to manually specify the offsets for the chart's grid lines. When you select this option, Major Offset and Minor Offset fields are displayed. Enter the numeric offset value you want for the major grid lines in the Major Offset field, and the offset you want for the minor grid lines in the Minor Offset field.
Display	The options in this section let you show or hide major and minor grid lines on the chart. Grid lines can make it easier to identify values on the chart.
Show Major	Select this option to display major grid lines on the chart.
Major Color	Select this option to open the color menu where you can choose the color you want for the major grid lines. Refer to Choosing colors.
Show Minor	Select this option to display minor grid lines on the chart.
Minor Color	Select this option to open the color menu where you can choose the color you want for the minor grid lines. Refer to Choosing colors.
Show Left	Select this option to show grid lines along the left side of the chart. **Note:** This option is not available on the Value Grid Lines button.
Left Color	Select this option to open the color menu where you can choose the color you want for the grid line along the left side of the chart. Refer to Choosing colors. **Note:** This option is not available on the Value Grid Lines button.

Table 200: Category Grid Lines and Value Grid Lines Buttons Description (Continued)

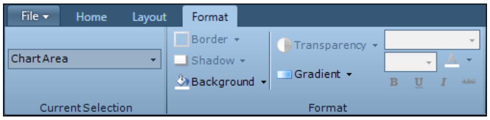
Option	Description
Bottom Color	Select this option to open the color menu where you can choose the color you want for the grid line along the bottom of the chart. Refer to Choosing colors. **Note:** This option is not available on the Category Grid Lines button.

12 To configure options for tick marks shown on the chart's scale, click the Tick Marks button on the Layout tab. The following table describes the options available on this button.

Table 201: Tick Marks Button Description

Option	Description
Scale	The options in this section let you choose whether to use automatic or manual offsets for the major and minor tick marks shown on the chart's scale. The offsets determine the spacing between the tick marks.
Automatic	Select this option if you want the offsets for the scale's major and minor tick marks to be configured automatically.
Manual	Select this option to manually specify the offsets for the scale's major and minor tick marks. When you select this option, Major Offset and Minor Offset fields are displayed. Enter the numeric offset value you want for the major tick marks in the Major Offset field, and the offset you want for the minor tick marks in the Minor Offset field.
Display	The options in this section let you show or hide major and minor tick marks on the chart's scale.
Major Tick Marks	Select this option to show the major tick marks on the chart.
Minor Tick Marks	Select this option to show minor tick marks on the chart.

13 To customize the fonts, borders, and backgrounds of different sections of the chart, click the Format tab.



a Click the section of the chart you want to configure on the content pane.

Or

If you know the name of the chart section you want to configure, select it from the Current Selection drop-down menu on the ribbon. The following chart sections are available, though not all sections are available for all chart types.

- ▷ Chart Area
- ▷ Grid Area
- ▷ Title
- ▷ Legend
- ▷ Category Axis Labels
- ▷ Category Axis Title
- ▷ Value Axis Title
- ▷ Primary Scale Labels
- ▷ Secondary Scale Labels
- ▷ Data Labels
- ▷ Exception Box

b Select from the buttons on the Format tab's Format group described in the following table.

Table 202: Format Tab Buttons Description

Button	**Description**
Border	Click this button to select a border style for the selected section. The available options are: • None • Thin • Medium • Thick • Dashed To select a color for the border, select Border Color from the menu to open the color menu. Refer to Choosing colors.

Table 202: Format Tab Buttons Description (Continued)

Button	Description
Shadow	Click this button to select a shadow style for the selected section's border. The available options are: • None • Thin • Medium • Thick To select a color for the shadow, select Shadow Color from the menu to open the color menu. Refer to Choosing colors.
Background	Click the arrow on this button to open the color menu where you can select a background color for the selected section of the chart. Refer to Choosing colors.
Transparency	Click this button to enter a percentage to define how intense the background color is for the chart's grid area. A setting of 100% is completely transparent, which prevents the fill colors from displaying. A setting of 0% has no transparency, resulting in intense background colors. The selected percentage is immediately reflected on the sample chart, so you can easily scroll through the transparency percentages to find a value that best suits your needs.
Gradient	Click this button to select the type of gradient you want for the background of the chart area section. You can use gradient color to customize a background by blending two colors. Your options are: • None • Left to Right • Top to Bottom To select a gradient color to blend into the background color, select Gradient Color to open the color menu. Refer to Choosing colors.
Font buttons	Select the font, font size, and other attributes from these buttons. Refer to Choosing font attributes.

14 To configure settings for a different chart type or subtype, repeat steps 3 through 13.

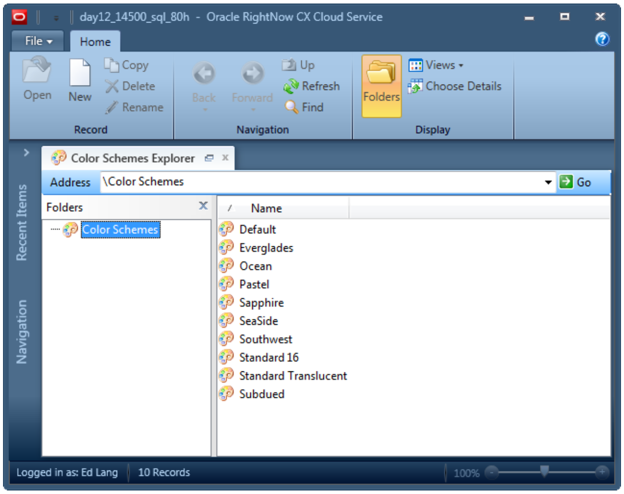
15 Click the Save and Close button on the ribbon to save the new chart style.

Color Schemes explorer

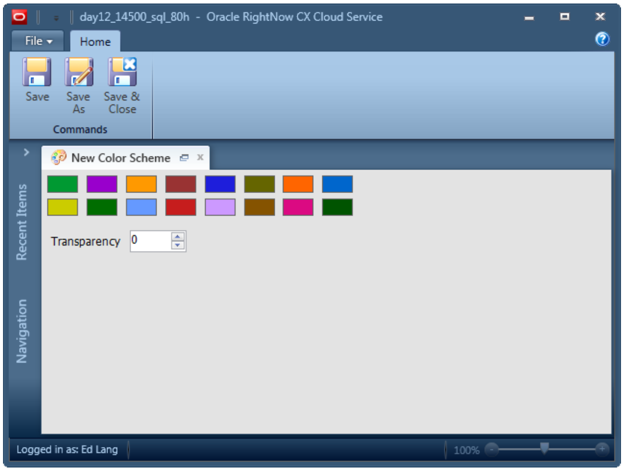
The Color Schemes explorer lets you view standard color schemes used in conjunction with chart styles. You can also copy standard color schemes and edit the copies, or you can create your own custom color schemes. Color schemes you create can be copied, renamed, edited, and deleted using right-click functionality.

To create a color scheme

1 Click the Analytics button on the navigation pane and then double-click Color Schemes Explorer. The Color Schemes explorer opens, displaying the current color schemes.



2 Click the New button on the ribbon to open the New Color Scheme window. The window populates with default colors.



3 To change a particular color, click the box with the color to open the Color window. Refer to Choosing colors.

4 Enter the transparency value for the color scheme in the Transparency field. A transparency value of 0 displays a solid color, and a value of 255 is completely transparent with no color.

5 Click the Save and Close button on the ribbon to save the new color scheme.

Images explorer

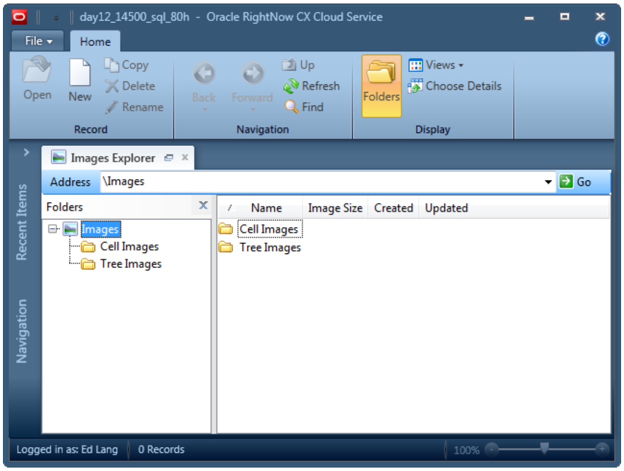
Photos and other images can be uploaded to use in reports and **dashboards**. For example, your organization's logo can be added as an image and then added to custom reports. Refer to Adding images to reports for information about adding images to reports area backgrounds or Adding images for information about adding images to dashboards.

The images used with reports and dashboards can be added and replaced using the Images explorer. The ability to replace images is helpful when an image, such as a corporate logo, is modified. Once the image file is replaced, the reports and dashboards with the old image automatically use the new image.

Note Images can also be copied, renamed, or deleted using right-click functionality.

To add an image

1 Click the Analytics button on the navigation pane and then double-click Images Explorer.



2 Click the New button on the ribbon.

3 Click Select One or More Images to open a window where you can select the images you want to add. You can add *.bmp*, *.jpg*, *.gif*, and *.png* file types.

4 Select the image you want to upload. You can select multiple images by pressing **Ctrl** when selecting them.

5 Click the Open button.

6 Click the Save and Close button on the ribbon to save the image. When saving a single image, you can specify a new name for the image. When saving multiple images, the original image names are retained.

To replace an image

1 In the Images explorer, right-click the image you want to replace and select Open.

2 Click Select a Different Image. A window opens where you can select the new image.

3 Select the image you want to replace the existing image with.

4 Click the Open button.

5 Click the Save and Close button on the ribbon to save the new image.

Text Fields explorer

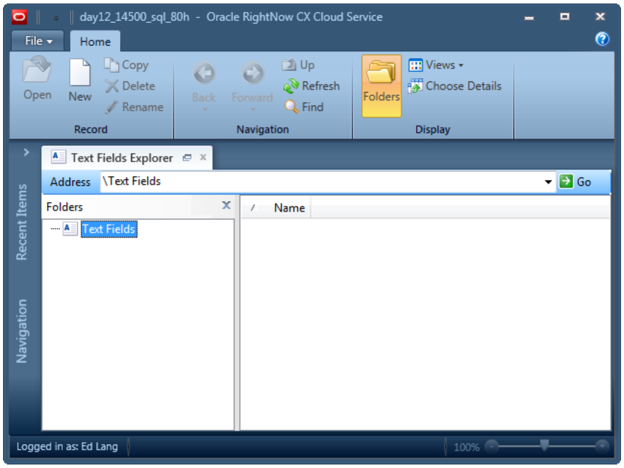
The Text Fields explorer lets you create text fields you can add to **custom reports** and **dashboards**. When you create a text field, you can specify the field's text, fonts, borders, colors, and margins. You can also adjust these settings after you add the field to a report or dashboard. Refer to Adding text fields to reports or Adding images and text fields to dashboards.

For example, you could create a text field with your organization's name, using your organization's preferred fonts and colors, which you could add to your reports' titles. Since the text fields can be edited once they are added to reports, you can also create a template text field with your customized settings and change the wording in the field as necessary.

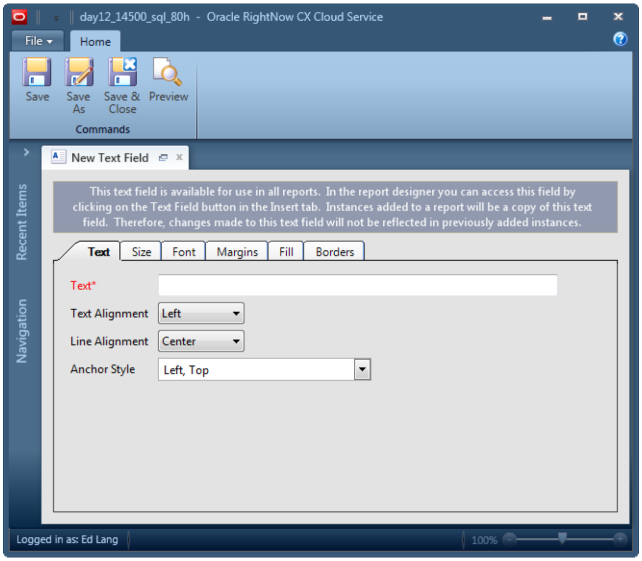
Using the Text Fields explorer, you can edit, copy, delete, and rename text fields using right-click functionality. You can also create new text fields.

To create a text field

1 Click the Analytics button on the navigation pane and then double-click Text Fields Explorer.



2 Click the New button on the ribbon. A new text field opens on the content pane.

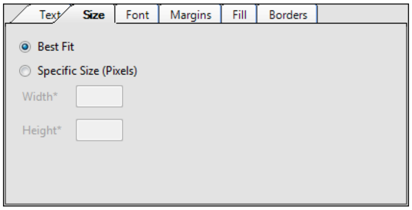


3 Enter the following field information.

Table 203: Text Tab Description

Field	Description
Text*	Type the text you want to display in this field. This text also serves as the text field name.
Text Alignment	Click this drop-down menu to select the horizontal alignment for the text in the text field. Options are Left, Center, and Right.
Line Alignment	Click this drop-down menu to select the vertical alignment for the text in the text field. Options are Top, Center, and Bottom.
Anchor Style	Click this drop-down menu to select the anchor style for the field. Refer to Defining anchor styles.

4 Click the Size tab.



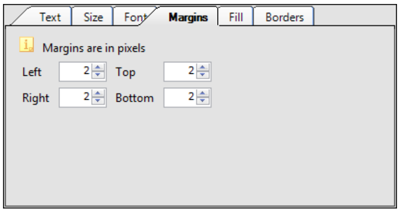
5 Enter the following field information.

Table 204: Size Tab Description

Field	Description
Best Fit	Select this radio button to have the size of the text field automatically adjusted to best fit the available space in the report.
Specific Size (Pixels)	Select this radio button to manually enter the specific width and height settings for the text field. Any text in the field boundaries that exceeds the size of the field is clipped.

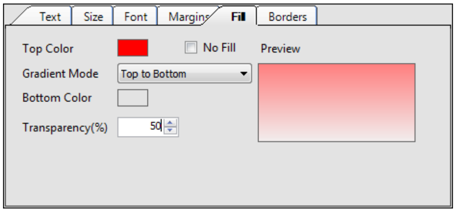
6 Click the Font tab to select the font settings for the text field. Refer to Choosing font attributes.

7 Click the Margins tab to define the amount of space surrounding the text in the text field.



8 Select the number of pixels between the text and each of the four text field margins.

9 Click the Fill tab to define the background fill colors for the text field.



10 Enter the following field information.

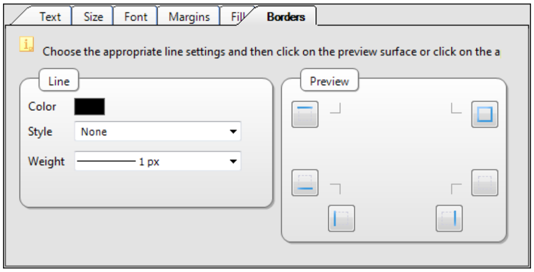
Table 205: Fill Tab Description

Field	Description
Color/Top Color/Left Color	The text description for this option varies depending on the gradient mode you select. Click this box to select a primary color as the background. Refer to Choosing colors.
No Fill	Select this check box to clear any fill colors previously selected. If this box is selected, the other options on the Fill tab are disabled except Color. Selecting a color automatically clears the No Fill check box, enabling the other options.
Gradient Mode	Select the positioning of the primary and secondary colors for the background from the Gradient Mode drop-down menu. Using gradient coloring lets you merge two colors. The following options are available. • **None**—Select this option to use only the primary color as the fill color. If you select None, the Gradient Color field is disabled. • **Top to Bottom**—Select this option to merge the colors from the top of the background to the bottom. • **Left to Right**—Select this option to merge the colors from the left of the background to the right.
Gradient Color/Bottom Color/Right Color	The text description for this option varies depending on the gradient mode you select. Click this box to select a secondary color to merge with the primary color. The fill colors then merge using the method defined in the Gradient Mode menu. Refer to Choosing colors.

Table 205: Fill Tab Description (Continued)

Field	Description
Transparency (%)	Select a percentage to define how intense the fill colors are. A setting of 100% is completely transparent, which prevents the fill colors from displaying. A setting of 0% has no transparency, resulting in intense background colors. The selected percentage is immediately reflected in the Preview area, so you can easily scroll through the transparency percentages to find a value that best suits your needs.
Preview	This area provides a sample of how the fill colors you select will appear on the text field's background.

11 Click the Borders tab to define the borders for the text field.



12 Enter the following field information.

Table 206: Borders Tab Description

Field	Description
Color	Click the color box to select a color for the border. Refer to Choosing colors.
Style	Click this drop-down menu to select one of the following border styles: Solid, Dashed, Dotted, Double, Inset, Outset, Groove, Ridge, Rounded, or Separator. The Separator option lets you add empty space around the text field.
Weight	Click this drop-down menu to select the pixel size of the border. The border weight can be from 1 to 10 pixels.

Table 206: Borders Tab Description (Continued)

Field	Description
Preview	This area defines the placement of the borders you define. Select any of the following buttons to place the borders or click the area in the Preview white space where you want the border.
 Borders	Click a button to add the selected border attributes to the top, bottom, left, right, or all sides of the component. You can also add or remove borders from all sides of the component.

13 To preview the text field, click the Preview button on the ribbon.

14 Click the Close button to close the preview window.

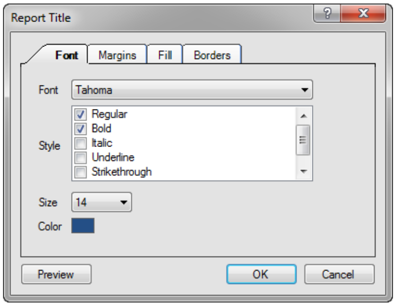
15 Click the Save and Close button on the ribbon to save the text field.

Selecting fonts and colors

Certain items you edit in explorers include options to change font attributes or add colors. The methods to define fonts and colors are generally the same, regardless of the item you are editing or the explorer you are working in.

Choosing font attributes

When customizing text elements in Analytics, you can specify font attributes to change the display of the text. Font attributes can be selected from the **ribbon** in certain editors, such as the chart styles editor, or from a Font tab on a window in other areas. The same options are available from the ribbon or the tab. Some editors give you access to font attributes from both the ribbon and the tab, allowing you to change font attributes from either location. The following figure shows font options on the style editor's Font tab.



This procedure describes the options available on the Font tab. However, you can also set these options from the ribbons of most editors in Analytics, such as the Chart Styles editor.

To select font attributes from the Font tab

1 Click the Font tab.

2 Enter the following field information.

Table 207: Font Options Description

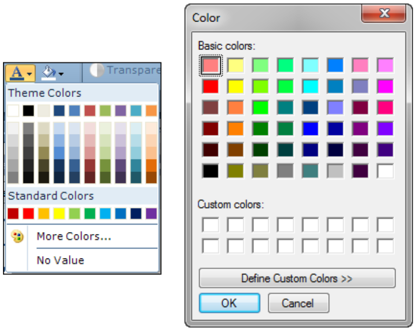
Field	Description
Font	Click this drop-down menu to select a font.
Style	Select the check boxes for the style attributes you want. You can select multiple attributes to apply to the font: Regular, Bold, Italic, Underline, Strikethrough, and All Caps.
Size	Click this drop-down menu to select the point size of the font.
Color	Click the color box to select a color for the font. Refer to Choosing colors.
Preview	Click this button to preview the font using the options you select. **Note:** This button is not available on all Font tabs.

3 Click the OK button to save your changes.

Choosing colors

You can select colors for many objects in Analytics, such as text labels and report backgrounds. When selecting colors from a tabbed window, the Color window displays. When selecting colors from a **ribbon**, the color menu is displayed. Both give you the same options, though they present them in slightly different ways.

This procedure explains how to select colors and define custom colors using both the color menu and Color window. The following shows the color menu on the left and the Color window on the right.

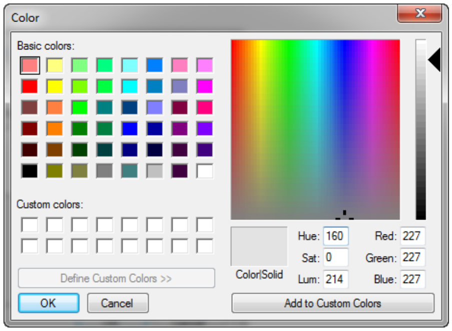


To select a color

1 To select a color using the menu, click the color you want. The color is applied to the object you are editing.

2 To select a color using the window, click the color you want and then click the OK button. The color is applied to the object you are editing.

3 To define a custom color from the window, click the Define Custom Colors button. The window expands to show custom color options.



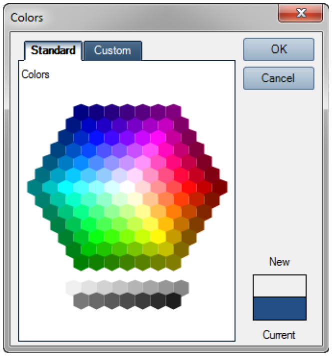
a Click anywhere in the color palette or type the HSL (hue, saturation, lumination) or RGB (red, green, blue) components in the appropriate text boxes to define your custom color.

- The HSL color model defines the hue, saturation, and lumination of the color.
  - ▷ **Hue**—The hue is the pigment of the color and has a value between 0 to 359 degrees.
  - ▷ **Saturation**—The saturation is measured as a percent from 0 to 100 and specifies the vividness of a color.
  - ▷ **Lumination**—Lumination is the amount of white in the color and is a value from 0 to 100 percent.
- The RGB color model defines the amount of red, green, and blue light the color contains. RGB values can be between 0 and 255. For example, when all components are set to 255, the color is white, and when all are set to 0, the color is black.

b Click the Add to Custom Colors button. The color is added to your custom colors.

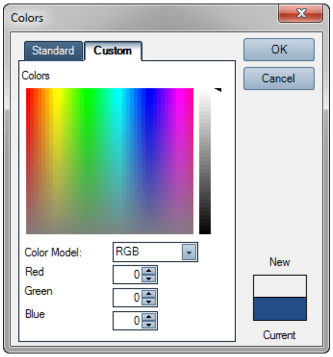
c Click the OK button to apply the color you selected or created to the component you are defining.

4 To view additional standard colors or to create a custom color from the color menu, click More Colors.



a To choose a standard color from the window, click the color you want and click the OK button to apply the color to the object you are editing.

b To define a custom color, click the Custom tab.



Custom colors are defined on the Custom tab in the same way they are defined on the Color window, as described in step 3.

c Click the OK button to apply the custom color to the object you are editing.

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Dashboards

When viewing standard or custom reports, you generally open reports one at a time, and search for data in only the report that is active. However, you can view and search for data in several reports simultaneously by adding them to a dashboard. Each report in a dashboard retains the same functionality as if you opened the report separately, allowing you to access and work with a variety of data from one dashboard.

Dashboards are particularly useful for managers who need to view a wide range of data from different reports. Using dashboards eliminates the need to open a large number of reports individually.

Creating dashboards

Dashboards are created and edited on the dashboard design center by dragging reports to the dashboard, adding optional descriptions, images, text, and controls, and configuring display options. If you do not want to create a new dashboard, you can copy an existing custom or standard dashboard in the Reports explorer and then edit the copy using the dashboard design center.

Important Customizations made to report displays in existing dashboards are not carried over when copying dashboards. This can result in a copied dashboard displaying somewhat differently than the original.

Opening the dashboard design center

The dashboard design center provides the tools you need to create and edit dashboards, and lets you access optional items such as text fields and images to enhance your dashboards. The dashboard design center can be opened from the Reports explorer or by right-clicking a dashboard on the navigation pane and selecting Edit Report Definition. The following procedure describes opening the design center from the Reports explorer.

To open the dashboard design center

1 If your navigation set is configured to add dashboards from the **file menu**, click File and select Dashboard. See To configure the file menu.

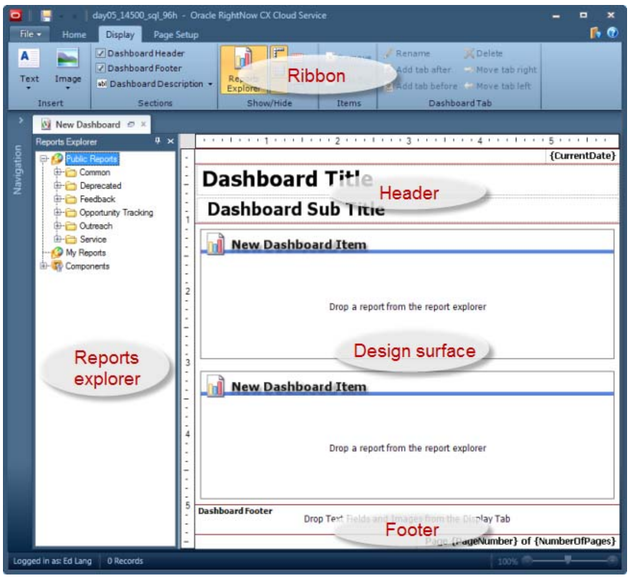
Or

Click the Analytics button on the navigation pane and then double-click Reports Explorer.

a To create a dashboard, click the New Dashboard button.

b To edit an existing dashboard, right-click the dashboard and select Edit.

The following image shows the dashboard design center. The design center's main components you use to create dashboards are indicated.



For descriptions of the ribbon and main components, refer to Dashboard design center ribbon and Dashboard design center components.

Dashboard design center ribbon

When you open the dashboard design center, the ribbon includes the Home, Display, and Page Setup tabs from which you can access tools to edit the dashboard. Each tab has one or more groups containing buttons you can use to modify the dashboard or items on the dashboard.

Note To minimize the ribbon when editing a dashboard, double-click a tab. Click the tab to temporarily display the buttons and click the tab again to hide them. To permanently restore the tab buttons, double-click the tab again.

Home tab

The options available on the Home tab let you preview the dashboard you are editing and configure options that apply to the entire dashboard. For example, you can select a dashboard layout and specify when the dashboard's contents should be refreshed.

The groups and buttons on the Home tab are described in the following table.

Table 208: Home Tab Description

Group/Button	Description
Views	This button lets you choose whether to view the dashboard using the report view or design view. Refer to Previewing dashboards.
Properties	The buttons in this group let you modify properties that apply to the entire dashboard.
Options	Click this button to select different options that impact how the dashboard runs. For example, you can edit the dashboard description and specify when the dashboard's contents should be refreshed. Refer to Changing dashboard options.

Table 208: Home Tab Description (Continued)

Group/Button	Description
Scheduling	Click this button to schedule the dashboard to be sent to other individuals. A dashboard can be scheduled and sent just as a report can. However, since **data exceptions** cannot be applied to dashboards, alerts cannot be added to the dashboard's schedule. Refer to Scheduling dashboards. **Note:** This button appears only when scheduled reports are enabled. For information about enabling scheduled reports, contact your Oracle account manager.
Permissions	Click this button to define which profiles should have access to run and edit the dashboard. Refer to Specifying permissions.
Audit Log	Click this button to open the audit log for the dashboard, which shows you when the dashboard was created, edited, run, and **published**, and which staff members performed these actions. Refer to Viewing the audit log.
References	Click this button to access predefined reports that show you the **workspaces**, **navigation sets**, and **report links** that use the dashboard you are editing. Viewing these items before editing a dashboard ensures that you are aware of other items that might be impacted by changes you make. If you decide the impact would be too great, you can create a copy of the dashboard and edit the copy instead. **Note:** If you have the Analytics Administrator profile permission, you can access versions of these reports that include search options using the Report Management component. Refer to Management Reports.
Display	The buttons in this group let you modify how the dashboard is displayed. For example, you can apply a style to all the reports on the dashboard to give them a similar appearance.
Screen	Click this button to display all the dashboard's reports on the screen when the dashboard is run. Each report can have separate scroll bars to view the report contents.

Table 208: Home Tab Description (Continued)

Group/Button	Description
Scrollable	Click this button to display all the contents of each report on the dashboard. When this option is selected, each report displays in its preferred size and the height and width of the items in each report are fixed. Separate reports do not have separate scroll bars, but vertical and horizontal scroll bars are added to the dashboard if needed to display the entire dashboard. **Note:** If the entire size of the dashboard exceeds 32767 x 32767 pixels, dashboard contents are clipped when using this option.
Display Options	Click this button to change the dashboard's width, add report title bars, and select which report sections you want to display. Refer to Changing dashboard display options.
Auto Format	Click this button to apply a **style** to all the reports in a dashboard. This overrides styles applied to the individual reports. Refer to Applying a style to a dashboard.
Layouts	Click this button to load a predefined dashboard layout. Layouts let you quickly select how many reports are shown on the dashboard and their position. When you select a layout, the design surface is automatically adjusted to conform to the layout you selected. Refer to Selecting dashboard layouts.
Parameter Values	Click this button to open the Set Filter Values window where you can specify defaults for searching reports in the dashboard. Refer to Specifying search defaults.
Add Tab	Click this button to add a tab to the dashboard. Tabs let you create multiple pages for the same dashboard, and you can select the reports that display on each tab.

Display tab

The options available on the Display tab let you add images and text fields, show the dashboard header and footer, and hide portions of the design center so you can see only the components you need.

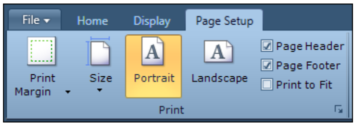
The groups and buttons on the Display tab are described in the following table.

Table 209: Display Tab Description

Group	Description
Insert	The buttons in this group let you add images and text fields to your dashboard. Refer to Adding images and text fields to dashboards.
Sections	The check boxes and button in this group let you show or hide the Dashboard Header and Dashboard Footer sections, and choose how you want to display the dashboard's description. Refer to Adding dashboard descriptions.
Show/Hide	The buttons in this group let you show or hide different parts of the dashboard design center. Showing the reports explorer lets you select reports to add to the dashboard. You can also add rulers, rule lines, field outlines, section headers, and a grid to the design surface to help you create your dashboard. Refer to Dashboard design center components.
Items	The buttons in this group let you remove a selected report or a report placeholder from the dashboard, and let you show or hide the title of the selected report when the dashboard is generated. **Note:** The Remove button is disabled when the only report on a dashboard is selected.
Dashboard Tab	The buttons in this group let you add, delete, rename, and move dashboard tabs. Refer to Adding tabs to the dashboard.

Page Setup tab

The options on the Page Setup tab let you configure printing options for the dashboard. These options are applied only when printing.



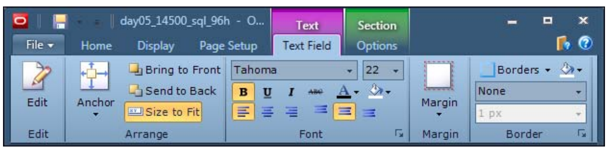
The groups and buttons on the Page Setup tab are described in the following table.

Table 210: Page Setup Tab Description

Group/Button	Description
Print	The buttons in this group let you configure the dashboard for printing and add the Page Header and Page Footer sections.
Print Margin	Click this button to select the size of the margins used when printing the dashboard. The available options are Normal, Narrow, Medium, and Wide.
Size	Click this button to select the size of the paper used when printing the dashboard. The available options are Letter, Legal, Executive, A3, A4, and A5.
Portrait/Landscape	Click these buttons to print the dashboard in portrait or landscape mode.
Page Header/Page Footer	Select these check boxes to include a page header and page footer when printing the dashboard.
Print to Fit	Select this check box to scale the dashboard to your printer's default page width and send the dashboard to the printer.

Text Field tab

The Text Field tab is shown on the ribbon when you select a text field on the dashboard design center. You can use the buttons on the tab to edit the text field's fonts, margins, and borders.



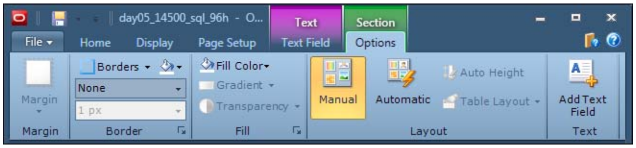
The groups and buttons on the Text Field tab are described in the following table.

Table 211: Text Field Tab Description

Group/Button	Description
Edit	Click this button to open the Edit Text Field window, where you can select fonts, margins, fill colors, and borders for the text. Many of the buttons on the Text Field tab let you customize the same options available on the Edit Text Field window.
Arrange	The buttons in this group let you position and size the selected text field.
Anchor	Click this button to define an anchor style for the image or text field. Anchor styles determine how an image or text field moves in relation to the borders of the dashboard section. Refer to Defining anchor styles.
Bring to Front/Send to Back	Click these buttons to place the selected item on top of or beneath other overlapping items.
Size to Fit	Click this button to automatically shrink or expand the element containing the image or text field to fit the selected item. **Note:** Manually resizing the selected element disables this option.
Font	The buttons in this group let you change the font style, size, and color. You can also select font attributes, such as bold and italic, and change the text's alignment within the text field. In addition, you can add a background color for the text field.
Margin	Click this button to select the width of the margins around the item. The available options are None, Narrow, Medium, Wide, and Custom. Selecting Custom lets you specify the number of pixels for the top, bottom, left, and right margins.
Border	The buttons in this group let you add borders to the text field and change the borders' display options. You can identify which borders you want and choose the borders' color, size, and style.

Options tab

The Options tab is shown on the ribbon when you select an item on the dashboard design center. The buttons on the tab vary depending on the item you select and let you customize the item. For example, if you select a report on the dashboard, you can use the buttons on the Options tab to add a border around the report and choose background colors.



The groups and buttons on the Options tab are described in the following table.

Table 212: Options Tab Description

Group/Button	Description
Margin	Click this button to select the width of the margins around the item. The available options are None, Narrow, Medium, Wide, and Custom. Selecting Custom lets you specify the number of pixels for the top, bottom, left, and right margins.
Border	The buttons in this group let you add borders to the text field and change the borders' display options. You can identify which borders you want and choose the borders' color, size, and style.
Fill	The buttons in this group let you add a background color to the selected item. You can select the background color and add a gradient color to blend into the primary color. You can also choose how intense the colors should be with the Transparency setting.
Layout	The buttons in this group let you define how the content of the selected dashboard section should be arranged and how the height of the dashboard section should be managed. Refer to Selecting dashboard section layout options.
Add Text Field	Click this button to add a new text field to the dashboard.

Dashboard design center components

The tasks you perform when creating or editing a dashboard are done through the ribbon, design surface, and reports explorer components of the dashboard design center. These components provide access to the reports, dashboard sections, and other items you use to create and edit dashboards. The dashboard sections are described in following table.

Table 213: Dashboard Sections Description

Dashboard Section	Description
Page Header	This section accepts images and text fields and is displayed at the top of dashboards when you print them.
Dashboard Header	Contains text fields and images that display at the top of the dashboard. By default, the header contains text fields you can modify for the dashboard's title and sub-title.
Dashboard Description	Contains text that you can modify to provide general information about the dashboard. You can display dashboard descriptions inline to show the description on the dashboard or as text on a separate tab on the dashboard. Refer to Adding dashboard descriptions.
Dashboard Items	Contains the reports and components you add to the dashboard. **Note:** If you add tabs to the dashboard, the name of this section changes to Tabs, and a tree is added from which you can add content to each tab. Refer to Adding tabs to the dashboard.
Dashboard Footer	This section contains text fields and images that display at the bottom of the dashboard.
Page Footer	The page footer is similar to the page header section. The text fields and images added to this section display at the bottom of printed dashboards.

Design surface

The design surface displays the dashboard sections you want to include in the dashboard. Once a dashboard section is displayed on the design surface, you can add, edit, and remove content in the section. For example, you can drag reports to the Dashboard Items section, insert text fields into the Dashboard Header, and change the background of the Dashboard Footer.

You can add rulers, lines, and headings to help you identify sections and fields shown on the design surface. These options are accessed from the Show/Hide group on the ribbon's Display tab. The options are described in the following table.

Table 214: Design Surface Display Options Description

Option	Description
Show Rulers	Click this button to display horizontal and vertical rulers when designing the dashboard to provide a perspective on the size of the dashboard.
Show Rule Lines	Click this button to display horizontal lines separating the dashboard sections displayed on the design surface.
Show Field Outlines	Click this button to display borders around the fields you add to the dashboard.
Show Section Headers	Click this button to display a heading above each dashboard section.
Show Grid	Click this button to display a grid in the dashboard's header and footer sections to help you align items you add to the sections. You can also click the arrow on the button to select the grid size you want to use.

Reports explorer

The dashboard design center's reports explorer lists the reports, notifications, and a web browser component that can be added to a dashboard. You add these by dragging them from the reports explorer to the dashboard's design surface.

Note If your site is configured to use custom add-in components, they are available on the reports explorer's Components tree. Custom add-ins can be dragged to dashboards and positioned just like reports. For information about custom add-ins, contact your Oracle account manager.

You can also hide the reports explorer to add more room to the design surface if you do not need to add reports. To hide the reports explorer, click the Display tab and then click the Reports Explorer button. You can click the button again to show the reports explorer.

Tip You can drag the reports explorer and reposition it on the dashboard design center or open it in a new window just as you can move the data dictionary on the report design center. Refer to Moving the data dictionary.

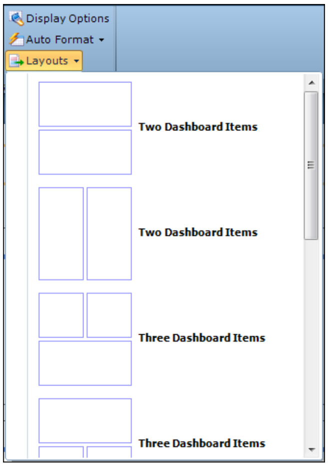
Selecting dashboard layouts

When creating a dashboard, you can use dashboard layouts to add predefined regions to the design surface. You can then drag reports and other content to the regions. The use of layouts is optional, but they offer a helpful starting point when creating dashboards.

To apply a layout to a dashboard

1 Click the Home tab.

2 Click the Layouts button to open the layouts menu.



3 Select the layout you want to apply to the dashboard. The design surface is updated to reflect the layout you selected.

4 To modify the spacing of the dashboard layout you selected, hover over the spaces between the report areas until the cursor changes to show direction arrows. You can then drag the borders to the position you want.

Placing content on the dashboard

You add reports and other items to a dashboard by dragging them from the dashboard design center's reports explorer to the design surface. You decide where to place each item and how much content you want on the dashboard. You can also add tabs to the dashboard to place additional reports and other content that may not fit on the dashboard's main page.

There are four types of items you can add to dashboards from the dashboard design center's reports explorer.

Note Each dashboard can have a maximum of fifty items placed on it.

- **Reports**—Most items you add to dashboards will likely be reports, though there are considerations to keep in mind before you add them.
  - ▷ Private reports on a dashboard can be viewed by staff members with permission to open the dashboard, even if the staff members do not have permission to view the individual reports. This may result in staff members seeing information they should not have access to.
  - ▷ If a report used on a dashboard is deleted, the report is automatically removed from the dashboard and a placeholder for the report displays when the dashboard is viewed or edited.
  - ▷ If you want to use the same report on a dashboard more than once with different default filter values to show different data, you need to create a copy of the report and add the copy along with the original report since only one set of filter values can be stored for each unique report on a dashboard.
- **Add-ins**—If you have installed add-ins that are designed to be accessible in dashboards, you can access them in the Components > Add-ins folder. You can drag add-ins to the dashboard just as you would drag a report. Refer to Add-Ins.
- **Notifications**—You can drag the Notifications component, located in the Components > Common folder, to the dashboard to allow your staff to receive notices on the dashboard when particular events happen, such as an incident being assigned. Refer to Opening your notifications.
- **Web browser**—A web browser can be added to a dashboard as well, allowing staff members to navigate to a web page displayed in the dashboard. To add the browser to a dashboard, drag the Web Browser–Component report from the Public Reports > Com-

mon report folder to the dashboard. Once the browser is added to the dashboard, you can specify a default URL in the dashboard's parameters. Refer to Specifying search defaults.

The following procedure describes adding reports to the dashboard, but the same process is used to add any of the other items listed in the dashboard's reports explorer.

To add reports to a dashboard

1 In the dashboard design center's reports explorer, navigate to the report you want to add to the dashboard.

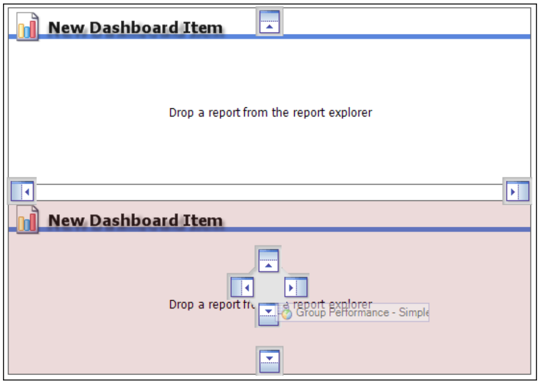
Tip You can quickly locate reports by right-clicking a report folder in the reports explorer and selecting the Search option.

2 Select the report and drag it to the dashboard.

3 Drop the report on the design surface where you want the report to display.

When you drag the report to the design surface, positioning images appear. Hovering over the various images highlights portions of the design surface. Once the section where you want the report is highlighted, drop the report. The design surface refreshes to show the updated dashboard layout.

In the example shown below, the Group Performance report being dragged would be added to the highlighted portion of the bottom section of the dashboard.



The positioning icons that display on the design surface when dragging a report are described in the following table.

Table 215: Dashboard Reports Positioning Icons

Icon	Description
 Entire Area	This icon group appears over the predefined dashboard section you are hovering over when dragging a report. Hovering over the various icons in the group highlights different portions of the dashboard section where you can drop the report. You can hover over the center of the icon group to drop the report in the full dashboard section. You can also place the report in the top, bottom, left, or right portions of the dashboard section by hovering over the individual icons in the group. If you break up a predefined dashboard section when dropping your report onto the dashboard section, the dashboard's layout is split into smaller areas.
 Area Buttons	Drop a report over one of these icons to place the report in the top, right, bottom, or left areas of the dashboard.

4 To modify the size of the area where you placed the report, hover over the area's borders until the cursor changes to show direction arrows. You can then drag the borders to the position you want.

5 Repeat steps 1 through 3 to add additional reports to the dashboard.

6 Click the Save button on the Quick Access toolbar to save the dashboard.

Removing, replacing, and editing dashboard reports

If you want to change the reports that are on a dashboard, you can remove the reports from the dashboard or replace them with new reports. If you need to make a change to a report on the dashboard, you can also open the report for editing.

Note If your dashboard has only one report, you cannot remove it, but you can replace it with another report.

To remove a report from the dashboard

Right-click the report on the design surface and select Remove.

Or

Click the item on the dashboard, click the Display tab, and click the Remove button.

To replace a report on the dashboard

Drag the new report you want on the dashboard from the reports explorer and place it on top of an existing report on the dashboard. The existing report is replaced with the new report.

To open a report for editing from the dashboard

Right-click the report on the design surface and select Edit Report Definition. The report opens on the report design center where you can edit it. Refer to Opening the report design center for information about editing reports.

Adding tabs to the dashboard

When creating a dashboard, you may find that you want more reports than can easily be viewed or that you want to group similar reports together. By adding tabs to the dashboard, you can create multiple pages for the same dashboard, and you can select the reports that display on each tab. Each tab acts as a distinct page of the dashboard. Reports are added to the pages just as they would be if the dashboard had only one page.

Tip Each dashboard can have a maximum of fifty tabs.

To add a tab to a dashboard

1. Click the Home tab.
2. Click the Add Tab button.

Once you add a tab, the dashboard design center is updated to show the tabs on the design surface. The tab names will likely not be what you want, but you can change them.

To change the name of a tab

1. Right-click the tab on the design surface and select Rename.

   Or

   Click the tab, click the Display tab, and click the Rename button.
2. Type the new name for the tab.
3. Click the OK button to save the tab's name.

Adding dashboard descriptions

If you create a dashboard that will be used by other people, you can add a description to explain the purpose of the dashboard or to relay other information concerning the dashboard. The description text can display **inline** on the dashboard or as text accessed from a separate tab.

To add a dashboard description

1. Click the Home tab on the dashboard design center's ribbon.
2. Click the Options button and select Edit Dashboard Description. The Edit Dashboard Description window opens.
3. Type the text for the description.
4. Click the OK button to save the description.

To define the description location

1. Click the Display tab and then click the Dashboard Description button.
2. To display the dashboard description on the dashboard, select Display Dashboard Description Inline.
3. To display the dashboard description on a separate Description tab, select Display Dashboard Description on Separate Tab.

Adding images and text fields to dashboards

You can add images and text fields to your dashboard's header and footer sections to clarify the dashboard's purpose or to make it more presentable to your target audience. When you place an image or text field on the dashboard, you can either manually position the item or it can be positioned automatically depending on the section's layout properties. Once you add an image or text field to a dashboard section, you can reposition it if needed, and you can edit any text fields you have added directly from the dashboard.

Selecting dashboard section layout options

When you add images or text fields to a dashboard section, you can manually position the item if the section has a manual layout. If the section has an automatic layout, the text field or image is positioned automatically, and the dashboard section's height is adjusted to best fit the image or text field. You can also set table layout options to change how the items in the section are sized. By default, dashboard sections have manual layout enabled.

To enable automatic layout of a dashboard section

1 Add the dashboard section you want to your dashboard.

- **a** To add the dashboard header or footer sections, click the Display tab and select the Dashboard Header or Dashboard Footer check box.
- **b** To add the page header or footer sections, click the Page Setup tab and select the Page Header or Page Footer check box.

2 Click the dashboard section you want to modify on the design surface.

3 Click the Options tab and click the Automatic button.

4 To prevent the section's height from being automatically adjusted to fit the items you add to the section, click the Auto Height button to disable the feature.

Tip When Auto Height is disabled, you can manually change the height of the dashboard section by dragging the section's horizontal borders up or down, just as you would if the section had a manual layout.

If a dashboard section has an automatic layout, the images and text fields you add to it are arranged in an invisible table structure with the items placed in rows and columns. You can adjust the sizing of the rows and columns to arrange the images and text fields as you want them.

To change a dashboard section's table layout options

1 Add images and text fields to the dashboard section.

2 Select the dashboard section you want to modify on the design surface.

3 If the section has a manual layout, click the Automatic button on the Options tab to change to an automatic layout.

4 Click the Table Layout button on the Options tab.

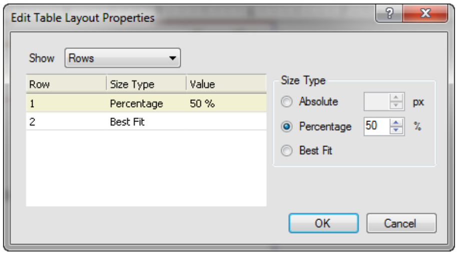
5 To give each column in the section's table the same amount of width, select Size All Columns Equally.

6 To give each row in the section's table the same amount of height, select Size All Rows Equally.

7 To size each column to best show the column's contents, select Auto Size All Columns.

8 To size each row to best show the row's contents, select Auto Size All Rows.

9 To manually configure the table's layout, select More Options. The Edit Table Layout Properties window opens.



10 Enter the following field information.

Table 216: Edit Table Layout Properties Window Description

Field	Description
Show	Select the row column you want to configure and then click this drop-down menu to select whether you are configuring rows or columns.
Size Type	Specify how the size of the report section is determined in this section.
Absolute	Select this radio button to specify a certain size for the selected row or column in pixels.
Percentage	Select this radio button to specify a certain percentage of the total available space in the section to allocate to the selected row or column.

Table 216: Edit Table Layout Properties Window Description (Continued)

Field	Description
Best Fit	Select this radio button to have the size of the selected row or column automatically adjusted to best fit the row's or column's contents.

11 Click the OK button to save your changes.

Adding text fields

You can add predefined text fields to your dashboard, or you can add custom text fields you create in the Text Fields explorer. You can also add new text fields you create from the dashboard design center. The dashboard's page header, dashboard header, page footer, and dashboard footer sections all accept text fields. Refer to Text Fields explorer for information about creating custom text fields.

Once you add a text field to a dashboard, you can modify its text, fonts, colors, and borders to tailor the text field to the dashboard's audience. These edits to the text field are specific to the dashboard and do not affect the original text field. This lets you customize the same text fields for different dashboards.

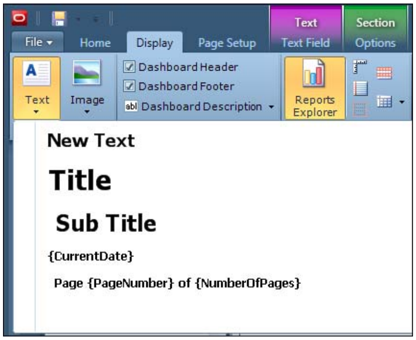
To add a text field to a dashboard

1 Add the dashboard section to the design surface that you want to add the text field to.

- **a** To add the dashboard header or footer sections, click the Display tab and select the Dashboard Header or Dashboard Footer check box.
- **b** To add the page header or footer sections, click the Page Setup tab and select the Page Header or Page Footer check box.

2 If you want the text field to be automatically positioned on the dashboard, click the dashboard section, click the Options tab, and click the Automatic button. Refer to Selecting dashboard section layout options.

3 To add a preconfigured text field to the dashboard, click the Display tab and then click the Text button. The Insert Text Field window opens.



The window displays standard text fields and custom text fields that you have added in the Text Fields explorer. The text fields' default fonts, colors, and other attributes are reflected in the display.

4 Click the text field you want to add to the dashboard. The Insert Text Field window closes, and the cursor displays the name of the text field you are adding when you hover over dashboard sections that accept text fields, such as the dashboard header.

5 Click the dashboard section on the design surface where you want to add the text field. The text field is added to your dashboard.

6 To add a new text field that is not in the Text Fields explorer, click the Options tab and click the Add Text Field button. The text field is added to the dashboard section with default text and text attributes which you can then edit. Refer to Editing text fields.

7 Click the Save button to save the changes to the dashboard.

Editing text fields

Once you add a text field to your dashboard, you can edit it to change the fonts, colors, text, and other attributes. These edits apply to the text in the dashboard, but the original text field is not affected.

Note Certain standard text fields, such as Current Date, include values that are dynamically updated when the report is run. While these fields can be edited, you cannot edit their dynamic value placeholders.

To edit a text field on a dashboard

Right-click the text field and select Edit Text Field.

Or

Click the text field and then click the Edit button on the Text Field tab.

The Edit Text Field window opens. For the procedure to use the options available on this window, refer to Editing text fields.

You can also edit the text field using the buttons in the Font, Margin, and Border groups on the Text Field tab. These buttons provide shortcuts to many of the same options available on the Edit Text Field window.

Adding images

You can insert images you have added to your dashboard's page header, dashboard header, dashboard footer, and page footer. Images can act as backgrounds or header images in these sections. Refer to Images explorer for information about adding images you can use on reports and dashboards.

To add an image to a dashboard

1 Add the dashboard section to the design surface that you want to add the image to.

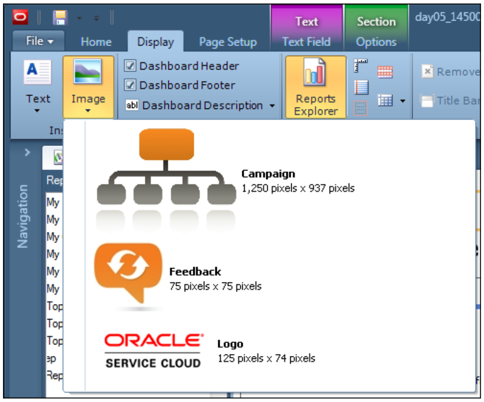
  a To add the dashboard header or footer sections, click the Display tab and select the Dashboard Header or Dashboard Footer check box.

  b To add the page header or footer sections, click the Page Setup tab and select the Page Header or Page Footer check box.

2 If you want the image to be automatically positioned on the dashboard, click the dashboard section, click the Options tab, and click the Automatic button. Refer to Selecting dashboard section layout options.

3 Click the Display tab on the ribbon.

4 Click the Image button to open the list of images added in the Images explorer.



5 Click the image you want to add.

6 Hover over the section where you want to add the image. The cursor displays the name of the image you selected when it is over a section that can accept an image.

7 Click to place the image in the dashboard section you select.

8 Click the Save button to save the changes to the dashboard.

Moving images and text fields

Once you add an image or text field to a dashboard section, you can move the field by dragging it to the appropriate place in the section. This may require dragging other text fields in the dashboard section to prevent the fields from overlapping.

If the dashboard section has a manual layout, you can move the item to any location in the section you want. If the dashboard section has an automatic layout, you can still move the item, but blue lines display when you drag the item, showing you where the item can be placed in relation to any other images or text fields in the section.

When you click an image or text field that has been added to a dashboard section, handles appear on the field's borders. To increase or decrease the size of the field, click the appropriate handle and drag it to a new position. When dragging a text field, the font size remains unchanged, but the text field's area is altered. However, when dragging an image, the image itself is resized.

Changing dashboard properties

Many of the buttons on the ribbon's Home tab let you specify a number of options that impact how the dashboard can be used. For example, you can select who owns the dashboard, specify dashboard permissions, and set the time zone the dashboard uses when it is opened. You can also schedule the dashboard to be sent in an email, view an audit log to see who has viewed or edited the dashboard, and modify how the dashboard's reports are searched.

Changing dashboard options

Dashboard options let you select the time zone that should be used for the reports in the dashboard, change the dashboard owner, and modify settings that impact how the dashboard functions when it is opened for viewing. You can also configure automatic refresh of the data shown in the dashboard's reports, select data source options, add notes to the dashboard, and change the image displayed for the dashboard in report lists.

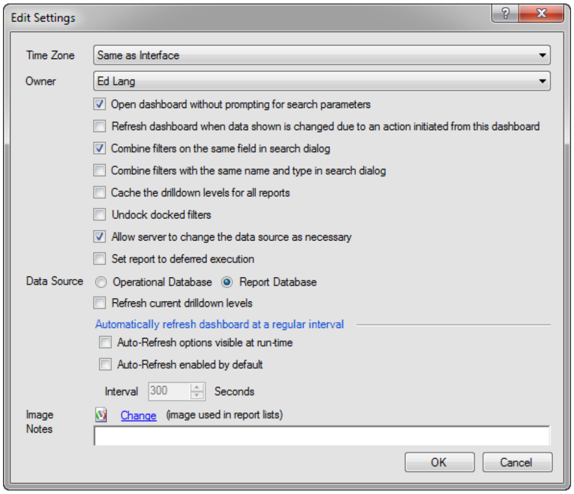
Several of the dashboard options you select play an important role in how the dashboard's reports are searched. These options are described in the following procedure and are also addressed in Searching dashboard reports.

To edit dashboard options

1 Click the Home tab on the ribbon.

2 Click the Options button and select More Options to open the Edit Settings window.

Note Most dashboard options can also be selected from the Options button without opening the Edit Settings window.



3 Enter the following field information.

Table 217: Edit Settings Window Description

Field	Description
Time Zone	Click this drop-down menu to select the time zone to be used with the dashboard's reports. The dates and times listed in the report output, filters, and parameters are adjusted according to the time zone that is specified. The available options are: • Same as Interface—The time zone is the same as that set for the interface. This is the default setting. • Same as Account—The time zone is the same as that of the staff member who is using the dashboard. Refer to Adding and editing staff accounts. • A specific time zone you can select from a list of standard time zones.
Owner	Click this drop-down menu to select a dashboard owner. Only the dashboard's owner can view or edit the dashboard, unless the owner makes the dashboard public and grants permissions to other profiles. Refer to Specifying permissions. **Note:** Changing the owner of a private dashboard makes the dashboard unavailable to the previous owner.

Table 217: Edit Settings Window Description (Continued)

Field	Description
Open dashboard without prompting for search parameters	Select this check box to open the dashboard using the default **run-time filters** for the reports. If this check box is not selected, the Search window opens for the dashboard's reports before the dashboard is displayed. Selecting this check box does not prevent the Search window from opening if a report has a required run-time filter. Refer to Searching dashboard reports.
Refresh dashboard when data shown is changed due to an action initiated from this dashboard	Select this check box to automatically refresh the dashboard's reports when you initiate an edit from one of the reports in such a way that the reports' contents would change. The dashboard is refreshed only if a record is edited in such a way that the record no longer matches the dashboard reports' search criteria.
Combine filters on the same field in search dialog	Select this check box to combine filters on the same field used in multiple reports on the dashboard. For example, multiple reports on the same dashboard might all have filters to search by contact email address. If this check box is selected, the dashboard's Search window joins these into one common filter for this field. All the reports that have this filter are filtered on the search value entered for the common filter.
Combine filters with the same name and type in search dialog	Select this check box to combine filters that have the same name and filter on different fields with the same data type. For example, if there are two filters both named Contact, and one filter searches a text field for first name, and the other searches a text field for last name, these filters can be joined into one common filter. The search value entered for the common filter is checked against both the first name and last name fields.

Table 217: Edit Settings Window Description (Continued)

Field	Description
Cache the drilldown levels for all reports	Select this check box to automatically cache the data in report levels when they are displayed. When you open a dashboard with this option enabled, the data shown on the reports' initial output levels is stored on your workstation. When you drill down on a report to view another output level and then return to the report's top level, it loads quickly since the data you are viewing is cached on your workstation. The cache is cleared when you close the dashboard. If this option is not selected, the database is queried every time you view an output level to ensure the most recent data is displayed even if you have already viewed the level. This default functionality can result in longer page load times than necessary when viewing reports with data that does not change frequently. **Note:** This option is also available for individual reports. When using a dashboard that has this option enabled, the dashboard's setting overrides the settings in the dashboard's report.
Undock docked filters	Select this check box to not dock filters on the dashboard that are docked in the dashboard's reports. If this check box is not selected and a report on the dashboard includes **docked filters**, the filters are displayed in the dashboard's Search window, and are also docked above the reports in the dashboard.
Allow server to change the data source as necessary	Select this check box to allow the data source to automatically change if necessary to allow the dashboard to run. For example, if a dashboard is configured to run on the operational database but is unable to do so due to data constraints, selecting this check box allows the dashboard to run on the report database (also referred to as the replication database). Clearing this check box forces dashboards to run on the data source that is selected. **Note:** This check box is cleared automatically any time the data source is changed on the Edit Settings window.
Set report to deferred execution	Select this check box to automatically queue the dashboard when it runs. **Note:** If the dashboard is automatically queued the next time it is run due to meeting queuing criteria, this option is selected automatically. To prevent the dashboard from being queued when it is next run, edit the dashboard and clear this check box.

Table 217: Edit Settings Window Description (Continued)

Field	Description
Data Source	Select which database you want the dashboard to run on. You can choose the operational or the report database. Refer to Report databases for information about these data sources. **Note:** This option is available only if your site has a report database. If your site does not have a report database, contact your Oracle account manager for more information.
Operational Database	Select this radio button if you want the dashboard to run on your operational database. This option is helpful if you need the dashboard to return the most current data available.
Report Database	Select this radio button if you want the dashboard to run on your report database. This option is helpful if your dashboard queries a large amount of data since the query size restrictions on report databases are more relaxed than those on operational databases.
Refresh current drilldown levels	Select this check box to automatically refresh the data shown on drill-down levels when the dashboard's display is refreshed without returning to the top levels of the dashboard's reports. When this option is not enabled and the dashboard is refreshed, drill-down levels shown on the dashboard automatically return to the top level of the dashboard's reports.
Automatically refresh dashboard at a regular interval	Options in this section let you configure automatic refresh of the data shown in the dashboard's reports to ensure the most recent data is displayed.
Auto-refresh options visible at run-time	Select this check box to add an arrow on the Home tab's Refresh button. Clicking the arrow displays options to let staff members enable or disable automatic refresh and change the interval time. **Note:** When this check box is not selected, the Refresh button refreshes the dashboard's data only when the button is clicked.
Auto-refresh enabled by default	Select this check box to enable automatic refresh of the data shown in the dashboard's reports.
Interval	Enter the number of seconds after which the data shown on the dashboard is automatically refreshed.

Table 217: Edit Settings Window Description (Continued)

Field	Description
Image	Click Change to select a different image to display next to the dashboard in lists such as navigation lists. When selecting the new image, you can choose from a list of standard images or from custom images that have been added in the Images explorer. Refer to Images explorer.
Notes	Type any text you want to add as a note to the dashboard. The note displays on the Edit Settings window, but cannot be seen by individuals viewing the dashboard.

4 Click the OK button to save the dashboard options.

Scheduling dashboards

You can schedule a dashboard to be sent to recipients or to be published in the same manner that reports can be scheduled. When a scheduled dashboard is sent, the recipients receive an email containing the dashboard in the format you select when creating the schedule.

Note Dashboard schedules cannot have alerts applied as report schedules can, since dashboards do not have **data exceptions** associated with them. In addition, dashboards cannot be sent to comma-separated values (CSV) files.

To open a dashboard's Schedules window, select the Scheduling button on the Properties tab. Refer to Scheduling reports.

Specifying permissions

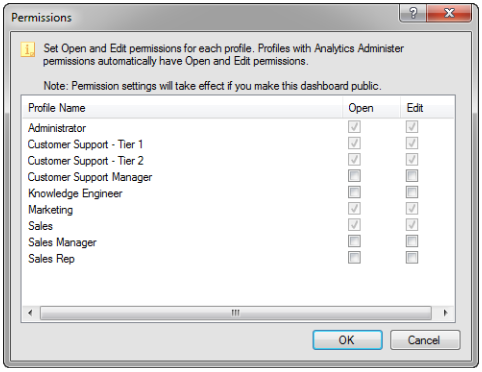
A dashboard's permissions specify the profiles whose staff accounts can open or edit the dashboard. You can select Open and Edit permissions for each profile defined in your system.

Note Permissions applied to a private dashboard take effect only when the dashboard is made public.

To specify dashboard permissions

1 Edit a dashboard and click the Home tab.

2 Click the Permissions button.



3 Enter the following field information.

Table 218: Permissions Window Description

Field	Description
Open	Select this check box next to a profile to allow staff members assigned to that profile permission to open the dashboard. You can select multiple profiles.
Edit	Select this check box next to a profile to allow staff members assigned to that profile permission to edit the dashboard. You can select multiple profiles.

4 Click the OK button to save the permissions.

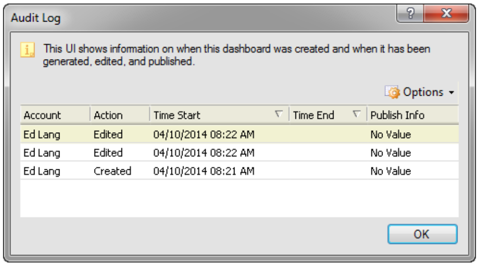
Viewing the audit log

You can open an audit log for a dashboard to see when the dashboard was created, edited, run, and **published**, and which staff members performed these actions. Since the audit log is a report, you can perform common report actions on the audit log, such as printing, forwarding, or **slicing**.

To view the audit log

1 Edit a dashboard and click the Home tab.

2 Click the Audit Log button.



3 To access a list of actions that can be taken on the audit log report, click the Options button. Many of the actions available when viewing other reports are available on the Options button. Refer to Ribbon options when viewing reports for descriptions of these actions.

4 To close the audit log, click the OK button.

Specifying search defaults

When opening a dashboard, the dashboard's reports automatically display with their default filter values, comparison date offsets, and output variables. However, you can select different defaults for the reports when they are opened from the dashboard by changing the dashboard's parameter values. If your dashboard includes the Web Browser–Component report, you can also specify a default URL for the web browser displayed in the dashboard.

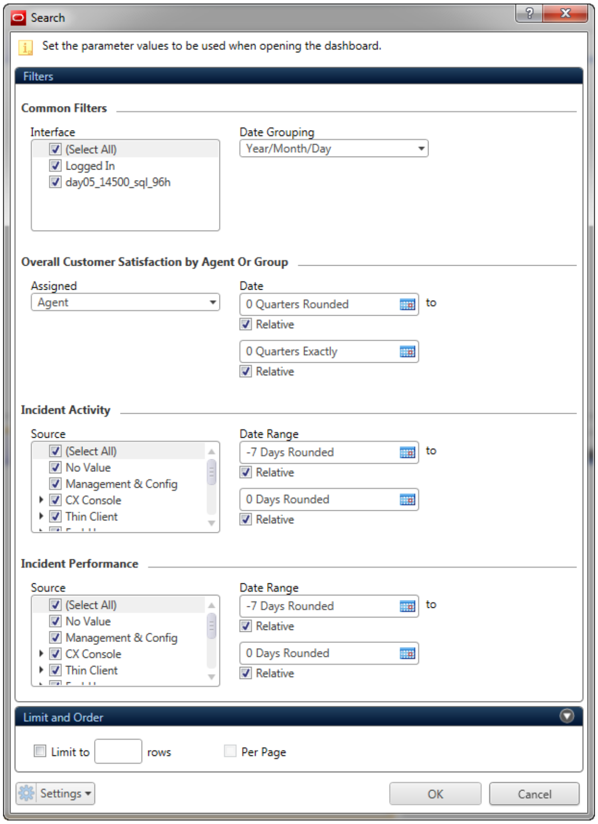
You also have the option to set limits on the total number of rows returned in each report or the number of rows returned on each page of the reports. In addition, you can enter Search Design Mode to modify the layout of the filters on the dashboard's Search window. For more information about searching for information in the reports shown in a dashboard, refer to Searching dashboard reports.

To set dashboard reports' search defaults

1 Edit a dashboard.

2 Click the Home tab.

3 Click the Parameter Values button to open the Set Filter Values window.



The window displays the **run-time selectable filters**, **comparison periods**, and variables that are in the dashboard's reports. If any of the reports have identical filters, comparison date offsets, or output variables, these are grouped together. You can also set limits on the number of rows returned on each page of the reports or the total number of rows the reports can return.

4 Select the default values you want for the reports' variables and filters.

5 To set record or page limits on the reports, select options in the Limit section of the Set Filter Values window.

   a Select the Limit To check box.

   b Type the number of rows to return.

c Select the Per Page check box to apply the entered row limit to each page of the report.

Note If the Per Page check box is not selected, the row limit you enter restricts the total number of rows returned in the reports.

6 To clear the customized default search parameters specified for the dashboard, click Settings and select Reset Values. When you do so, the dashboard's default search parameters are reset to use the reports' default search parameters.

7 To modify the sizes and placement of the filters on the Search window, click Settings and select Enter Search Design Mode. Refer to Customizing the Search window.

8 Click the OK button to save the dashboard parameters.

Customizing dashboard output

The appearance of the dashboard can be customized by applying a **style** to the dashboard, by changing fonts, by changing the dashboard's width, and by specifying how the reports on the dashboard should be scrolled. You can also add titles to the dashboard's reports and choose which report sections to display.

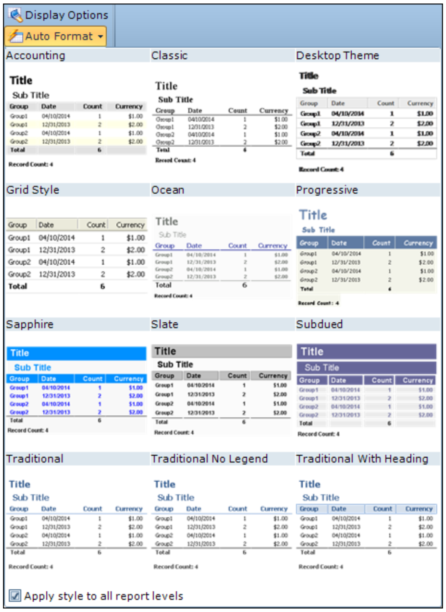
Applying a style to a dashboard

Dashboards can have report styles applied to them, just as individual reports can. When you apply a style to a dashboard, all reports on the dashboard use the same style when viewed from the dashboard. If a new report is added to the dashboard, the dashboard style needs to be applied again for the style to be applied to the new report. Refer to Changing report displays with styles for information about applying a style to a report. For procedures on editing and creating styles, refer to Styles explorer.

To apply a style to a dashboard

1 Click the Home tab.

2 Click the Auto Format button to open the Auto Format window.



3 To prevent the style from being applied to all levels in the reports shown on the dashboard, clear the Apply Style to All Report Levels check box.

4 Click the style you want to apply to the dashboard.

The report style is automatically applied to all the reports in your dashboard.

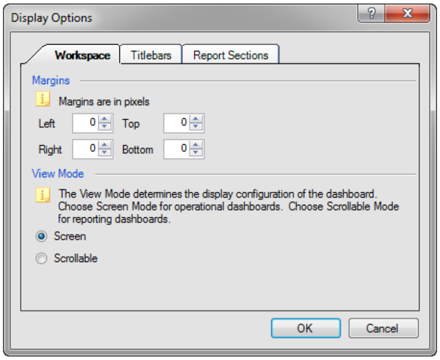
Changing dashboard display options

You can adjust the dashboard's display options to add margins and titles to the reports in the dashboard. You can also specify which report sections should display in the dashboard's reports.

To change display options

1 Click the Home tab.

2 Click the Display Options button to open the Display Options window.

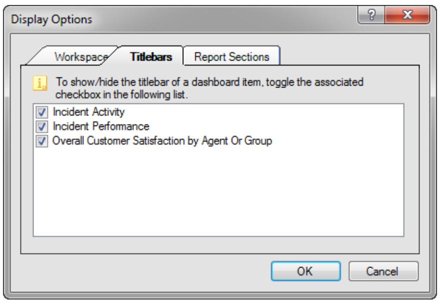


3 In the Margins area, enter the number of pixels between the text and the left, right, top, and bottom margins.

4 In the View Mode area, select a radio button to specify how you want the dashboard's reports to scroll.

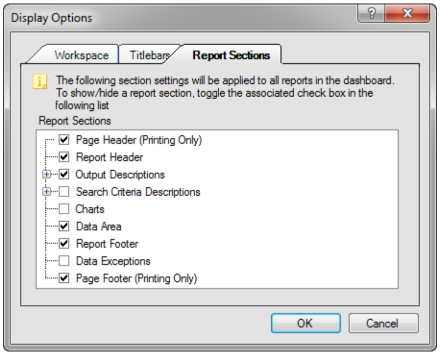
- **Screen**—Select this radio button to add scroll bars to the individual reports in the dashboard.
- **Scrollable**—Select this radio button to permit each report to display in its preferred size, with the height and width of the items in each report fixed. When this option is selected, a single set of scroll bars is added to the dashboard so you can view the entire dashboard surface. However, if the entire size of the dashboard exceeds 32767 x 32767 pixels, the dashboard's reports may be clipped.

5 Click the Titlebars tab.



6 To display a report's title above the report in the dashboard, select the check box next to the report.

7 Click the Report Sections tab.



This tab displays the common report sections included in the dashboard's reports. Sections common to all reports in the dashboard have a black check mark, sections that are not shared by all reports have a gray check, and sections that are not in any of the reports have no check.

8 Select the check box next to each report section you want to display on the dashboard. To remove a section you have already selected, clear the check box next to the section.

9 Click the OK button to save your display options.

Previewing dashboards

When creating and editing dashboards on the dashboard design center, you generally use the design view. This is the default view used to edit the dashboard's properties, and add reports, images, and text fields to the dashboard.

Once you modify your dashboard, you can switch to the report view to preview what the dashboard will look like when it is used by staff. When viewing a dashboard using the report view, the dashboard is presented to you just as your staff members see it, though certain items, such as action links displayed in reports, are disabled. When you want to edit the dashboard again, you can switch back to the design view.

To select the report or design views

1 Edit or create a new dashboard. By default, the dashboard is shown in the design view.

2 Click the ribbon's Home tab.

3 Click the arrow on the Views button and select Report View to change the view.

4 To view the dashboard with the design view, click the arrow on the Views button and select Design View.

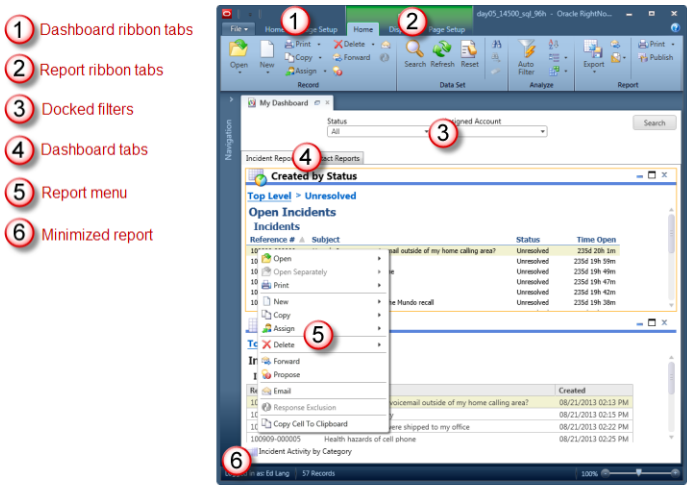
Using dashboards

You open dashboards just as you would open a regular report from the Reports explorer or one of your navigation lists. Dashboards can also be opened from links you add to reports. When you open a dashboard, it loads with current report data. You can also queue dashboards to view them at a later time.

The dashboard includes options similar to those accessed from the Report tab when viewing a report. The dashboard also includes **docked filters** that are common to the reports in the dashboard and may include tabs to access reports on other dashboard pages.

Since every report in a dashboard is fully functional, you can access the standard options available when viewing a report to sort columns, show or hide columns, and add column calculations. If the report and the permissions allow it, you can also access records listed in the reports or edit them inline.

Here's a sample dashboard highlighting dashboard features.

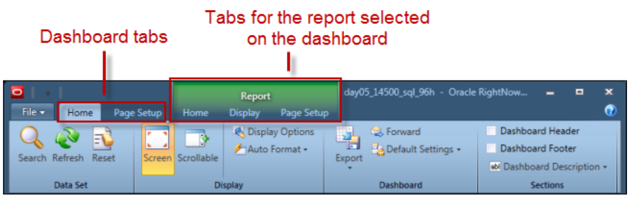


Dashboard ribbon

When you open a dashboard, the dashboard's ribbon includes Home and Page Setup tabs. You can use the options on these tabs to print the dashboard and adjust the dashboard's display and output. When you select an individual report on the dashboard, the ribbon is updated to include additional tabs containing options for modifying the selected report.

Note When viewing a published dashboard or a dashboard that is run after being queued, some options on the ribbon are not available.

A ribbon with dashboard and report-specific tabs is shown here.



Dashboard tabs

The buttons available on the Home and Page Setup dashboard tabs let you open the Search window, refresh the display, select display options, forward the dashboard, configure print options, and perform other actions that impact the entire dashboard. Refer to Page Setup tab for descriptions of the buttons on the Page Setup tab.

Important Permission to export, print, and forward reports must be selected in your profile for the Page Setup tab and the Export and Forward buttons on the Home tab to display. Refer to Customizing profiles.

The groups and buttons on the dashboard Home tab are described in the following table.

Table 219: Dashboard Home Tab Description

Group/Button	Description
Data Set	The buttons in this group let you search for data in all the dashboard's reports, refresh the display, and reset the search criteria to the dashboard's defaults.
Search	Click this button to open the dashboard's Search window. Refer to Searching dashboard reports.
Refresh	Click this button to refresh the dashboard's data using the current search criteria. **Note:** If the auto-refresh feature is enabled, an arrow displays on the button. Clicking the arrow displays options to let staff members enable or disable automatic refresh and change the interval time for automatic refresh of data. Refer to Changing dashboard options.
Reset	Click this button to reset the dashboard's search criteria to the defaults and regenerate the dashboard using the default search criteria.
Display	The buttons in this group let you modify how the dashboard is displayed. For example, you can apply a style to all the reports on the dashboard to give them a similar appearance.
Screen	Click this button to display all the dashboard's reports on the screen when the dashboard is run. Each report can have separate scroll bars to view the report contents.
Scrollable	Click this button to display all the contents of each report on the dashboard. When this option is selected, each report displays in its preferred size and the height and width of the items in each report are fixed. Separate reports do not have separate scroll bars, but vertical and horizontal scroll bars are added to the dashboard if needed to display the entire dashboard. **Note:** If the entire size of the dashboard exceeds 32767 x 32767 pixels, dashboard contents are clipped when using this option.
Display Options	Click this button to change the dashboard's width, add report title bars, and select which report sections you want to display. Refer to Changing dashboard display options.

Table 219: Dashboard Home Tab Description (Continued)

Group/Button	Description
Auto Format	Click this button to apply a **style** to all the reports in a dashboard. This overrides styles applied to the individual reports. Refer to Applying a style to a dashboard.
Dashboard	The buttons in this group let you export the dashboard, forward the dashboard in an email, and save and restore default settings. **Note:** Permission to export, print, and forward reports must be selected in your profile for the Export and Forward buttons to display. Refer to Customizing profiles.
Export	Click this button to export the data from the dashboard's reports to a file for use with third-party applications. You can export the dashboard in HTML, PDF, Excel, XML, Image, Clipboard, and Delimited formats. Reformatting of report layouts will occur when exporting dashboards in certain formats. • Dashboards exported in the Excel format are laid out vertically, and the reports' row and column spacing are reset so the data displays sequentially. • Dashboards exported in XML and delimited formats do not retain their report layouts, and the data is displayed sequentially. • Dashboards exported in HTML, Image, and PDF formats retain their report layouts. However, dashboards that span multiple pages are arranged vertically when viewed in PDF format. Dashboards and reports are exported using the same method and can be exported in the same formats. Refer to Exporting report output for more information about these formats.
Forward	Click this button to send the dashboard to individuals or distribution lists in an email. Dashboards and reports are forwarded using the same method. Refer to Forwarding reports.
Default Settings	Click this button and select Save as Default to save your personalized display and data settings for a dashboard for later use. Select Restore to remove personalized display and data settings from a dashboard and restore the settings to those defined in the dashboard. Refer to Resetting display and data settings.
Sections	The options in this group let you select whether to show the dashboard's header, footer, and description.

Table 219: Dashboard Home Tab Description (Continued)

Group/Button	Description
Dashboard Header	Select this check box to show the dashboard's header.
Dashboard Footer	Select this check box to show the dashboard's footer.
Dashboard Description	Click this button and select how the dashboard description should be displayed. You can choose to not display a description, display the description inline, or display the description on a separate tab.

Report tabs

When you click a report on the dashboard to select it, the ribbon is updated to include the report's Home, Display, and Page Setup tabs. You can use the buttons on these tabs to perform the same actions you could if viewing the report outside of a dashboard. For example, you can add calculations, select fields to show in the report, sort the report output, and edit records. For descriptions of the buttons on these tabs, refer to Ribbon options when viewing reports.

Queuing dashboards

Dashboards can be queued to run at a later time just as reports can. Dashboards can be manually queued or automatically queued. Once a queued dashboard generates, you can view the dashboard using a standard report or a notification just as you can with queued reports. Refer to Queuing reports.

Note Unlike queued reports, you cannot send queued dashboards to comma-separated values (CSV) files.

Manually queuing dashboards

You can queue dashboards containing reports that you think may query or return large amounts of data. This is also helpful if you want to view a number of dashboards but do not want to wait for each to generate.

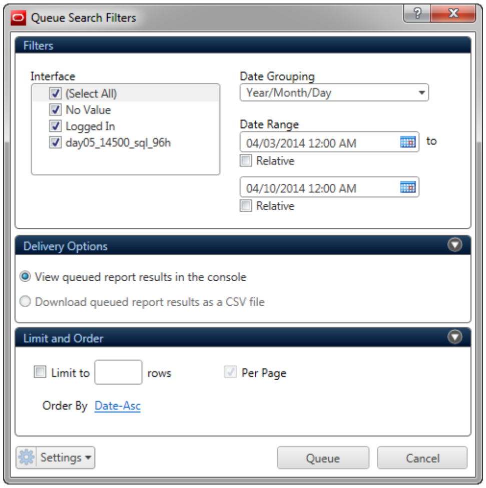
To manually queue a dashboard

1 Select the dashboard on the Reports explorer and click the ribbon's Queue button.

Or

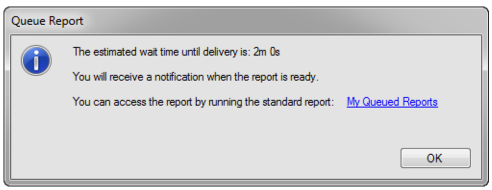
Right-click the dashboard, either on the Reports explorer or the navigation list, and select Queue.

The Queue Search Filters window opens where you specify the search parameters you want to use for the queued dashboard.



2 Enter the search parameters you want to use. Refer to Searching dashboard reports.

3 Click the Queue button. A window displays an approximation of when the dashboard will be available to view.



4 Click the OK button to close the window.

Automatic queuing

When you attempt to open a dashboard, the queries that are required to run each of the dashboard's reports are examined. If the system determines that one or more of the reports will take too long to process, a message displays the reports in the dashboard that are causing the problem and asks if you want to queue the dashboard. If you choose to queue the dashboard, it is queued to run at a later time using the search parameters you entered and a message shows you the estimated time when the dashboard will be ready for viewing. If you choose not to queue the dashboard, you can try to run it again using more restrictive search parameters.

Tip You can force dashboards to be queued automatically by enabling the Set Report to Deferred Execution option on the Edit Settings window. Refer to Changing dashboard options.

Viewing queued dashboards

After you queue a dashboard, you can use standard reports located in the Reports explorer's Public Reports > Common > Site Administration > Reports folder to see the dashboard's status in the queue. Once the dashboard runs and is ready to view, you are notified and you can open it from several locations. Most of the standard options are available on the dashboard's ribbon, though there are some exceptions.

It is possible that some of the reports in the dashboard will not queue successfully, for the reasons described in Queuing failures. If a report in a dashboard cannot be queued, the queued dashboard cannot be processed.

The methods to view and open dashboards that have been queued are identical to those used with queued reports. Refer to Viewing queued reports.

Displaying and hiding reports in a dashboard

When viewing a dashboard, you can use buttons displayed in each report's title bar to minimize, maximize, or close each report. This allows you to simplify the dashboard display when you want to focus on certain reports in the dashboard.

Note The minimize, maximize, and close buttons are not available when the dashboard is displayed with a scrollable view mode. Refer to Changing dashboard display options for information about view modes.

The buttons in each report's title bar are described in the following table.

Table 220: Dashboard Reports Display Buttons Description

Button	Description
Minimize	Click this button to minimize the report. When a report is minimized, the report name and icon display in the lower left corner of the dashboard. To restore the report, right-click the minimized option and select Restore.
Maximize	Click this button to maximize the report. When a report is maximized, the other reports in the dashboard are hidden.
Restore	Click this button in the maximized report's title bar to return the report to its previous size.
Close	Click this button to close the report and temporarily remove it from the dashboard. The report displays the next time you load the dashboard.

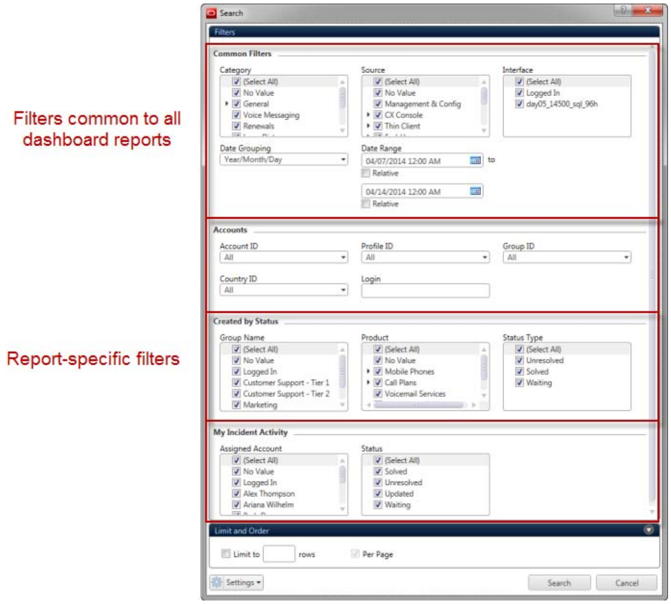
Searching dashboard reports

Searching for information in reports in a dashboard is similar to searching the reports when they are generated on their own. However, there are some differences that you need to be aware of.

- **Docked filters**—When a report that includes docked **run-time filters** is run outside of a dashboard, the docked filters display at the top of the report. However, when the report is opened in a dashboard, the report's docked filters are displayed at the top of the dashboard.

If multiple reports in the same dashboard include docked filters, all the reports' docked filters are displayed at the top of the dashboard. If two or more reports in the dashboard have the same docked filters, these can be merged so only one docked filter displays. Values you set in the merged filter are applied to all reports with that filter. Refer to Changing dashboard options for information about combining filters for dashboard reports.

- **Search window**—When reports are displayed together on a dashboard, you can search for information in all the reports simultaneously. Searching for information in a dashboard is similar to searching for information in a report, though a dashboard's Search window displays filters common to multiple reports, followed by report-specific filters. These common and report-specific filters are separated by headers on the Search window, as shown in the following figure. Refer to Searching in reports.



To search for information in all reports on a dashboard

1 Open the dashboard and click the Home tab.

2 Click the Search button to open the dashboard's Search window.

3 Select the filters, variables, and limits you want.

4 Click the OK button to apply the search criteria to all the reports on the dashboard.

Note Certain options you select when creating dashboards impact the behavior of the Search window. For example, if you select the Open Dashboard Without Prompting for Search Parameters option on the Edit Settings window, the Search window automatically opens when you open the dashboard. Refer to Changing dashboard options for information about these options.

If you want to search a specific report on the dashboard without searching the dashboard's other reports, select the report on the dashboard, click the report's Home tab on the ribbon, and then click the Search button.

To search for information in only one report on a dashboard

1. Open the dashboard.
2. Select the report on the dashboard you want to search. When you select a single report on the dashboard, additional report tabs display on the ribbon. (Refer to Report tabs.)
3. Click the Home tab beneath the ribbon's Report heading and then click the Search button to open the report's Search window.

The search you perform from the report's Search window applies only to the selected report.

Tip You can use the Find feature to locate specific text in the highlighted report. Refer to Finding content in reports.

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Creating Basic Reports

Oracle RightNow Analytics Cloud Service (Analytics) provides tools to create custom reports that include advanced features such as multiple **output levels**, **linked reports**, calculations, **data exceptions**, **variables**, **computed fields**, and custom scripts. These reports can take time to plan or may require input from several people. However, you can quickly create reports that fulfill most of your reporting needs.

Note This section provides an overview of planning and creating basic custom reports. For information about all the tools available to create and edit reports, refer to Custom Reports.

Planning reports

No matter how simple or complex a custom report is, there are certain guidelines to follow to help you create the report you want. Since each custom report you create can output different data and include different components, you may want to design your report before you start to create it. This helps determine what steps you need to take to create the report you want.

We recommend considering the following questions before you create your report.

- What audience will view or use the report? This determines which report layout you use since some layouts include charts, titles, and other information. Refer to Applying report layouts.
- What information do you want the report to return? This determines the fields to include in the report's output. Refer to Managing output columns.
- What fields do you want to be able to search on when running the report, and what information should be excluded? This determines the report's **fixed** and **run-time selectable filters**. Refer to Specifying filters.
- Do you want to be able to **drill down** on any fields to view additional information? This determines if multiple output levels or linked reports need to be configured. Refer to Adding additional output levels and Linking reports.

- How do you want the information that is returned to be ordered? This determines the sorting options that you apply to the report. Refer to Changing sort options.
- Who should have access to run or edit the report? This determines if the report should be made public and what permissions are applied to the report. Refer to Specifying permissions.

Tip Before creating a report, we recommend reviewing the reports already on your site to see if any of them are similar to the report you want. If so, you can copy the existing report and then edit the copy to meet your reporting needs.

To view descriptions of existing reports, you can generate a catalog of reports. Refer to Producing a catalog of reports. For information about finding and copying reports, refer to Working with explorers. For information about viewing the contents of a report, refer to Viewing and exporting report definitions.

Creating reports

Once you have an understanding of what your report should contain, you create it on the report design center. The procedures listed here demonstrate the basic steps that are required to create most reports. While the sample report might not be useful to your organization, knowing how to create a report such as this will help you create reports your organization needs.

In this sample report, you will see the number of unresolved and updated incidents in each incident queue. You will also be able to drill down on the information in the first level to open a second output level to view details about the incidents in each queue.

To create the report, you will follow a number of basic steps.

- Open the report design center. Refer to Opening the report design center.
- Add columns to the report. Refer to Adding columns.
- Add another output level to the report. Refer to Adding drill-down levels.
- Add filters to the report. Refer to Adding filters.
- Save the report. Refer to Saving reports.

Opening the report design center

The report design center gives you access to all the tools you need to create basic or more complex reports.

To open the report design center

1 Click the Analytics button on the navigation pane, double-click Reports Explorer, and then click New Report on the ribbon.

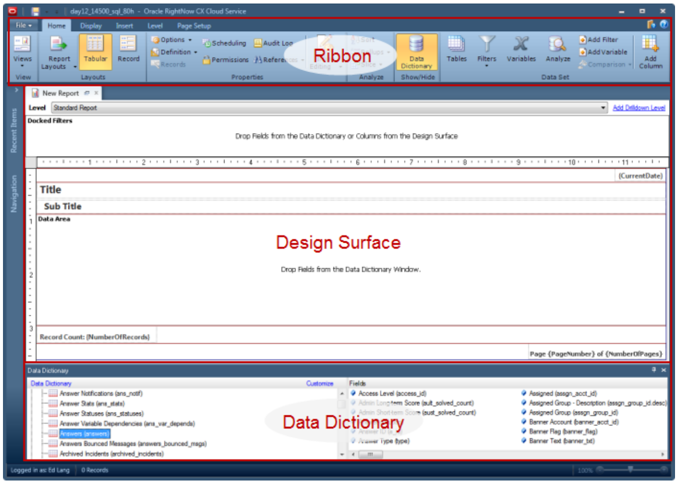
Or

If your navigation set is configured to add new reports from the **file menu**, click File and then select Report. Refer to File menu.

2 Select the type of report you want to build: Grid report, Standard report, or Standard report with Chart. Since the sample report will primarily be used internally by staff members to work with records, select Grid report.

Note Grid reports are most commonly used on the **Service Console** to list records that staff members can open for editing. The other report types are generally used to present summaries of data inside or outside of your organization. If you decide you want a different report type after you start creating a report, you can change it from the Report Layouts button on the ribbon's Home tab.

After selecting the report type, the report design center opens where you create your report. The report design center is shown in the following figure and the main areas of the design center are indicated.



For detailed information about the design center, refer to Opening the report design center.

Adding columns

We will add two columns to the report's first output level, displaying incident queues and the number of incidents in each queue.

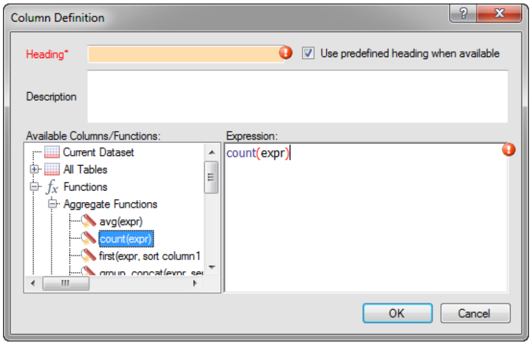
To add output columns

1 Expand the All Tables tree on the data dictionary and then select Incidents.

2 Select Queue (queue_id) on the right side of the data dictionary and drag it to the design surface. The field is added to the report as a column and is automatically named Queue, but you can right-click the column to change the name and customize other options.

3 On the data dictionary, scroll down to the Functions tree and expand it.

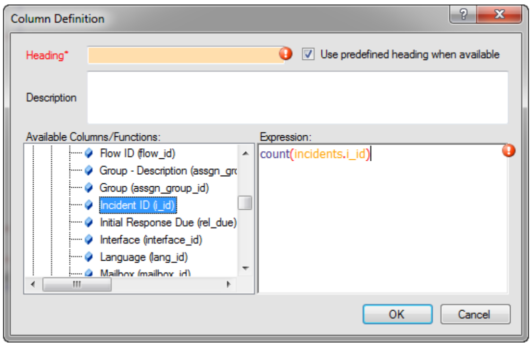
4 Select Aggregate Functions and then drag count(expr) onto the design surface. The Column Definition window opens where you select the field you want counted.



We will edit the column’s expression to specify what records we want counted. In this example, we want to count the incidents in each queue.

5 On the left side of the window, expand Current Dataset and Incidents.

6 Scroll down to Incident ID (i_id) and drag it to the text between the parentheses on the right side of the window. After you do this, the column’s expression will be *count(incidents.i_id)*.



We want to count the records using this field since it is a unique identifier for incidents as no two incidents share the same ID number.

7 To change the name of the column you are adding, type the name you want in the Heading field. For our example, you can type Number of Incidents.

8 Click the OK button to save the changes and add the column to the report. The new column automatically displays a count of all incidents in each incident queue.

The first output level of the sample report now has two columns displaying incident queues and the number of incidents in each queue. For more information about adding output columns to reports and the types of columns you can add, refer to Managing output columns.

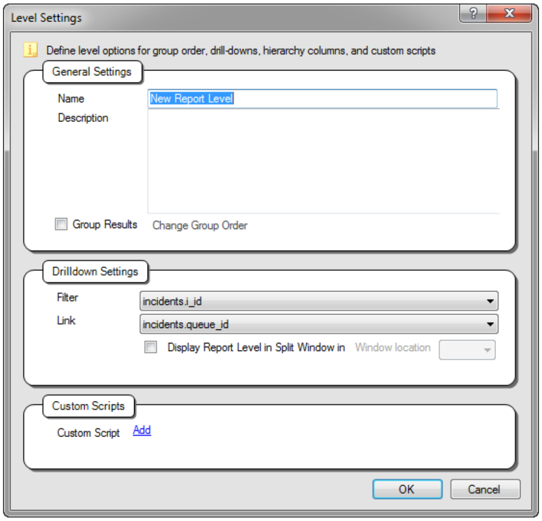
Adding drill-down levels

Now we will add a second level to the report that you can drill down into to view details about the incidents in the queues. Refer to Adding additional output levels.

Tip If you already have a report that returns the information you want to see in the drill-down level, you can link the reports together instead of adding another output level. Refer to Linking reports.

To add another output level

1 Click the Level tab on the ribbon and then click the Add Drilldown button. The Level Settings window opens, displaying information about the new output level.



You can type a different name for the new output level in the Name field, add notes about the level in the Description field, and change other options that are described in Adding additional output levels.

As you review the options in the Drilldown Settings area of the window, notice that the drill-down filter is automatically set to *incidents.queue_id*. When you use the report and click a drill-down link on the first level of the report, the second output level knows to display only information related to the queue in the row you clicked. For more complex reports, the drill-down filter can be changed, but it is not necessary to do so here.

The link you click when using the report is also automatically set to *incidents.queue_id*. However, for our sample report, we will make the incident count column the link we click to drill down.

2 Click the Link drop-down menu and select count(incidents.i_id).

3 Click the OK button to save the new output level.

You can now drag fields from the data dictionary onto the design surface to add columns to the second level of the report. Since this output level is intended to display details about the incidents, you could add fields from the *incidents* table such as Reference #, Subject, Assigned Account, and Date Created. You can also add fields from the *contacts* table to view information about the contacts who submitted the incidents. Refer to Adding columns to reports.

Tip If you want to change the output level you are editing, click the Level drop-down menu at the top of the design surface and select the level you want.

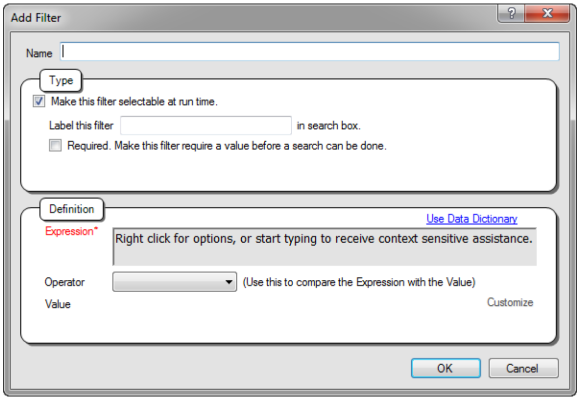
Adding filters

Next, we will add a fixed filter to return only unresolved and updated incidents in the report. Fixed filters prevent reports from querying more information than you need in the report.

You could also add run-time selectable filters to the report to return only incidents created in a certain time period, assigned to particular staff accounts, or that match other criteria you specify. Unlike fixed filters, run-time selectable filters allow you to select the values you want when you run the report. For detailed information about filters, refer to Specifying filters.

To add a filter to the report

1 Click the Home tab on the ribbon and then click the Add Filter button.



2 If you want to specify a name for the filter, type a name in the Name field. This name is used only on the report design center. If you do not specify a name, the filter's database field is used instead.

3 Clear the Make this Filter Selectable at Run Time check box.

Note If we were creating a run-time selectable filter, we would leave this check box selected and type a filter name in the Label this Filter field that staff members see when running the report. We could also select the Required check box for run-time selectable filters to force the report's users to specify a filter value before they can run the report.

4 In the Definition section, right-click in the Expression field and select Incidents followed by Status (status_id). This is the database field we are using to filter the report's output by.

5 Click the Operator drop-down menu and select In List.

6 When you use the In List operator, all items are selected by default. Clear the check box next to each item you do not want to include in the initial search or clear the Select All check box and select the check box next to each item you want to include. For our example, select Unresolved and Updated. The report will include only incidents with one of these statuses. Since the filter is selectable at run-time, you can change the search options when you run the report.

   a To prevent menu options that are irrelevant to the report's audience from being available in searches, click Customize and clear the check boxes next to the options you do not want to display. Refer to [Hiding menu options](#).

7 Click the OK button to save the filter.

Saving reports

The final step in creating the report is to save it to a location where the report's audience can access it. Once you save the report, your staff members can open it, assuming they have permission to do so. Refer to Specifying permissions.

To save the report

1. Click the arrow next to the Save button on the **Quick Access toolbar** and select Save and Close. The Save As window opens where you specify the name of the report and where you want it saved.

2. Select Public Reports or a custom subfolder beneath Public Reports. Reports that are saved in the My Reports folder are accessible only by you.

   a. To create a custom subfolder, right-click Public Reports, select New Folder, and type the name you want for the folder.

3. Type the name for the report in the Name field. The name can be up to eighty characters.

4. Click the OK button to save the report and close the report design center.

Your staff members can now access the report from the Reports explorer or you can add the report to their navigation sets (refer to Creating navigation sets). You can edit the report whenever you want to add more columns, filters, or output levels. You can also add advanced functionality such as column calculations, variables, inline editing, and other options. If you want to show the information in the report to a wider audience, you can also change the report's layout and add charts, text fields, and images. For information about these and other options, refer to Custom Reports.

If you encounter problems when you try to run a custom report, you can examine it using the report analyzer. This will help you determine the cause of the problem, such as the report querying tables that it does not need, or lacking filters to reduce the amount of data being read. Refer to Reviewing report performance.

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Custom Reports

Creating custom reports gives you the flexibility to output the information you need in the format you want. Custom reports can be simple, pulling data from one table and returning data from the same table, or they can be complex, pulling data from several tables, filtering it, and returning tabular and chart information in multiple output levels or linked reports.

When creating a custom report, you can select the database fields you want, add calculations and **functions** to the fields, and create **fixed** and **run-time selectable filters** to find the exact records you want. You can also add charts and text to your report, and specify the display and data options used when your report is opened. This ensures the information presented in your report is clear and accessible to your audience.

Note For step-by-step instructions for creating a basic custom report, refer to Creating Basic Reports.

Using the report design center

You create and edit custom reports from the report design center. All the tools you need to create a report are available from one location. You can also access optional items, such as **chart styles** and **color schemes** you have configured in the other Oracle RightNow Analytics Cloud Service (Analytics) explorers, from the report design center to enhance your reports. Refer to Analytics Explorers.

You can customize reports based on your organization's needs using the report design center's ribbon, data dictionary, and design surface components.

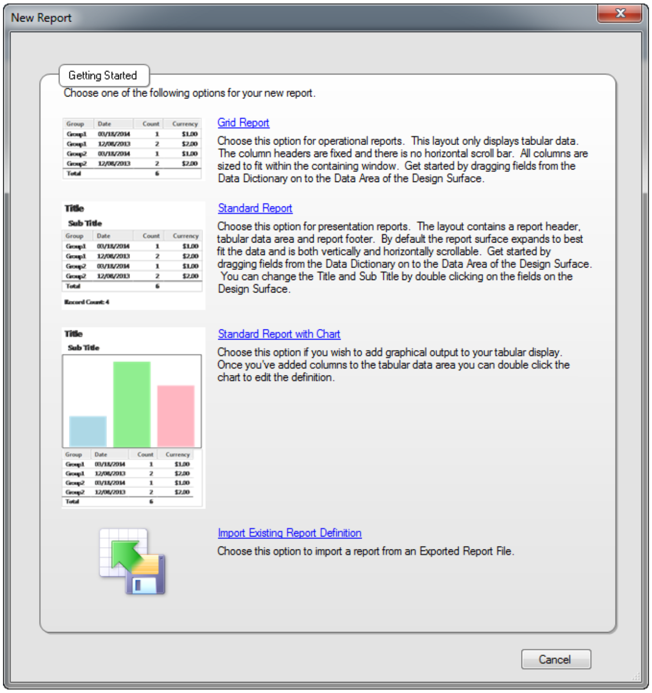
Opening the report design center

The report design center is generally opened from the Reports explorer. However, if you want to create a new report and your navigation set is configured to add reports from the **file menu**, you can click File and select Report. See To configure the file menu.

Once you open the report design center, you can increase the amount of space on the design surface by hiding the data dictionary or elements on the design surface. When you need an item that is hidden, you can display it again.

To open and configure the report design center

1. Click the Analytics button on the navigation pane.
2. Double-click Reports Explorer. Refer to Reports explorer for an overview of this explorer.
3. To edit an existing custom report, right-click the report and select Edit. The report design center opens. Refer to Report design center components.
4. To create a report, click the New Report button. When creating a report, a window opens where you select the report's initial layout.



5 Click the name of the layout you want to use for the report. The options are Grid Report, Standard Report, and Standard Report with Chart. When you select a layout, the report design center opens with the selected layout. Refer to Applying report layouts.

6 To create a copy of a report from another **interface** by importing a report definition, click Import Existing Report Definition. Refer to Importing reports.

Importing reports

If you have multiple **interfaces**, you can use report definitions saved in XML files to create reports on other interfaces. This allows you to create duplicates of complex custom reports from other interfaces without manually re-creating the reports. If you have previously exported **segments**, you can also import these to create custom reports. Refer to Exporting and importing segments.

Important Since reports are not shared between interfaces, you must export a report from one interface and import it into another to have the same report available in multiple interfaces.

When importing a report, the permissions from the imported report are not changed. However, the owner of the report is changed to the staff member who imports the report.

The following procedure explains how to import report definitions from XML files created from another interface. For information about exporting report definitions, refer to Exporting report definitions.

To import a report definition

1 Click the New Report button on the Report explorer's ribbon to select the report layout.

2 Click Import Existing Report Definition and select the XML file containing the report definition.

3 Select the XML file you want and click the Open button.

Note If you import a report that includes custom object record commands into a site that has custom objects with different names or ID numbers, a window opens where you can match the custom objects referred to in the imported report to the custom objects on the site. Refer to Custom Objects.

The imported report opens on the report design center where you can modify it.

Important When you import a report definition to create a report on a different Oracle Service Cloud site, items in the report definition that do not exist in the database where you import the report, such as custom fields, will display in the new report but will not display data. You must edit the new report to modify or delete items that do not correspond to existing fields in the database.

4 Save the new report.

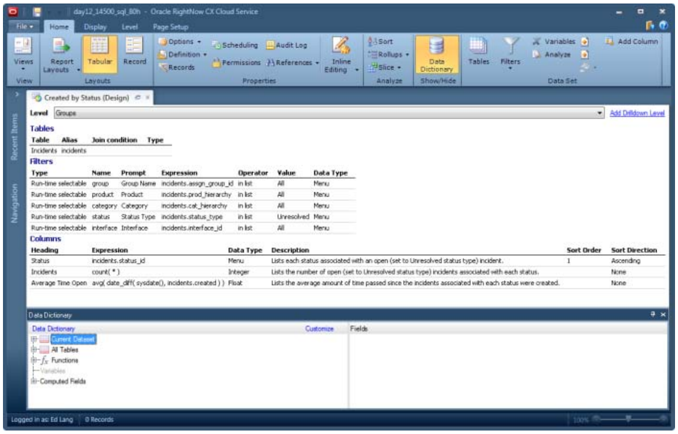
Selecting a view

When you open the report design center, you can choose to use one of four views to look at your report. Each view presents your report in a different way and gives you access to different tabs on the ribbon. The following views are available when editing a report.

- **Report View**—This view shows you the report just as your staff members will see it when they open it. The report presents real data and is particularly useful when you want to preview a report you are editing. This view does not let you add column calculations, adjust column formatting options, or use action links.
- **Layout View**—This view is similar to the report view and is also useful for previewing reports. However, unlike the report view, this view lets you select individual columns in the report and apply formatting options to the columns. For example, if you want to add **conditional formatting** to a column to highlight data that meets certain criteria in the column, you could select the layout view, select the column, and configure conditional formatting for the column.

Note When you select the report or layout view, a message appears if your report queries too much data. You can save reports such as this, but we recommend that you add fixed filters or reduce the number of tables in the report to ensure that the report runs efficiently.

- **Design View**—This is the default view when you open the report design center. This view gives you access to the tools you need to create and edit your report on the design surface.
- **Data Set View**—This view shows your report in a textual design space. You can add columns, filters, and variables using this view, just as you can when using the design view, but you cannot add graphic elements, such as charts, images, or text fields. The data set view is particularly helpful if you want to view text descriptions of your report's contents, and access different report components to edit them. The following figure shows a report displayed using the data set view.



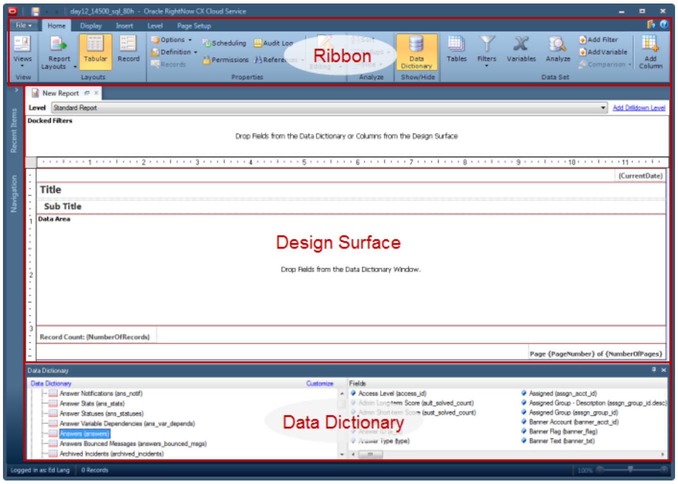
To select views

1 Edit a report. By default, the report opens in the design view.

2 Click the arrow on the Views button on the ribbon's Home tab and select the view you want. The report display is updated to use the view you select.

Report design center components

The majority of the tasks you perform when creating or editing a custom report are done through the ribbon, design surface, and data dictionary components of the report design center. These components provide access to the data, report sections, parameters, and other items you use to create and edit custom reports. The following figure shows the report design center's main components and includes the grid, rulers, rule lines, field outlines, and section headers design tools you can enable from the ribbon's Display tab.

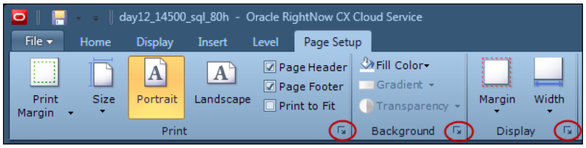


Report design center ribbon

The report design center's ribbon includes eight tabs from which you can access options to create or edit a report. The tabs on the ribbon change depending on which view you use and what is selected on the design surface. When editing a report using the design view, you can select the Home, Display, Insert, Level, and Page Setup tabs to add filters and report levels, insert charts, and modify the report's display. The Design, Format, and Options tabs are displayed when you select objects on the report, giving you options to edit the selected object. The data set view gives you similar options, though the Insert tab is not available. Fewer tabs are available when using the report and layout views. For descriptions of the tabs available in the report and layout views, refer to Ribbon options when viewing reports.

Tip You can minimize the ribbon when editing a report by double-clicking the active tab. Click the tab to temporarily display the buttons on the tab or double-click the tab again to maximize the ribbon.

Each tab on the ribbon has one or more groups containing buttons you can use to modify the report or items on the report. Some groups have buttons to the right of their names that you can click to open a window. For example, the Page Setup tab has groups for Print, Background, and Display options, and you can click the Background group's button to open the Display Options window.

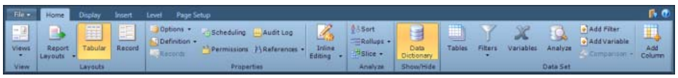


Windows give you access to the same features you can access from the ribbon, though the windows group the options differently, and sometimes contain additional options not available from the ribbon.

Important When explaining features that can be accessed from a window or the ribbon, we describe the feature using the window, but keep in mind that the ribbon's buttons provide shortcuts to most of the same features available on windows.

Home tab

The report design center's Home tab gives you access to options that impact the entire report. For example, you can select report layouts, view or export a definition of the report, schedule the report to be sent out in an email, adjust permissions, view an audit log, and enable inline editing for the report. You can also sort the data in the report or view it differently using rollups or slicing. Buttons on the tab's Data Set group give you access to the report's tables, filters, variables, and columns.



The groups and buttons on the Home tab are described in the following table.

Table 221: Home Tab Description

Group/Button	Description
Views	This button lets you choose whether to view the report using the report, layout, design, or data set view. Refer to Selecting a view.
Layouts	The buttons in this group let you select a style and layout for the report.

Table 221: Home Tab Description (Continued)

Group/Button	Description
Report Layouts	Click this button to load a predefined report layout. The available layouts are Grid Report, Standard Report, Chart, and Standard Report with Chart. When you select a layout, the report sections needed for the type of report you select are automatically displayed. Refer to Applying report layouts.
Tabular	Click this button to edit the report in a tabular layout. This is the default layout used when creating a report. Refer to Selecting record or tabular layouts.
Record	Click this button to edit the report in a record layout. Refer to Selecting record or tabular layouts.
Properties	The buttons in this group let you modify properties that apply to the entire report.
Options	Click this button to select how the time zone used in the report is determined, who the owner of the report is, set Auto Refresh and other options, and add notes to the report. Refer to Changing report properties.
Definition	Click this button and select View to view the report definition, showing descriptions of the report's tables, columns, filters, and other information describing the report's structure. Refer to Viewing and exporting report definitions. Click this button and select Export to export the definition to a file which you can import into another **interface** to copy the report. Refer to Exporting report definitions.
Records	Click this button to select the record commands buttons you want to display on the report's Home tab. Refer to Customizing record commands.
Scheduling	Click this button to schedule the report to be sent to other individuals. Refer to Scheduling reports. **Note:** This button appears only when scheduled reports are enabled. For information about enabling scheduled reports, contact your Oracle account manager.
Permissions	Click this button to define which profiles should have access to run and edit the report. Refer to Specifying permissions.

Table 221: Home Tab Description (Continued)

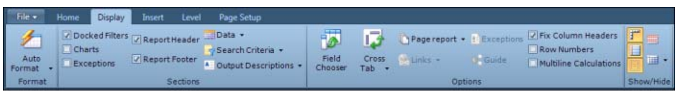
Group/Button	Description
Audit Log	Click this button to open the audit log for the report, which shows you when the report was created, edited, run, and **published**, and which staff members performed these actions. Refer to Viewing the audit log.
References	Click this button to access pre-defined reports that show you the **workspaces**, **navigation sets**, **dashboards**, and **report links** that use the report you are editing. Viewing these items before editing a report ensures that you are aware of other items that might be impacted by changes you make. If you decide the impact would be too great, you can create a copy of the report and edit the copy instead. **Note:** If you have the Analytics Administrator profile permission, you can access versions of these reports that include search options in the Report Management component. Refer to Management Reports.
Inline Editing	Click this button to select options for **inline editing**, which allows staff members to edit data directly from a report. Refer to Enabling inline editing. **Note:** This button does not display if the staff member's profile lacks inline editing permission.
Analyze	The buttons in this group let you sort the data shown on the report and apply rollups and slicing to the data.
Sort	Click this button to open the Sort window and select which output columns to sort by and the sort method. Refer to Changing sort options.
Rollups	Click this button to select rollup options and open the Rollups window. Refer to Displaying rollup levels.
Slice	Click this button to slice the data in the report. Slicing lets you group tabular data that shares common values in fields included in the report. Refer to Slicing report data.
Data Dictionary	Click this button to hide or display the data dictionary at the bottom of the report design center. You can select fields from the database to use in the report from the data dictionary. Refer to Data dictionary.

Table 221: Home Tab Description (Continued)

Group/Button	Description
Data Set	The buttons in this group let you add or edit columns, tables, filters, variables, and edit comparison date offsets.
Tables	Click this button to view the tables used in the report, change the joins used between the tables, add and delete tables from the report, and add join filters. Refer to Managing table relationships.
Filters	Click this button to view, add, edit, or delete report filters. Refer to Creating report filters.
Variables	Click this button to view, add, edit, or delete variables. Refer to Variables.
Analyze	Click this button to preview the report's database query. Refer to Reviewing report performance.
Add Filter	Click this button to add a report filter. Refer to Creating report filters.
Add Variable	Click this button to add a variable to the report. Refer to Variables.
Comparison	Click this button to add comparison date offsets for comparison columns. Refer to Adding comparison columns to reports.
Add Column	Click this button to add a column to the report. Refer to Adding columns to reports. **Note:** You can also add columns by dragging them from the data dictionary onto the design surface.

Display tab

The Display tab on the report design center ribbon is similar to the Display tab available when viewing a report. Each gives you options to apply report styles, add report sections, page the report, fix column headers, and display data using cross tabs. The report design center's Display tab also includes a Show/Hide button group that lets you add rulers, lines, and headings to help you identify sections and fields shown on the design surface.



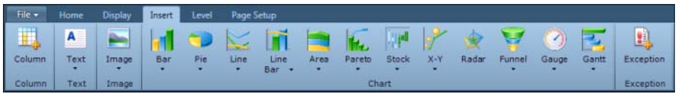
For descriptions of the buttons on the tab's Format, Sections, and Options button groups, refer to Display tab. The buttons on the Display tab's Show/Hide group are described in the following table.

Table 222: Display Tab Show/Hide Group Description

Button	Description
Show Rulers	Click this button to display horizontal and vertical rulers when designing the report to provide a perspective on the report's size.
Show Rule Lines	Click this button to display horizontal lines separating the report sections displayed on the design surface.
Show Field Outlines	Click this button to display borders around the fields you add to the report.
Show Section Headers	Click this button to display a heading above each report section.
Show Grid	Click this button to display a grid in the report's header and footer sections to help you align items you add to the sections. You can also select the grid size you want to use.

Insert tab

The Insert tab allows you to add columns, charts, and **data exceptions** to your report. You can also add standard text fields or custom text fields created from the Text Fields explorer and images added in the Images explorer. This Refer to Text Fields explorer and Images explorer.



The groups and buttons on the Insert tab are described in the following table.

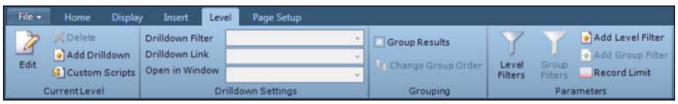
Table 223: Insert Tab Description

Group/Button	Description
Column	Click this button to open the Column Definition window to add a column to the report. Refer to Adding columns to reports. **Note:** You can also add columns by dragging them from the data dictionary onto the design surface.
Text	Click this button to insert a text field into a report section that accepts text fields. Refer to Adding text fields to reports.
Image	Click this button to add an image to your report. Refer to Adding images to reports.
Chart	The buttons in this group let you select a chart to add to the Charts section of your report. You can select different chart types and subtypes. Refer to Adding and editing charts.
Exception	Click this button to add data exceptions to the report. Refer to Creating data exceptions.

Level tab

The report design center's Level tab gives you access to options you can apply to report levels. You can also create reports with drill-down levels from this tab. If your report already has multiple output levels, you can select the level you want to edit from the Level drop-down menu located on the design surface.

You can apply level filters and group filters from this tab and add custom scripts to the report level you are viewing. You can also click the Edit button to add output descriptions to the report level.



The groups and buttons on the Level tab are described in the following table.

Table 224: Level Tab Description

Group/Button	Description
Current Level	The buttons in this group let you edit the report level that is currently selected on the Level drop-down menu at the top of the design surface. You can also delete the selected level, or add custom scripts or drill-down levels to the level.
Edit	Click this button to open the Level Settings window where you can configure all level options for the selected level. Refer to Adding additional output levels.
Delete	Click this button to delete the selected level. This option is not available for the top level of a report. **Note:** When you delete a level, all the columns and other items added to the level are also deleted.
Add Drilldown	Click this button to add a drill-down level to the selected level. Refer to Adding additional output levels.
Custom Scripts	Click this button to add a custom script to the selected level. Refer to Adding custom scripts to output levels.
Drilldown Settings	The options in this group let you select the drill-down filter and link for the level. Refer to Configuring recursive drill-down levels.
Drilldown Filter	Click this drop-down menu to select the output column or columns to use as the filter for the new level. The drill-down filter determines the data set displayed in the drill-down level.
Drilldown Link	Click this drop-down menu to select the output column you click to open the drill-down level. You can also select Entire Row to open the drill-down level by clicking anywhere on a row in the parent output level. **Note:** If you want to drill down into another report level instead of opening a specific record when a value from the record is double-clicked on a report, select Entire Row as the drill-down link. When configuring record commands for the report, select None from the Default Record drop-down menu. Refer to Customizing record commands.

Table 224: Level Tab Description (Continued)

Group/Button	Description
Open in Window	Click this drop-down menu to specify how you want to open the drill-down output level. To replace the current output level, select None. To open the output level in a new window, select the location on the screen where you want the window to open by default. You can choose Top, Bottom, Left, or Right.
Grouping	The buttons in this group let you configure result grouping for the drill-down level.
Group Results	Select this check box to group data on the selected level. Refer to Result grouping.
Change Group Order	Click this button to change the order of the grouped output columns. Refer to Changing group ordering.
Parameters	The buttons in this group let you manage level and group filters, and add record limits to the selected level.
Level Filters	Click this button to view, add, edit, or delete level filters. Refer to Creating level filters.
Group Filters	Click this button to view, add, edit, or delete group filters. Refer to Creating group filters.
Add Level Filter	Click this button to add a level filter. Refer to Creating level filters.
Add Group Filter	Click this button to add a group filter. Refer to Creating group filters.
Record Limit	Click this button to limit the number of records that can be returned on the selected level. Refer to Adding row limits and page breaks.

Page Setup tab

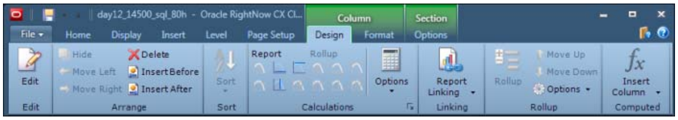
The options on the Page Setup tab allow you to configure default printing options for the report. You can also change the report's background, margins, and width. This tab is also available when staff members view reports. Refer to Page Setup tab for a description of the options on this tab.

Design tab

The report design center's Design tab is available when you click a column, text field, exception, or chart. The Design tab also displays when you select a filter, variable, or table when using the data set view.

Note The Design tab is renamed to Text Field when a text field is selected.

Different buttons are shown on the tab depending on the item you select. For example, when working with a column, buttons are available to add calculations, configure data rollups, and add comparison values. When working with text fields, you can change fonts, margins, and borders. The following figure shows the options on the Design tab when a column is selected.



The groups and buttons on the Design tab are described in the following tables, with the options for columns, text fields, data exceptions, charts, tables, and filters or variables described in separate tables.

Note The groups and buttons available on the Design tab depend on the type of object you select. In addition, when editing a column, the options on the tab depend on the type of data the column returns.

The groups and buttons available on the Design tab when editing a column are described in the following table.

Table 225: Design Tab Column Options Description

Group/Button	Description
Edit	Click this button to open the Column Definition window, from which you can edit the column's definition. Refer to Adding columns to reports.
Arrange	The buttons in this group let you hide, remove, and order the position of the selected column.

Table 225: Design Tab Column Options Description (Continued)

Group/Button	Description
Hide	Click this button to hide the selected column. **Note:** To show hidden columns, right-click the header for a visible column, select Insert Hidden Column, and select the column you want to show. The column will be displayed in the column's default location.
Move Left/Move Right	Click these buttons to move the selected column one column to the left or right.
Delete	Click this button to remove the selected item from the report.
Insert Before/Insert After	Click these buttons to open the Column Definition window, from which you can create a new column inserted before or after the selected column.
Sort	Click this button and select Sort Ascending or Sort Descending to sort the data in the report by the values in the selected column. Refer to Changing sort options. **Note:** Columns with a text area data type cannot be sorted.
Calculations	The buttons in this group let you add calculations to the selected column. You can hover over each button to view a description of the calculation. You can also choose to show multiple calculations on a single row or on separate rows. Refer to Adding column calculations.
Calculation buttons	Click the button for the calculation that you want to add to the selected column.
Options	Click this button and select Display Calculations on Single Row to show all the selected calculations on one row beneath the column. Select Display Calculations on Separate Rows to show each calculation on a separate row below the column.
Report Linking	Click this button to add, edit, and remove links to other reports. You can add conditional or unconditional links to columns. Refer to Linking reports.

Table 225: Design Tab Column Options Description (Continued)

Group/Button	Description
Rollup	The buttons in this group let you group the information in the report by the selected column. You can also change the ordering if your report has multiple rolled-up columns. Refer to Displaying rollup levels.
Rollup	Click this button to roll up the report's data by the selected column. Click the button again to remove the rollup.
Move Up/Move Down	If your report's data is rolled up by more than one column, click these buttons to move the selected column up or down one rollup level.
Options	Click this button to select rollup options. The available options are Display Group Counts, Display Rollup Headings, Display Column Headings, and Repeat Column Headings.
Insert Column	Click this button in the Computed group to add a computed column to the report. The types of computed columns available depend on the values in the selected column. You can also add computed columns from the data dictionary. Refer to Computed fields for information about computed columns.
Trend Options	The buttons in this group let you edit trend options for the selected trend column. Refer to Specifying trend value duration.
Perform Forecast	Select this check box to enable forecasting in the trend value column.
Forecast Units	Enter the number of time units to forecast forward. For example, if the trended column groups data by week, trending forward three units displays data trended three weeks in the future.

Table 225: Design Tab Column Options Description (Continued)

Group/Button	Description
% Change	The buttons in this group let you edit comparison percentage and trend percentage column options for the selected comparison percentage or trend percentage column. Refer to Adding comparison percentage columns and Adding trend percentage columns.
Comparison Direction	Click this button and select how the percentage value shown in the comparison or trend percentage column should be derived. The value can be derived from the difference between the value in the original column being compared/trended versus the value in the comparison or trend column. The value can also be derived from the difference between the value in the comparison or trend column versus the value in the original column being compared/trended.
Show Icon	Select this check box to display icons next to the percentage values returned in the column. The icons indicate whether there is a positive change, negative change, or no change.
Icon Colors	Click this button to change the colors used for the icons to indicate a positive change, negative change, or no change.

The groups and buttons available on the tab when editing a text field are described in the following table.

Table 226: Text Field Tab Options Description

Group/Button	Description
Edit	Click this button to open the Edit Text Field window, from which you can edit the selected text field. Refer to To create a text field.
Arrange	The buttons in this group let you position the selected text field on the design surface.
Anchor	Click this button to define an anchor style for the text field. Anchor styles determine how a text field moves in relation to the borders of the report section. Refer to Defining anchor styles.
Bring to Front/Send to Back	Click these buttons to place the selected item on top of or beneath overlapping items.

Table 226: Text Field Tab Options Description (Continued)

Group/Button	Description
Size to Fit	Click this button to automatically shrink or expand the element containing the text field to fit the selected item. **Note:** Manually resizing the selected element disables this option.
Font	The buttons in this group let you change the selected text field's font style, size, and color. You can also select font attributes, such as bold and italic, and change the text's alignment within the text field. In addition, you can add a background color for the text field.
Margin	Click this button to select the width of the margins around the item. The available options are None, Narrow, Medium, Wide, and Custom. Selecting Custom lets you specify the number of pixels for the top, bottom, left, and right margins.
Border	The buttons in this group let you add borders to the text field and change the borders' display options. You can identify which borders you want and choose the borders' color, size, and style.

The groups and buttons available on the Design tab when editing a **data exception** are described in the following table.

Table 227: Design Tab Data Exception Options Description

Group/Button	Description
Edit	Click this button to open the Exception Editor, from which you can edit the selected data exception. Refer to Creating data exceptions.
Display Reference	The drop-down menu in this group lets you select the field you want to highlight to indicate which rows meet the selected data exception.
Arrange	The buttons in this group let you add, remove, and position the selected data exception.
Add	Click this button to add a new data exception. Refer to Creating data exceptions.
Delete	Click this button to remove the selected exception from the report.

Table 227: Design Tab Data Exception Options Description (Continued)

Group/Button	Description
Move Up/Move Down	Click these buttons to move the selected exception up or down in the list of exceptions. Refer to Ordering data exceptions.
Insert Before/ Insert After	Click these buttons to add a new data exception before or after the selected exception. Refer to Ordering data exceptions.
Tabular Display	The options in this group let you configure the tabular display for the selected data exception. Refer to Creating data exceptions.
Show Notifications	Click this button to show the selected exception at the bottom of the report's tabular data.
Show Criteria	Select this check box to display the exception criteria. For example, if the data exception marks opportunities that are still active, the criteria would display *opportunities.status_id = Active.*
% Meeting Criteria	Select this check box to show the percentage of data in the report that meets the specified exception criteria. This information displays at the bottom of the report in the Data Exceptions report section.
% Not Meeting Criteria	Select this check box to show the percentage of data in the report that does not meet the specified exception criteria. This information displays at the bottom of the report in the Data Exceptions report section.
Graphical Display	The options in this group let you configure the graphical display for the selected data exception. Refer to Creating data exceptions.
Show Notifications	Click this button to show the selected exception in charts shown on the same report output level as the data exception.
Show Criteria	Select this check box to display the exception criteria in the chart. For example, if the data exception marks opportunities that are still active, the criteria would display *opportunities.status_id = Active.*
% Meeting Criteria % Not Meeting Criteria	Select these check boxes to display data on the chart showing the percentage of data that meets or that does not meet the specified exception criteria.
Color	Click this button to select a color to use for the indicator on the chart that shows the amount of data meeting the exception criteria.

The groups and buttons available on the Design tab when editing a chart are described in the following table.

Table 228: Design Tab Chart Options Description

Group/Button	Description
Define Data Source	Click this button to open the Chart Wizard where you can select data options for your chart. Refer to Using the Chart Wizard.
Arrange	The buttons in this group let you position the selected chart on the design surface and remove it from the report.
Delete	Click this button to remove the selected chart from the report.
Bring to Front/Send to Back	Click these buttons to place the selected chart on top of or beneath overlapping charts.
Type	Click this button to change the type and subtype of the selected report. If the data options in the new chart type differ from those in the old chart type, the Chart Wizard opens, allowing you to select new data options. Click here for descriptions of the available chart types.
Chart Style	Click this button to select a chart style for the selected chart. Refer to Chart Styles explorer.
Labels	Click in the text fields in this group to type text for the chart's title, category, and value labels.
3D Settings	Click the buttons in this group to specify angle and depth settings for a three-dimensional chart. Refer to Chart Styles explorer. **Note:** The buttons in this group are active only if a three-dimensional chart is selected.
Settings	Click the buttons in this group to modify settings specific to charts that include bars, lines, or gauges. Refer to Chart Styles explorer. **Note:** The buttons in this group are active only if a chart with bar, line, or gauge properties is selected.
Colors	Click the button in this group to select a color scheme for the chart. Refer to Chart Styles explorer.

The buttons available on the Design tab when editing a table from the data set view are described in the following table.

Table 229: Design Tab Table Options Description

Group/Button	Description
Tables	Click this button to open the Data Set window, where you can edit the tables used in the report. Refer to Managing table relationships.
Outer Join	Click these buttons to join the selected table with the parent table using an outer or an inner join. Refer to Types of table joins.
Inner Join	
Join Condition Menu	Select the fields used to link the selected table with the parent table from this drop-down menu.

The groups and buttons available on the Design tab when editing a filter or variable from the data set view are described in the following table.

Table 230: Design Tab Filters and Variables Options Description

Group/Button	Description
Edit	The buttons in this group let you modify filter properties and the logical expression combining filters.
Edit	Click this button to open the Edit Filter window, from which you can edit the filter's properties. Refer to Specifying filters.
Logical Expression	Click this button to open the Edit Logical Expression window, where you can modify the logical expression combining the report filters, level filters, or group filters. The type of filter you select determines which logical expression you can edit. Refer to Defining logical expressions.
Arrange	The buttons in this group let you add, remove, and order filters and variables.
Add	Click this button to open the Add Filter or Add Variable window to add a new filter or variable. Refer to Specifying filters and Creating variables. **Note:** The type of filter you select determines whether you add a report, level, or group filter.

Table 230: Design Tab Filters and Variables Options Description (Continued)

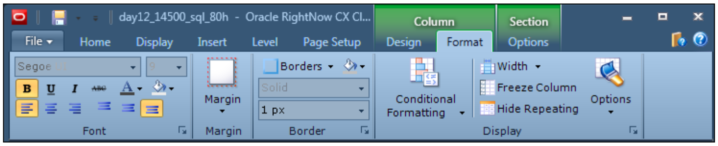
Group/Button	Description
Delete	Click this button to remove the selected item from the report.
Move Up/Move Down	Click these buttons to move the selected run-time selectable filter or variable up or down in the list of filters or variables on the data set view. **Note:** Moving filters and variables can help you organize them for easier management when using the data set view. However, their positions do not change their placement on the Search window or the filters' logical expression.
Insert Before/ Insert After	Click these buttons to open the Add Filter window to add a new filter or variable before or after the selected filter or variable.
Filter/Variable Options	The check boxes in this group let you modify options for the selected filter or variable.
Display in Docked Filters	Select this check box to display the selected variable or run-time selectable filter on the docked filters section of the report. Refer to Docking variables and run-time selectable filters.
Display in Search Criteria	Select this check box to include descriptions of the selected variable or filter in the search criteria description. Refer to Search criteria descriptions.
Run-Time Selectable	Select this check box to make the selected filter available on the Search window when the report is run. Refer to Creating report filters.
Required	Select this check box to make the selected run-time selectable filter required. Staff members must specify values for required filters when they run the report.

Layout tab

The report design center's Layout tab is available when you click a chart. The buttons on this tab let you apply chart style options to individual charts in your report. This allows you to create a custom look for a chart without creating or modifying a chart style. This tab is identical to the Layout tab on the Chart Styles designer. Refer to Chart Styles explorer for information about options available on this tab.

Format tab

The report design center's Format tab is available when you click a column, **data exception**, or chart. This tab provides access to general display options, such as fonts, margins, borders, and width. Some buttons on the tab vary depending on the type of item you select. For example, when working with a column, you can apply **conditional formatting** to flag data in the column that meets certain criteria. Here is the Format tab for a column.



The groups and buttons on the Format tab are described in the following table.

Table 231: Format Tab Description

Group/Button	Description
Font	The buttons in this group let you change the font style, size, and color. You can also select font attributes, such as bold and italic, and change the text's alignment. In addition, you can also add a background color. **Note:** This group does not display when editing a chart.
Margin	Click this button to select the width of the margins around the selected column. The available options are None, Narrow, Medium, Wide, and Custom. Selecting Custom lets you specify the number of pixels for the top, bottom, left, and right margins. **Note:** This button displays when editing a column.
Border	The buttons in this group let you add borders to the column and change the borders' display options. You can identify which borders you want and choose the borders' color, size, and style. **Note:** This group does not display when editing a chart.

Table 231: Format Tab Description (Continued)

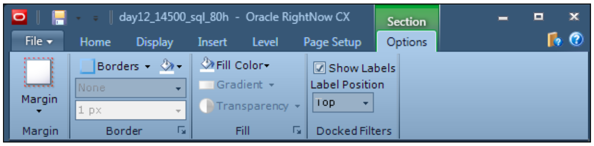
Group/Button	Description
Display	The buttons in this group let you apply conditional formatting to the column, change the column's width, freeze the column, and hide repeating values in the column. You can also select other display options for the column. **Note:** This group displays when editing a column.
Conditional Formatting	Click this button to apply conditional formatting to the column's data. Refer to Editing column format options.
Width	Click this button to select a width for the column. Select Best Fit to automatically set the width based on the amount of space needed to display the column's contents. Best Fit also takes into account the width needed by other columns in the report. Select Percentage to specify a percentage of the total report width for the column.
Freeze Column	Click this button to fix the selected column in place so it does not move when you horizontally scroll the report. This can be helpful if you want to continue to view the first column in the report while scrolling the report to see the columns on the right of the report. **Note:** When you fix a column, all columns to the left of the column are also fixed. You can still scroll the columns to the right of the fixed column.
Hide Repeating	Click this button to hide consecutive repeating values in the column. For example, if the name of a staff member is shown in the column in five consecutive rows, you can hide repeating values to show the name in only the first column. **Note:** You can also hide repeating values from the Column Format window, described in Editing column format options. This window has an option to exclude hidden repeating values from consideration in column calculations and column auto-filter options. When you hide repeating values from the ribbon, they are still included in column calculations and auto-filtering.
Options	Click this button to select display options for the column. Refer to Editing column format options.

Table 231: Format Tab Description (Continued)

Group/Button	Description
Number	The options in this group let you display numeric values as a gauge and select numeric formats. Refer to Editing column format options. **Note:** This group displays when selecting a column containing numeric values.
Date	The options in this group let you select a date format for the column and view the format. Refer to Editing column format options. **Note:** This group displays when selecting a column containing date/time data.
Image	The options in this group let you configure the image used to indicate columns that meet **data exception** criteria. These options are also available when creating data exceptions. Refer to Creating data exceptions. **Note:** This group displays when editing a data exception.
Current Selection	The options in this group let you select the area of the chart you want to edit and reset the style options. **Note:** This group displays when editing a chart.
Area Menu	Select the area of the chart you want to edit from this drop-down menu. You can also select the area by clicking it on the chart on the design surface.
Reset to Match Style	Click this button to reset customized display and formatting of the selected chart area to match the default settings specified in the chart style that is applied to the chart.
Format	The buttons in this group let you select border, background, and font characteristics for the selected chart area. These same options are available when creating chart styles. Refer to Creating and editing chart styles. **Note:** This group displays when editing a chart.

Options tab

The report design center's Options tab is available when you click a report section, column, table, or other item. The tab displays options appropriate for the report item you have selected. The type of item you select is displayed above the Options tab. For example, the following figure shows the tab after selecting a report section. In this example, you could edit the section's margins, borders, fill colors, and layout options from the tab.



The groups and buttons on the Options tab are described in the following table.

Table 232: Options Tab Description

Group/Button	Description
Margin	Click this button to select the width of the margins around the item. The available options are None, Narrow, Medium, Wide, and Custom. Selecting Custom lets you specify the number of pixels for the top, bottom, left, and right margins.
Border	The buttons in this group let you add borders to the selected item and change the borders' display options. You can identify which borders you want and choose the borders' color, size, and style.
Fill	The buttons in this group let you add a background color to the selected item. You can select the background color and add a gradient color to blend into the primary color. You can also choose how intense the colors should be with the Transparency setting.
Layout	The buttons in this group let you define how the content of the selected report section should be arranged and how the height of the section should be managed. Refer to Editing section layout properties. **Note:** This group is not shown when a column is selected.
Manual	Click this button to manually size the report section and manually position text fields and images you add to the section. When a section is configured with manual layout, you control the placement of items on the section and the section's height.

Table 232: Options Tab Description (Continued)

Group/Button	Description
Automatic	Click this button to automatically size the report section and automatically position text fields and images you add to the section. When a section is configured with automatic layout, you do not need to specify the placement of items on the section or the section's height.
Layouts	Click the down arrow on this button to select a layout for the chart section. Refer to Adding charts with chart table layouts. **Note:** This button is shown when a chart is selected on the report.
Auto Height	If Automatic layout is selected, you can click this button to prevent the height of the section from being automatically set.
Table Layout	If Automatic layout is selected, you can click this button to configure the layout of the table that underlies each report section. For example, you can specify that all columns in the table have the same width, giving any images or text fields in those columns the same amount of horizontal space. Refer to To change a report section's table layout options.
Add Text Field	Click this button to add a new text field to the report. **Note:** This button is shown when a text field, image, or report section is selected on the report.
Add Chart	Click this button to add a new chart to the report. **Note:** This button is shown when a chart is selected on the report.
Add Column	Click this button to add a new output column to the report. **Note:** This button is shown when a column is selected on the report.

Design surface

The design surface displays all of the sections you add to your report from the ribbon. Only report sections displayed on the design surface are included in a report when it runs. Once you add a section to the design surface, you can add, edit, and remove content in the section or modify the display of the section itself. For example, you can drag database fields to the data area, insert charts into the Charts section, and edit the report's title in the report header.

When working on the report design center, you can add rulers, lines, and headings to help you identify sections and fields shown on the design surface. These options are accessed from the Show/Hide group on the ribbon's Display tab.

Data dictionary

The data dictionary is shown on the report design center when you use the design or data set views, and lists the standard tables and fields from the database that can be used in custom reports. **Functions**, **variables**, **computed fields**, and tables created for **custom objects** can also be selected from the data dictionary. Any item listed in the data dictionary can be dragged to the Data Area section to add the field as an output column, dragged to Docked Filters to create a filter based off the field, or dragged to the Data Exceptions section to create an **exception** based on the field.

You can view detailed information about the tables and fields shown in the data dictionary and customize the data dictionary to show only the fields and tables you regularly use. You can also reposition the data dictionary if you want a different location for it.

Viewing table and field information

Before you add database fields to a report from the data dictionary, you may need to view information about the field's contents. You can view brief descriptions of tables and fields in the data dictionary by hovering over their names, and you can view more detailed information by right-clicking tables or fields and selecting View Data Definition.

If you want to view the entire data dictionary that describes all the standard tables and fields in the database, you can right-click any table name and select View Full Data Dictionary. The data dictionary opens in a separate window. You can also open the full data dictionary from Configuration > Database > Data Dictionary.

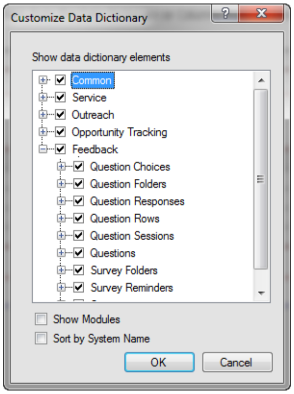
Customizing the data dictionary

The list of available tables and fields in the data dictionary can be customized to hide the tables and fields that you do not use in your reports. This is helpful if you use only certain tables and fields in your reports and want to simplify the data dictionary to make it easier to select the tables and fields you use.

Note Tables and fields created for **custom objects** can be viewed only in the All Tables list in the report design center's data dictionary. This prevents customizing the data dictionary to display only custom object tables. Refer to Custom Objects.

To customize the data dictionary

1 Click Customize at the top of the data dictionary to open the Customize Data Dictionary window.



2 Expand the modules, tables, and fields that you want to see.

3 Clear the check boxes for those tables, fields, or modules, such as Feedback or Sales, that you do not want to see in the data dictionary.

4 To group the database tables by the module they are most frequently used with, select the Show Modules check box.

5 To sort the lists of tables displayed in the data dictionary by their database names instead of the tables' aliases, select the Sort by System Name check box.

6 Click the OK button to save your customizations to the data dictionary.

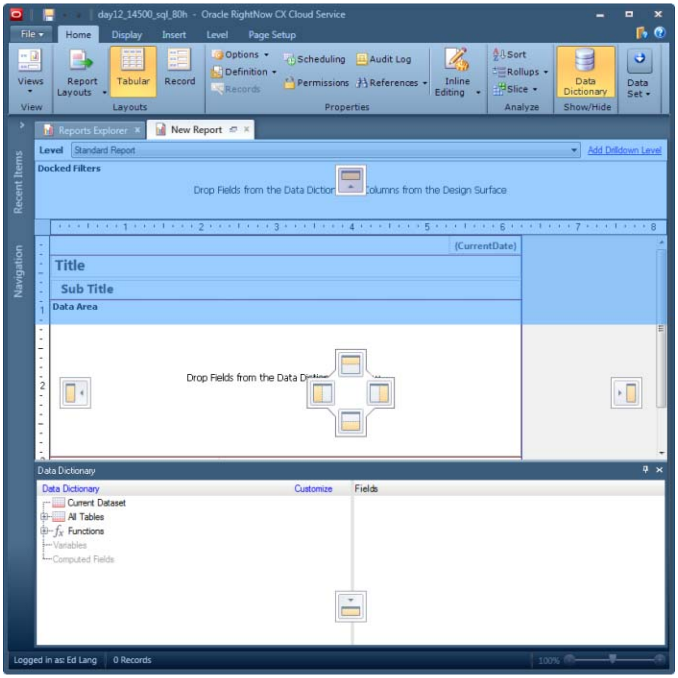
Moving the data dictionary

By default, the data dictionary is located at the bottom of the report design center, but you can reposition it on the content pane.

Note The following procedure is the same as that used to move the report explorer on the dashboard design center. Refer to Dashboards for information about the dashboard design center.

To move the data dictionary

1 Click the data dictionary's title bar and drag it. When you drag the data dictionary, positioning images appear. Hovering over the various images highlights portions of the report design center.



2 Drop the data dictionary once the section where you want it is highlighted.

The design center is updated to show the data dictionary in the new location.

Note Since the location of the data dictionary is stored in your personal settings, it remains where you placed it until you move it again.

Report elements

Every report consists of items added to the report and configured using the ribbon, design surface, and data dictionary. Reports can have one or more output levels that contain report sections, and each section can contain text fields, images, charts, and output columns. The data shown in charts and output columns in each output level is impacted by the filters, variables, and comparison date offsets you add to the report.

Output levels

Each custom report has at least one output level, and each output level contains one or more report sections and can have unique filters, variables, and comparison date offsets. If your report has drill-down levels, a separate output level is added for each drill-down level. Refer to Drilling down in reports and Adding additional output levels.

Important The output level you are currently viewing on the design surface is shown in the Level drop-down menu at the top of the design surface. If your report has multiple output levels, you select the level you want to view from the drop-down menu.

Output columns

The output columns you add to the report levels' data sections determine the information your staff members can see about the records returned in the report. There are different types of output columns, including database fields, **functions**, and **computed fields**. You can apply formatting to the columns in your report and also add calculations to tally data shown in each column. Columns can be added from the Column Definition window or by dragging fields from the data dictionary. Refer to Managing output columns.

Charts

Charts offer a graphical display of the data returned in your report. You can add multiple charts to the charts report section in each output level. Different types of charts are available so you can present the data in different ways, and you can modify the display for each chart, selecting different colors, fonts, scales, and other attributes. Refer to Adding and editing charts.

Text fields and images

You can add text fields and images to your report to enhance the report's appearance and to clarify the report's purpose. Refer to Adding images to reports.

Data exceptions

Data exceptions let you highlight data displayed in charts and output columns that meet certain requirements. Each output level can have multiple exceptions to highlight data for different reasons. For example, in an incidents report, you could display unresolved incidents in red text and overdue incidents in bold text. The exceptions' criteria and percentage of data meeting or not meeting the exceptions can be shown in the report level's charts and exceptions report section. Refer to Creating data exceptions.

Tip If you want to highlight data in a single column, you can apply conditional formatting to the column instead of using data exceptions. Refer to Editing column format options.

Report sections

Report sections store the content you add to the output level, such as docked filters, headers, footers, descriptions, charts, tabular data, and **data exceptions**. Some sections are designed to contain **text fields**, such as the report's title, and others are designed to display non-tabular data, such as charts. The sections you should include in each output level are primarily determined by the report's audience and the output level's purpose. For example, a custom report that only you will use may not need a report header, report footer, or similar report sections that clarify the report's purpose and make it more presentable. However, these report sections are useful if the report will be sent to other staff members. If a section is added to the design surface, but has no content, the section does not display when the report is run. For procedures on adding and editing report sections, refer to Managing report sections.

Note When creating a report, you can select a layout to have the appropriate report sections automatically included in the report. Refer to Applying report layouts.

The sections you can add to your output levels are described in the following table, along with the type of contents each section can contain.

Table 233: Report Sections Description

Report Section	Description
Docked Filters	This section is used to display run-time selectable filters at the top of the report for easy changes to the report's search parameters. Refer to Docking variables and run-time selectable filters. **Note:** This section can be added to or removed from the design surface using the Docked Filters check box on the ribbon's Display tab.
Page Header	This report section is displayed only on printed reports. By default, this section contains the Current Date text field, which is a variable that outputs the date when the report is run. **Note:** This section can be added to or removed from the design surface using the Page Header check box on the ribbon's Page Setup tab.
Report Header	This section contains text fields that display at the top of each page of the report. By default, this section contains the Title and Sub Title text fields. **Note:** This section can be added to or removed from the design surface using the Report Header check box on the ribbon's Display tab.
Output Descriptions	This section contains text that you can modify to provide general information about the report. Output descriptions can display **inline**, as text on a separate tab, or by rolling over the columns in the report. Refer to Output descriptions. **Note:** This section is shown on the design surface by selecting Display Descriptions Inline from the Output Descriptions button on the ribbon's Display tab.
Search Criteria Descriptions	This section contains text explaining the filters that are added to the report. Search criteria descriptions can be displayed inline or as text on a separate tab in the report. Refer to Search criteria descriptions. **Note:** This section is shown on the design surface by selecting Display Search Criteria Inline from the Search Criteria button on the ribbon's Display tab.

Table 233: Report Sections Description (Continued)

Report Section	Description
Charts	This section contains charts that you insert into the report. Charts provide a graphic representation of data and are most useful for quickly comparing groups of data. **Note:** This section can be added to or removed from the design surface using the Charts check box on the ribbon's Display tab.
Data Area	This section contains database fields you add to the report, which outputs tabular data. This report section is used in almost all reports, as it provides text with specific details about specific records or specific numbers summarizing groups of records. **Note:** This section can be removed from the design surface by selecting Do Not Display Data from the Data button on the ribbon's Display tab.
Report Footer	The report footer is similar to the report header, though the text fields in the footer display on the bottom of each page of the report. By default, the report footer contains the Record Count text field. This is a variable which displays the number of records returned on the page. **Note:** This section can be added to or removed from the design surface using the Report Footer check box on the ribbon's Display tab.
Data Exceptions	This section contains information summarizing the data exceptions that are indicated in the data area. Data exceptions are used to highlight specific information in the report that meets certain criteria you define. **Note:** This section can be added to or removed from the design surface using the Exceptions check box on the ribbon's Display tab.
Page Footer	The page footer is similar to the page header section. The text fields added to this section display at the bottom of printed reports. By default, this section contains the page number text field. This is a variable which outputs the current page number and the total number of pages in the report. **Note:** This section can be added to or removed from the design surface using the Page Footer check box on the ribbon's Page Setup tab.

Search parameters

You can add search parameters to your report to define the data shown in the report's columns, charts, and exceptions. Search parameters include filters, variables, and comparison date offsets. These are shown on the report's Search window when staff members run the report, allowing them to modify the data that is returned, or you can hide filters so their values cannot be changed by staff members.

The types of parameters available on the Search window are described in the following table.

Table 234: Search Parameters Description

Parameter	Description
Filters	Filters limit the data returned in your report by selecting a subset of information from the database. Different types of filters are available, and each serves a different purpose.
Report Filters	Report filters limit the data accessible to any of the report's output levels and can be fixed or run-time selectable. Fixed filters cannot be changed when the report is run, but run-time selectable filters can be changed by staff members. Run-time selectable filters can also be required if you want to force staff members to select filter values. Refer to Creating report filters.
Level Filters	Level filters are similar to report filters and can be fixed or run-time selectable. However, unlike report filters, level filters limit the data accessible at individual output levels rather than the entire report. Refer to Creating level filters.
Group Filters	Group filters can be fixed or run-time selectable and are applied to data that is grouped to prevent information about certain groups from being returned. For example, a report that shows the number of unresolved incidents for each staff member could have a group filter to display information only for staff members with more than ten unresolved incidents. Refer to Creating group filters.
Variables	Variables can be used to return different data, or the same data in different formats, in one column. For example, you could create a single report that displays the number of incidents by staff member, group, queue, or status. You select the information you want when you run the report. Refer to Variables.

Table 234: Search Parameters Description (Continued)

Parameter	Description
Comparison Date Offset	Staff members can select comparison date offsets when they run a report with comparison columns. Comparison columns are used to display related information from different time periods. For example, comparison columns can be used to see how many opportunities were created in two different quarters. Refer to Adding comparison columns to reports.

Managing report sections

Report sections are added to the design surface by using a **layout** or by selecting the sections on the ribbon. When a section is displayed on the design surface, you can resize the section and add content such as **text fields**, database fields, and charts. You can also change section colors, margins, and borders using the options on the ribbon, and adjust layout properties for certain sections.

Applying report layouts

You can apply a predefined layout to quickly modify the report's display to make it appropriate for the report's audience. For example, the Grid layout can be applied to operational reports that are used by staff members who work with incidents, contacts, or other types of records. This layout is ideal for such reports since it does not include titles, headers, or other report sections that are not needed when working with records. If your report is to be emailed or printed, you could use the Standard Report layout, which includes titles, headers, and other report sections that help explain the report's context and purpose. The other layouts available are Standard Report with Chart and Chart Report.

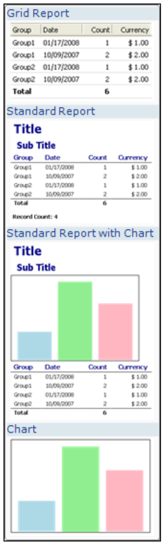
Layouts can be selected on the Getting Started window when creating reports or from the report design center's ribbon. Layouts selected from the Getting Started window are applied to all the output levels added to the report, and layouts selected from the ribbon are applied to individual output levels. Refer to Opening the report design center for more information about adding layouts from the Getting Started window. The following procedure describes how to apply a layout to individual output levels.

To apply a layout to an output level

1 If your report includes more than one output level, select the output level the layout should be applied to from the Level drop-down menu at the top of the design surface.

2 Click the Home tab.

3 Click the Report Layouts button to open the report layouts menu.



4 Click one of the layouts to apply it to the current output level. The predefined layouts are described in the following table.

Table 235: Report Layout Options

Layout	Description
Grid Report	Select this layout for an output level with the Docked Filters, Page Header, Data Area, and Page Footer report sections.
Standard Report	Select this layout for an output level with the Docked Filters, Page Header, Report Header, Data Area, Report Footer, and Page Footer report sections.

Table 235: Report Layout Options (Continued)

Layout	Description
Standard Report with Chart	Select this layout for an output level with the Docked Filters, Page Header, Report Header, Charts, Data Area, and Page Footer report sections.
Chart	Select this layout for an output level with the Page Header, Charts, and Page Footer report sections. This layout is not available on the Getting Started window. **Note:** When a report output level includes a chart but not tabular data, you can add data for the chart directly from the Chart Wizard. Refer to Using the Chart Wizard.

Manually adding sections to the design surface

While layouts automatically add certain report sections to the design surface, you may want to customize the sections displayed once the layout is applied. Manually adding report sections to the design surface is simple using the ribbon. You can add different sections to each output level in a report. For example, the primary output level in your report might include a header and chart, and the other output levels in the report might include only the data area section.

To display and hide report sections on the design surface

1. If your report includes more than one output level, select the level you want from the Level drop-down menu at the top of the design surface.
2. Click the Display tab on the ribbon.
3. Select the check box next to the section you want to display from the tab's Section group. The design surface changes to include the report section you select.
4. To display the Page Header or Page Footer section when the report is printed, click the Page Setup tab and select the Page Header or Page Footer check box on the tab's Print group.
5. To remove a report section from the design surface, clear the section's check box on the ribbon. The design surface changes to remove the report section.

Resizing sections

When a report section is added to the design surface, it is displayed with a default size. You may want to resize a section to allow more room for images or **text fields** or to reduce the size of the section to allow more room for other sections.

To resize report sections

1 Move your cursor over the section border that you want to move on the design surface. The cursor changes to display directional arrows when it is over a border.

2 Drag the border to the position you want.

Editing section styles

Sections that are included in a report can be customized, allowing you to further tailor your report to your audience. The available style options for each section vary. You can change the fill colors and borders of all the sections, and you can also change the margins in the output descriptions, search criteria descriptions, data area, and data exceptions sections.

Section styles can also be changed by applying **report styles** with the Auto Format feature. If the style selected using auto format is applied after you manually modify a section style, your edits to the section style are overwritten. Editing a section style after an auto-format style is applied overwrites the auto-format style. Refer to Changing report displays with styles for more information about the Auto Format feature.

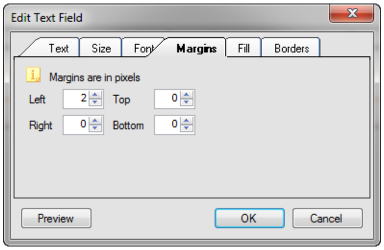
Tip The following procedure describes editing section styles from the Edit Style window. However, you can also adjust style options by selecting the report section and using the buttons on the ribbon's Options tab.

To edit section styles

1 Right-click the section on the design surface that you want to edit and select Edit Style.

Note The Edit Style window for some report sections includes an Options tab that allows you to set layout options. Refer to Editing section layout properties.

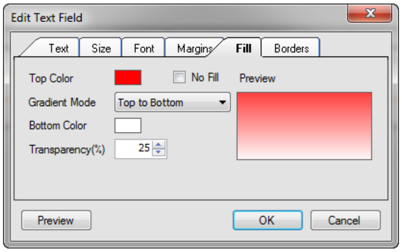
2 Click the Margins tab to modify the amount of space surrounding the contents in the section.



3 Enter the number of pixels between the text and the left, right, top, and bottom margins.

4 If you are editing a style for a report section, such as the report header, enter the number of pixels you want between the section's content in the Spacing field.

5 Click the Fill tab to modify the background fill colors for the selected section. When editing styles for report sections that do not have margins, the Fill tab is the active tab when you edit the style.



6 Enter the following field information.

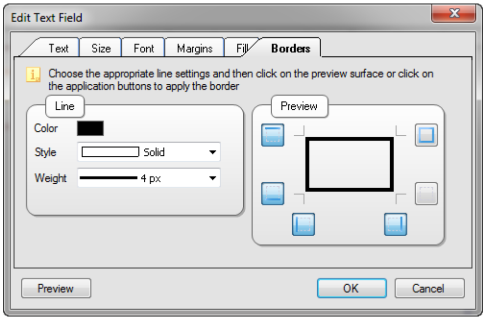
Table 236: Fill Tab Description

Field	Description
Color/Top Color/Left Color	The text description for this option varies depending on the gradient mode you select. Click this box to select a primary color as the background. Refer to Choosing colors.
No Fill	Select this check box to clear any fill colors previously selected. If this box is selected, the other options on the Fill window are disabled except Color. Selecting a color automatically clears the No Fill check box and enables the other options.

Table 236: Fill Tab Description (Continued)

Field	Description
Gradient Mode	Select the positioning of the primary and secondary colors for the background from the Gradient Mode drop-down menu. Using gradient coloring lets you merge two colors. The following options are available. • **None**—Select this option to use only the primary color as the fill color. If you select None, the Gradient Color field is disabled. • **Top to Bottom**—Select this option to merge the colors from the top of the background to the bottom. • **Left to Right**—Select this option to merge the colors from the left of the background to the right.
Gradient Color/Bottom Color/Right Color	The text description for this option varies depending on the gradient mode you select. Click this box to select a secondary color to merge with the primary color. When you do so, the fill colors merge using the method defined in the Gradient Mode menu. Refer to Choosing colors.
Transparency(%)	Select a percentage to define how intense the fill colors are. A setting of 100% is completely transparent, which prevents the fill colors from displaying. A setting of 0% has no transparency, resulting in intense background colors. The selected percentage is immediately reflected in the Preview field, so you can scroll through the transparency percentages to find a value that best suits your needs.
Preview	This area provides a sample of how the fill colors you select will appear on the report background.

7 Click the Borders tab to modify the borders of a report section.



8 Enter the following field information.

Table 237: Borders Tab Description

Field	Description
Color	Click this box to select a color for the border. Refer to Choosing colors.
Style	Click this drop-down menu to select one of the following border styles: Solid, Dashed, Dotted, Inset, Outset, Double, Groove, Ridge, Rounded, or Separator. The separator option lets you add empty space around the report section.
Weight	Click this drop-down menu to select the pixel size of the border. You can choose a number between 1 and 10 pixels.
Preview	This area defines the placement of the borders you define. Select any of the following buttons to place the borders, or click the area in the Preview white space where you want the border.
 Borders	Click a button to add or remove the selected border attributes from the top, bottom, left, or right sides of the component. Alternatively, you can click the appropriate location in the Preview area to add or remove borders.

9 Click the OK button to save the section’s style changes.

Editing section layout properties

Section layout properties determine how the charts, images, and text fields you add are positioned on the section. A manual layout lets you manually position items you add. If the section has an automatic layout, the item is positioned automatically, and the section's height is adjusted to best fit the item. You can also set table layout options to change how the items in the section are sized. By default, report sections have manual layout enabled.

To enable automatic layout of a report section

1. Add the report section you want to the report output level.
2. To add the report header or footer sections, click the Display tab and select the Report Header or Report Footer check box.
3. To add the page header or footer sections, click the Page Setup tab and select the Page Header or Page Footer check box.
4. Click the report section on the design surface to select it.
5. Click the Options tab and click the Automatic button.
6. To prevent the section's height from being automatically adjusted to fit the items you add to the section, click the Auto Height button to disable it.

Tip When Auto Height is disabled, you can manually change the height of the section by dragging the section's horizontal borders up or down, just as you would if the section had a manual layout.

If a report section has an automatic layout, the charts, images, and text fields you add to it are arranged in an invisible table structure, with the items placed in rows and columns. You can adjust the sizing of the rows and columns to arrange the images and text fields exactly like you want them.

To change a report section's table layout options

1. Add images and text fields to the report section.
2. Click the report section on the design surface and then click the Options tab.
3. If the section has a manual layout, click the Automatic button to change to an automatic layout.

4 Click the Table Layout button.

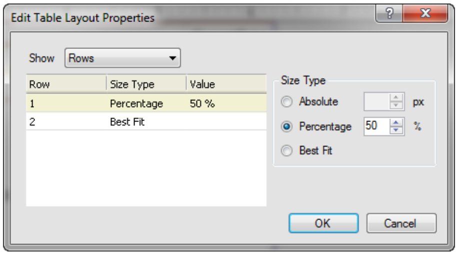
5 To give each column in the section's table the same amount of width, select Size All Columns Equally.

6 To give each row in the section's table the same amount of height, select Size All Rows Equally.

7 To size each column to best show the column's contents, select Auto Size All Columns.

8 To size each row to best show the row's contents, select Auto Size All Rows.

9 To manually configure the table's layout, select More Options.



10 Enter the following field information.

Table 238: Edit Table Layout Properties Window Description

Field	Description
Show	Click this drop-down menu and then select whether you want to configure rows or columns.
Size Type	Specify how the size of the report section is determined in this section.
Absolute	Select this radio button to specify a certain size for the selected row or column in pixels.
Percentage	Select this radio button to specify a certain percentage of the total available space in the section to allocate to the selected row or column.

Table 238: Edit Table Layout Properties Window Description (Continued)

Field	Description
Best Fit	Select this radio button to have the size of the selected row or column automatically adjusted to best fit the row's or column's contents.

11 Click the OK button to save your changes.

Adding images, text fields, and descriptions

You can add optional content to make your reports more presentable, or to explain the purpose or functionality of a report. You can add images and text fields to a report's headers and footers, and you can add output and search criteria descriptions to describe a report's purpose to your staff members.

Adding images to reports

When presenting a report, you may want the report to include images, such as a logo, to enhance the report's appearance or to customize it for your audience. You can add images you have created in the Images explorer to the Page Header, Report Header, Report Footer, and Page Footer sections. Images can act as backgrounds or header images in these sections. You can also use images as links to open URLs that you specify. Refer to Images explorer.

To add an image to a report section

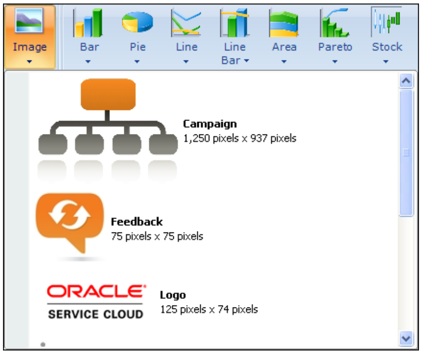
1 Click the Analytics button on the navigation pane.

2 Double-click Reports Explorer.

3 Right-click the report you want to add the image to and select Edit.

4 Click the Insert tab on the report design center's ribbon.

5 Click the Image button to open the list of images available in the Images explorer.



6 Click the image you want to add. The images list closes.

7 Hover over the report section where you want to add the image. The image name displays when the cursor is over a section that can accept an image.

8 Click to place the image in the report section you select.

9 To move an image you have added to a report section, drag the image to the position where you want to place it in the section.

Note To move an image from one report section to another, both sections must have Automatic layout enabled. Refer to Editing section layout properties.

10 To resize an image you have added to a report section, click the image to activate it, and then drag one of the handles displayed on the image's borders. The image is resized as you drag the handle.

11 To define how the image should move in relation to the report section's border, you can specify an anchor style for the image. Refer to Defining anchor styles.

To use an image as a link

You can associate URLs with images to use the images as links. When you view a report and click an image that is configured as a link, the web page the URL points to opens on the workstation's default browser. You can also associate a filter or variable you create to open a different web page depending on the value selected for the filter or variable.

To associate a URL with an image

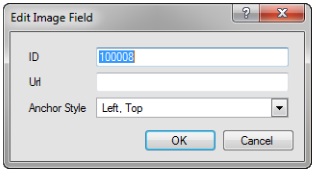
1 Click the Analytics button on the navigation pane.

2 Double-click Reports Explorer.

3 Right-click the report you want to add the image to and select Edit.

4 Add an image to the report. Refer to To add an image to a report section.

5 Right-click the image and select Edit Image Field. The Edit Image Field window opens.



6 Type the URL you want the image to link to in the URL field.

7 Click the OK button to save the change and close the window.

8 Click the Save and Close button on the ribbon to save the change to the report and close the report design center.

When you run the report and click the image, the web page the image links to opens in a web browser.

To use a filter or variable in the URL field

1 Click the Analytics button on the navigation pane.

2 Double-click Reports Explorer.

3 Right-click the report you want to add the image to and select Edit.

4 Add an image to the report. Refer to To add an image to a report section.

5 Create the filter or variable you will use to populate the image's URL field. For example, you could create a variable named *$webpages* with a User Defined List type and add menu values such as `www.google.com` and `www.yahoo.com`. Refer to Specifying filters or Variables.

6 Right-click the image on the report design center and select Edit Image Field to open the Edit Image Field window.

7 Type the name of the filter or variable you created in step 5 in the URL field. Surround the name in braces. For example, if the variable's name is *$webpages*, type {*$webpages*} in the URL field (filter names do not begin with the dollar sign).

8 Click the OK button to save the change and close the window.

9 Click the Save and Close button on the ribbon to save the change to the report.

After you open the report, click the report's Search button and enter the URL you want in the filter or variable you created. When you click the image, the web page you selected opens in your workstation's default browser.

Adding text fields to reports

You can add standard text fields or custom text fields you have created in the Text Fields explorer to the Page Header, Report Header, Report Footer, and Page Footer report sections. You can also insert values from a report's filters and variables into the text fields on the report. Refer to Text Fields explorer for information about creating and editing custom text fields in the Text Fields explorer.

To add a text field to a report

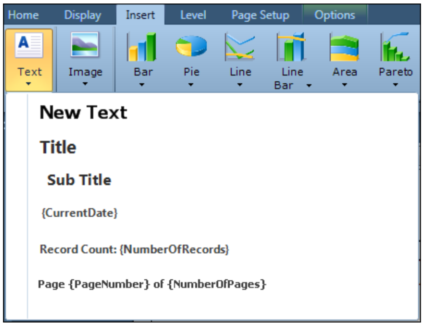
1 Click the Analytics button on the navigation pane.

2 Double-click Reports Explorer.

3 Right-click the report you want to add the text field to and select Edit.

4 Click the Insert tab on the report design center's ribbon.

5 Click the Text Field button to open the list of text fields. The window displays standard text fields, such as "Title," and custom text fields you can add using the Text Fields explorer. The text fields' default fonts, colors, and other attributes are reflected in the display.



6 Click the text field you want to add to the report. The text fields list closes, and the cursor displays with a small version of the text field when you hover over report sections that accept text fields.

7 Click the report section where you want to add the text field. The text field is added to your report.

8 To move the text field, drag it to the position you want.

Note To move a text field from one report section to another, both sections must have Automatic layout enabled. Refer to Editing section layout properties.

9 To resize a text field in a report section, click the text field to activate it and then drag one of the handles displayed on the text field's borders. The text field is resized as you drag the handle.

10 Click the Save and Close button on the ribbon to save the change to the report.

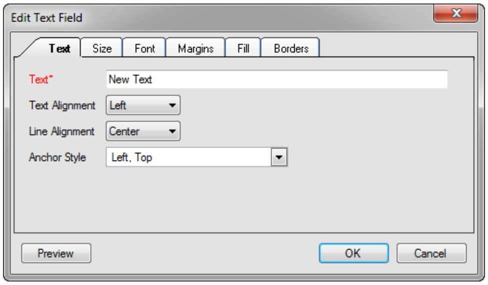
Editing text fields

Once you add a text field to a report section, you can edit it to change the fonts, colors, text, and other attributes. This allows you to have one generic text field that can be added to several reports, which can then be modified for each individual report.

Note Certain standard text fields, such as Record Count or Rows per Page, include values that are dynamically updated when the report is run. While these fields can be edited, you cannot edit their dynamic value placeholders.

To edit a text field in a report

1. Right-click the text field in the report section on the design surface and select Edit Text Field. The Edit Text Field window opens.



Tip If you know the specific options you want, it can be faster to select them from the ribbon. Opening the window gives you an overview of all the available options.

2. Edit the text field on the Edit Text Field window. Refer to Text Fields explorer.

3. Click the OK button on the Edit Text Field window to save your changes.

Populating text fields with filter and variable values

You can insert the values currently selected in a report's filters and variables into text fields on the report. For example, a text field can display the value selected in a filter that filters on the staff member assigned to a group of incidents. The following procedure describes how to use a value from a filter in a text field, but a similar process is used to display the value from a variable.

To display a filter's value in a text field

1. Click the Analytics button on the navigation pane.

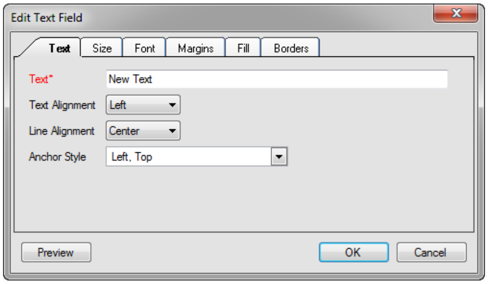
2. Double-click Reports Explorer.

3. Right-click the report you want to add the text field to and select Edit.

4. Create a filter that includes the values you want to display in the text field. For example, you can add a filter to an incidents report that filters on the staff accounts that incidents are assigned to. Refer to Specifying filters.

5 Add a text field to your report. Refer to To add a text field to a report.

6 Right-click the text field and select Edit Text Field. The Edit Text Field window opens.



7 Type the text you want to display in the Text field on the window's Text tab. Type the name of the filter, putting braces around it ({}), where you want the filter value to display in the field.

For example, if the report has a filter named *Assigned* that filters on the staff member assigned to incidents, you can type "Assigned to {Assigned}" in the window's Text field.

8 Click the OK button to save the change and close the window.

9 Click the Save and Close button on the ribbon to save the change to the report.

When the report runs, the text field will display the static text entered in the field along with the filter or variable value that is currently selected. For example, if the filter value is currently Tina Smith, the text field will read "Assigned to Tina Smith."

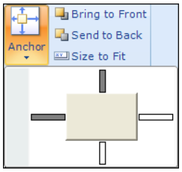
Defining anchor styles

Once you add an image or text field to a report section, you can define how the item should move in relation to the report section's border by specifying an anchor style. By default, when a report section is resized, images and text fields in the section maintain the same distance between the top and left side of the report section. However, you can change the default anchor style so the item instead moves with the bottom or right side of the report section when the section's borders are changed. The following procedures describe how to select anchor styles for text fields and images.

To select an anchor style for a text field

1 Click a text field on the design surface to select it. Refer to Adding text fields to reports.

2 Click the Anchor button on the Text Field tab to view anchor style options. The text field's current anchor style displays. The gray bars identify which sides of the report section the text field is anchored to.



3 To clear an anchor, click the gray bar indicating an active anchor.

4 To add an anchor, click the appropriate clear bar. For example, to anchor a text field to the bottom and right side of the report section, clear the gray bars at the top and left side, and click the clear bars at the bottom and right side of the anchor style selection control.

To select an anchor style for an image

1 Right-click an image on the design surface and select Edit Image Field. Refer to Adding images to reports.

2 Click the Anchor Style drop-down menu to display the anchor style options. The image's current anchor style displays when you click the drop-down menu.

3 To clear an anchor, click the gray bar indicating an active anchor.

4 To add an anchor, click the appropriate clear bar. For example, to anchor an image to the bottom and right side of the report section, clear the gray bars at the top and left side, and click the clear bars at the bottom and right side of the anchor style selection control.

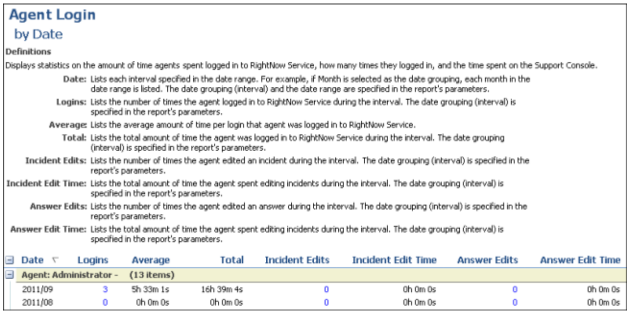
5 Click the OK button to save the change to the anchor style and close the window.

Adding output and search criteria descriptions

You can add descriptions to your reports to provide additional information about the report's output levels, columns, and filters. The information is customizable, so you can add information you think would be helpful to the report's audience. You can add output descriptions and search criteria descriptions.

Output descriptions

The Output Descriptions report section displays text you enter to describe output levels and columns in the output level. The output descriptions you add can be displayed **inline**, on a separate tab in the report, or when rolling over the columns in the report that have definitions defined. You can select the placement of the output descriptions from the ribbon. The following figure shows a report with output descriptions displayed inline.

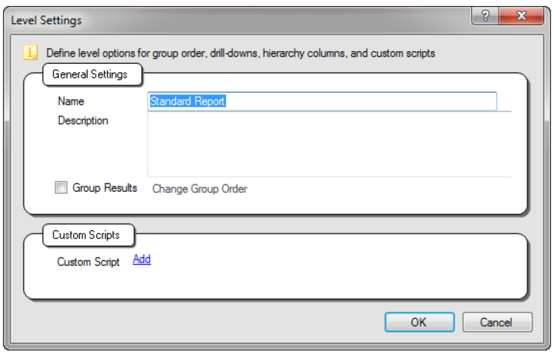


To add text to output descriptions

1 Open the report you want to edit.

2 To add a description to an output level, select the output level you want from the Level drop-down menu at the top of the design surface.

  a Click the Level tab and click the Edit button to open the Level Settings window.



  b Type the text you want to describe the output level in the Description field.

  c Click the OK button to save the output level's description.

3 To add an output description to a column, click the column on the design surface to select it.

   a Click the Design tab.
   b Click the Edit button to open the Column Definition window.
   c Type the text you want to describe the column in the Description field.
   d Click the OK button to save the column description.

To display output descriptions on reports

1 Click the Display tab.

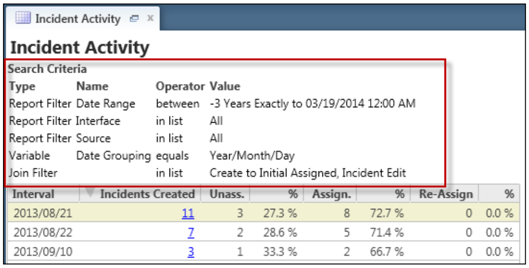
2 Click the Output Descriptions button and select the display option you want from the list. The options are described in the following table.

Table 239: Output Descriptions Display Options

Option	Description
Do Not Display Descriptions	Select this option to remove output descriptions from the report.
Display Descriptions on Column Rollover	Select this option to show the output descriptions when rolling over the report columns that have definitions defined.
Display Descriptions Inline	Select this option to show the output descriptions in the output level, below the page header and report header sections.
Display Descriptions on Separate Tab	Select this option to show the output descriptions on a separate Description tab. The tab is automatically added to the report when you choose this option.

Search criteria descriptions

By default, the Search Criteria Descriptions report section includes information about the filters in your report, along with descriptions of the report's variables, record limits, and comparison date offsets. However, you may not want to display descriptions of all report components, so you can specify which descriptions you want to display. Search criteria descriptions can be displayed **inline** or on a tab in the report. You select where to place the descriptions from the Search Criteria button on the ribbon's Display tab. The following figure shows search criteria descriptions displayed inline.



To display search criteria descriptions on reports

1 Click the Display tab.

2 Click the Search Criteria button and select the display option you want from the list. The options are described in the following table.

Table 240: Search Criteria Descriptions Display Options

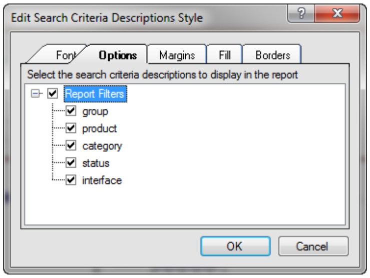
Option	Description
Do Not Display Search Criteria	Select this option to remove search criteria descriptions from the report.
Display Search Criteria Inline	Select this option to show the search criteria descriptions in the output level's output, below the page header and report header text fields.
Display Search Criteria on Separate Tab	Select this option to show the search criteria descriptions on a separate Description tab.

To specify which search criteria descriptions to display

1 Click the Search Criteria Descriptions tab or report section on the design surface.

2 Click the Options tab.

3 Click the Search Criteria button.



4 Clear the check boxes next to the descriptions you do not want to display.

5 Click the OK button to save your changes.

Managing output columns

The output columns you add to a report display tabular information about your data. Output columns are added to the data area of each output level. Once an output column is added to the output level, you can move the column, change the column headers, add notes to the column, change the column's display, and add calculations to tally the values shown in the column. You can also create data exceptions to highlight data returned in the columns. For example, if you want to highlight all incidents in a report that are unresolved and overdue, you could create data exceptions to display these records in bold red text.

Output columns can be fields from the database, **functions**, **variables**, or **computed fields**. All of these items can be added from the ribbon or by dragging the field from the data dictionary to the design surface.

Database fields

Generally, most of the columns added to reports are fields from the database, which contain the data you see throughout Oracle Service Cloud. Fields from tables that are created for **custom objects** are also available (refer to Custom Objects). The database fields that can be used in reports are listed in the report design center's data dictionary.

Tip To view descriptions of the tables and fields in the data dictionary, right-click the table or field and select View Data Definition. A new window opens with a description of the table or field.

Adding suffixes to database fields

When certain database fields are used in report columns, the output is automatically modified to display the data in an easily readable format. For example, the *incidents.assgn_acct_id* field stores the ID numbers of the agents who have incidents assigned to them. Since report users generally prefer to see agent names instead of ID numbers, the names are returned instead of the ID numbers.

However, there are occasions when you may want the report to return the agents' ID numbers instead of their names. In such cases, the suffix *.id* can be added to *incidents.assgn_acct_id*, changing the column's expression to *incidents.assgn_acct_id.id*. This suffix prevents the name associated with the record from being returned automatically and forces the report to instead return the ID number from the database field.

There are several suffixes that can be added to name lookup fields, such as *incidents.assgn_acct_id*, or currency fields, such as *opportunities.mgr_value*. Other types of database fields do not accept suffixes. Each suffix has a different purpose, as described in the following table.

Table 241: Database Field Suffixes

Suffix	Description
Name lookup field suffixes	These suffixes can be used with database fields that trigger an automatic name lookup when used in reports.
.id	This suffix prevents Analytics from performing a name lookup and returns the ID number stored in the field. For example, *answers.assgn_acct_id.id* would return the account ID number of the staff member an answer is assigned to.
.desc	This suffix can be used only with name lookup fields that have a description field. The suffix returns the text from the field's description rather than the field's ID number or name. For example, *incidents.prod_lvl1_id.desc* would return the text description of the parent product an incident is associated with.
.name	This suffix returns the name that is associated with the database field. For example, *answers.map_cat_lvl1_id.name* would return the name of the parent category an answer is associated with. **Note:** This suffix is rarely used since the name lookup is usually performed by default.
Currency field suffixes	These suffixes can be used with database fields that store currency values.

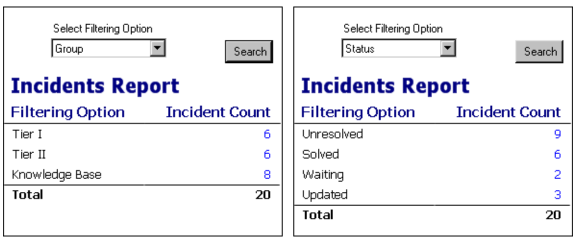
Table 241: Database Field Suffixes (Continued)

Suffix	Description
.curr_id	This suffix returns the type of currency the value was stored in, rather than the currency value. For example, *opportunities.mgr_value.curr_id* could return *USD*, *GBP*, or another currency type.
.rate_id	This suffix returns the exchange rate that is used to calculate the field's currency value when returning the value in a different currency format. For example, *opportunities.rep_value.rate_id* could return 1.45000 or another exchange rate.
.native	This suffix returns the field's value in its original currency instead of the currency determined by staff account or interface settings. For example, *opportunities.mgr_value.native* used in a report on a British interface would return the manager forecast value in USD if that value was originally entered on a U.S. interface.

Variables

You can create variables to use in report output columns, filters, images, text fields, and data exceptions. Using a variable in an output column lets you return different data, or data in different formats, in the same column. For example, you could create a single report that displays the number of incidents by staff member, group, queue, or status. You select which of the four variable values to use in the report from the Search window or from a menu at the top of the report if the variable is docked.

The following figures show a report with a variable used as an output column.



Using a variable in a filter lets you combine the functionality of filters with the flexibility of variables. For example, you could create a variable that groups records together in time periods, and then create a filter with an expression of `date_format(opportunities.created, $date_group)`, where `$date_group` is the variable to filter on opportunities created during a particular year. To use the filter, you would simply enter the year you want to report on. Without such a filter, the report would need to include a filter using the *between* operator that requires entering both a start time and an end time.

Using a variable in a data exception lets you use a single exception to flag different data. This eliminates the need to create multiple exceptions to flag data in different columns. For example, you could use a variable in an exception to flag incidents that were created more than one day ago or to flag incidents that were updated more than one day ago. The information you want to flag is selected on the Search window when you run the report. Refer to Creating data exceptions.

Using a variable in an image lets you dynamically generate links to web pages and change the displayed image when you select different variable values. Refer to Adding images to reports. Using a variable in a text field lets you display the variable's current value in the text field. Refer to Populating text fields with filter and variable values.

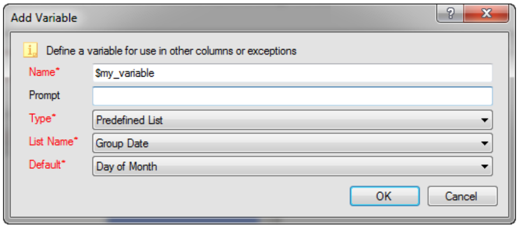
Creating variables

Before you use variables in output columns, filters, or data exceptions, the variables first need to be created. There are several types of variables you can use, including predefined lists, user-defined lists, ad hoc values, and replacement values. Each of these serves a unique function.

To add variables

1 Click the Home tab.

2 Click the Add Variable button to open the Add Variable window.



3 Type a name for the variable in the Name field. Variable names are always preceded by the dollar sign.

Note The options on the Add Variable window change depending on the variable type that is selected.

4 Type an optional prompt in the Prompt field. This text is displayed on the Search window when running the report. If this field is left empty, the variable's name is displayed instead.

Note The Prompt field is not available when using a Replacement Value variable type, as this type is not displayed when running a report.

5 Select the variable type from the Type drop-down menu. The following variable types are available.

Table 242: Variable Types

Field	Description
Predefined List	Select this type to use values from an existing menu or predefined list in the variable. When selecting this option, all menu fields from the tables used in the report are available, along with three predefined lists: • **Group Date**—This list contains date/time formats, such as Month, Week, and Day of Month. • **Yes/No**—This list contains Yes and No options. • **Currency Formats**—This list contains currency formats, such as USD and CAN, that are defined on your site.
User Defined List	Select this type to compile your own list of menu items to use for the variable. For example, if you wanted the variable to return either incidents' statuses or assigned staff accounts, you could create a variable value for *incidents.status* and another for *incidents.assgn_acct_id*. **Note:** When you select this type, you must select a data type for the variable. Click here for a description of the available data types.

Table 242: Variable Types (Continued)

Field	Description
Ad Hoc Value	Select this type to allow staff members to type their own value for the parameter at run-time, without having to select from a list. For example, an individual using the report types the exact expression or string to use as the variable value. **Note:** When you select this type, you must select a data type for the variable. Click here for a description of the available data types.
Replacement Value	Select this type to enter an expression that you want to use in several places in the report. The replacement value variable you create can be added to the report in any place you would otherwise need to type the expression. This lets you use a short variable name rather than a lengthy expression.

6 If using a predefined list variable type, select the list to use from the List Name drop-down menu.

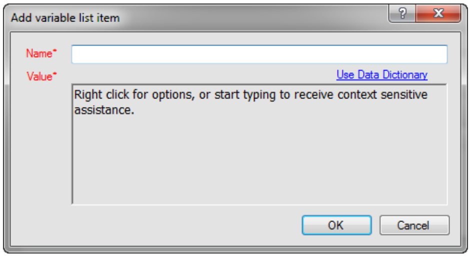
7 If using a user-defined list or ad hoc value variable type, select the data type to use from the Data Type drop-down menu. The following data types are available.

Table 243: Variable Data Types

Data Type	Description
String	Select this option to add a variable that uses a string field.
Integer	Select this option to add a variable that uses an integer field.
Float	Select this option to add a variable that uses a numeric field that can contain decimal points.
Date and Time	Select this option to add a variable that uses a date and time field.
Currency	Select this option to add a variable that uses a currency field.
Expression	Select this option to add a variable that uses a database field (for example, *incidents.status*). **Note:** This data type is not available for Ad Hoc Value.

8 If using a user-defined list variable type, create the list items you want to include.

a Click Add Item to open the Edit Variable List Item window. The following figure shows the window when adding a variable with an Expression data type.



b Type a name for the list item in the Name field.

c Enter a value for the list item in the Value field.

The format of the Value field changes depending on the data type selected for the user-defined list. For example, the Value field for a Date and Time list item displays a calendar, whereas the Value field for an expression list item displays a text box and includes an Advanced option you can click to open the data dictionary to help you build the expression.

d Click the OK button to save the list item.

e Add the other list items you want to be able to select for the variable.

9 If using a predefined list or user-defined list variable type, enter a default value for the variable in the Default field.

10 If using an ad hoc value variable type, type a default value for the variable in the Default field.

11 If using a replacement variable type, type the expression you want the variable to replace.

Or

Click Use Data Dictionary to open the data dictionary to create the expression from database fields and functions.

12 Click the OK button to save the variable.

Adding variables to a column

Once you create a variable in a report, it is added to the variables list in the report design center's data dictionary. You can then create output columns that use the variable in the same manner as you would any other output column, creating the column's expression out of database fields, **functions**, **computed fields**, and **variables** listed in the data dictionary. In some cases, the variable will be the only item in the column's expression. In other cases, the variable will be combined with functions or database fields to form the column's expression. Refer to Adding columns to reports.

When a predefined list, user-defined list, or ad hoc value variable is included in a report's output columns, a menu listing the variable's options displays on the report's Search window. The variable menu can also display at the top of the report in the docked filters section for easy access by individuals using the report. Refer to Docking variables and run-time selectable filters.

Computed fields

Computed fields are not actual fields in the database, but are calculated from the columns in your output level. Before the output level has columns added, computed fields are not available. Once you add columns to the output level, the data dictionary's Computed Fields tree includes the columns you added. If you click a column in the tree, the available computed fields for that column appear in computed fields in the data dictionary. You can then drag the computed field you want to the design surface, just as you would with a standard database field.

Tip You can also add computed fields by clicking a column on the design surface to select it, clicking the Design tab, clicking the arrow on the Insert Column button, and selecting the computed field you want to add.

Most database fields have only a comparison value computed field available. Additional calculations are available for integer fields, which store numbers. The moving average, moving total, percentage of average, percentage of total, running average, and running total columns are all available to use in output levels and in rollups, if rollups exist in the report. When computed fields are added to rollups, the values are reset at the beginning of each rollup section.

The Comparison Value and Comparison Percentage Value computed fields are described in Adding comparison columns to reports. The Trend Value and Trend Percentage Value computed fields are described in Adding trending columns to reports.

Report moving average

This column outputs a centered moving average. Centered averages calculate the average for a value in a column by averaging that value, along with a number of values in the column prior to and preceding that value. For example, if a report outputs the number of incidents per month, a centered average for March that uses three data points would use the number of incidents from February, March, and April to derive the average.

Tip Moving averages work best using odd numbers of data points, but can use an even number, though the internal calculation to derive the value will differ somewhat.

For an odd number of data points, the centered average at *i* for a given data point, *di*, and number of data points, *N*, is:

```
(di-(N-1)/2 + di-(N-1)/2 +1 + ...di + ...di + (N-1)/2 -1 + di + (N-1)/
2)/N.
```

For an even number of data points, the centered average at *i* for a given data point, *di*, and number of data points, *N*, is:

```
(di-N/2 + 2*di-N/2 +1 + ...2*di + ...2*di + N/2 -1 + di + N/2)/2N.
```

When you add a report moving average column to a report, the calculation automatically uses three data points. However, the number of data points can be changed. Refer to Specifying data points for moving calculation columns.

Report moving total

A report moving total column outputs a running total of the values in the specified column. The totals are calculated for the current row, and a number of preceding rows determined by the number of data points you select. By default, the report moving total calculation uses three data points. For example, if you had a column with four rows, with values of 10, 20, 30, and 40, respectively, and used three data points, the corresponding values in the report moving total column would be NULL, NULL, 60, and 90.

Specifying data points for moving calculation columns

The report moving average and report moving total computed fields use data points in their calculations. The method to select the number of data points to use is identical for either computed field.

To change the number of data points

1 Add a report moving average or report moving total column to the output level.

2 Right-click the column on the design surface and select Edit Moving Calculations Options.

3 Type the number of data points you want to use in the calculation.

4 Click the OK button to save the number of data points used for the moving calculation.

Tip You can also change the number of data points by selecting the moving calculations column, clicking the Design tab, and entering the number of data points in the Number of Data Points drop-down menu.

Report percentage of average

A report percentage of average column calculates the average of the values in the specified column, and then returns the percentage of that total of the value in the current row. For example, if you had a column with three rows whose values were 10, 20, and 30, the average of the values in the column would be 20. The values returned in the report percentage of average column would be derived by dividing the value in each row by the average value of the column, and multiplying the result by 100. In this example, the values returned would be 50%, 100%, and 150%, respectively.

Report percentage of total

A report percentage of total column calculates the total of the values in the specified column, and then returns the percentage of that total of the value in the current row. For example, if you had a column with three rows whose values were 10, 20, and 30, the total of the values in the column would be 60. The values returned in the report percentage of total column would be derived by dividing the value in each row by the total value of the column, and multiplying the result by 100. In this example, the values returned would be 16.6%, 33.3%, and 50%, respectively.

Report running average

A report running average column averages the values in a specified column for all the column's rows, up to and including the value in the current row. For example, if you had a column with three rows, with values of 10, 20, and 30, respectively, the corresponding values in the report running average column would be 10, 15, and 20.

Report running total

A report running total column totals the values in a specified column for all the column's rows, up to and including the value in the current row. For example, if you had a column with three rows, with values of 10, 20, and 30, respectively, the corresponding values in the report running total column would be 10, 30, and 60.

Functions

Functions allow you to apply standard mathematical functions to the data from your database, and output the modified data in report columns. For example, using the *count()* function, you can output the number of contacts associated with an organization. The column's expression in this example would be *count(contacts.c_id)*. Expressions that use more complex functions allow more complex modifications to the data that is displayed. You can also combine different functions and database fields in the same column's expression.

When you drag a function from the data dictionary to the design surface, the Column Definition window opens. This lets you enter the variables used in the function's expression. You can either type the variables in the Expression field or, if the variable is an item listed in the Available Columns/Functions field, you can drag the item into the function's expression. Refer to the following table for descriptions of the functions you can use in reports.

Table 244: Functions Description

Function	Description
Aggregate Functions	Select from the following to use an aggregate function in the expression. **Note:** Aggregate functions can be used only when defining output.
avg(expr)	This function computes an average value for the **data set** *expr*.
count(expr)	This function returns the number of rows included in the data set *expr*.
first(expr, sort column1[, sort column2][,...])	This function returns the first value of data set *expr* based on the order of the specified sort columns. For example, the expression `first(threads.note, threads.entered, threads.seq)` returns the first thread note in the data set based on time entered and thread sequence.
group_concat(expr, separator[, sort column 1, ASC|DESC][, sort column 2, ASC|DESC][,...])	This function allows you to combine multiple values from data set *expr* into a delimited list in a single row. The list is delimited by *separator* and ordered by the specified sort columns. For example, the expression `group_concat(threads.note, ',', threads.entered, ASC)` returns a comma-delimited list of thread notes ordered by time entered ascending.

Table 244: Functions Description (Continued)

Function	Description
last(expr, sort column1[, sort column2][,...])	This function returns the last value of data set *expr* based on the order of the specified sort columns. For example, the expression `last(threads.note, threads.entered, threads.seq)` returns the last thread note in the data set based on time entered and thread sequence.
max(expr)	This function returns the largest numerical value, the last string in alphabetical order, or the latest date in the data set *expr*.
min(expr)	This function returns the smallest numerical value, the first string in alphabetical order, or the earliest date in the data set *expr*.
sum(expr)	This function returns the sum of the values in the data set *expr*.
sum_distinct(expr, reference)	This function returns the sum of distinct values in an expression for a particular record (reference) rather than for all records of the same type in a table. For example, if you want to calculate the sum of all quotas for a particular sales person, you could add a function of `sum_distinct(sa_period2accts.quota, sa_period2accts.acct_id)`.
stddev(expr)	This function returns the standard deviation of *expr*. For example, the expression `stddev(answers.solved_count)` returns the standard deviation of all the values in the *solved_count* column of the *answers* table.
String Functions	Select from the following to use a string function in the expression:
concat(str1, str2)	This function combines input character strings from multiple expressions into a single output string. Two or more expressions can be appended with this function. For example, the expression `concat('www.','global','.com')` returns the value `www.global.com`.
instr(str, substr)	This function returns the numeric position (in characters) of the initial occurrence of string *substr* in string *str*. For example, the expression `instr('globalcellphones.com','cell')` returns the value `7`.
length(str)	This function returns the length (in characters) of the string. For example, the expression `length('cell phones')` returns the value `10`.

Table 244: Functions Description (Continued)

Function	Description
lower(str)	This function returns string *str* in all lowercase characters. For example, the expression `lower('Global.COM')` returns the value `global.com.`
ltrim(str)	This function returns the string *str* without leading spaces. For example, the expression `ltrim('     Cell phone')` returns the value `Cell phone.`
lpad(str1, X, str2)	This function returns *str1* padded on the left with *str2* until *str1* is *X* characters long. For example, the expression `lpad('phone', 10, '@')` returns the value `@@@@@phone`.
rpad(str1, X, str2)	This function returns *str1* padded on the right with *str2* until *str1* is *X* characters long. For example, the expression `rpad('phone', 10, '@')` returns the value `phone@@@@@`.
rtrim(str)	This function returns the string *str* without trailing spaces. For example, the expression `rtrim('agarfield@global.com ')` returns the value `agarfield@global.com`.
substr(str, start_pos, [length])	This function returns a portion of the string *str* starting at the character defined by *start_pos* (an integer) and ending at the character defined by *length* (an integer). If *length* is not indicated, it returns the remainder of the string.
to_char(expr)	This function converts the numeric *expr* to a character string.
to_number(str)	This function converts the character string *str* to a numeric. If the *str* is not numeric, this function returns zero. If *str* is a combination of numbers and other characters and begins with a number, this function returns only the initial numeric portion. For example, `to_number('123ABC')` returns 123.
upper(str)	This function returns string *str* in all uppercase characters. For example, the expression `upper('global.COM')`returns the value `GLOBAL.COM.`

Table 244: Functions Description (Continued)

Function	Description
Date Functions	Select from the following to use a date function in the expression. **Note:** Refer to Date and time format tokens for analytics for a list of the date/time format tokens you can use in date functions. Most of the date functions allow you to combine the supported format tokens in any combination you want.
date_add(date, units, interval, round)	This function returns the value of *date* plus a specified amount of time where date is a date/time type column or a literal string in the format YYYY-MM-DD or YYYY-MM-DD HH:MI:SS. The amount of time to add is specified by *units* and *interval. Units* is an integer or expression referring to an integer database field specifying the number of intervals to add or subtract. *Interval* can be SECONDS, MINUTES, HOURS, DAYS, WEEKS (Sunday through Saturday), IWEEKS (Monday through Sunday), MONTHS, QUARTERS, or YEARS. To round the result to the beginning of the specified interval, set the *round* argument to 1. If you set *round* to 0, the result will not be rounded. For example, the expression `date_add('2013-11-25 22:35:00', 48, HOURS, 1)` returns the value `2013-11-27 22:00:00`.

Table 244: Functions Description (Continued)

Function	Description
to_date(str, format)	This function converts the value entered in *str* that is in the format specified in *format* to a date or date/time value. For example, the expression `to_date('20140215','YYYYMMDD')` returns a value of `02/15/2014`. **Note:** Unlike other date functions, *to_date* supports only the following date formats. DD MM YYYY HH24:MI:SS DD MM YYYY HH:MI:SS AM DD MON YY DD MON YYYY DD-MM-YY DD-MM-YYYY DD.MM.YY DD.MM.YYYY DD/MM/YY DD/MM/YYYY DD/MM/YYYY HH:MI:SS AM MM-DD-YY MM-DD-YYYY MM/DD/YY MM/DD/YYYY MON DD YY MON DD YYYY MON DD YYYY HH:MI AM MON DD YYYY HH:MI:SS AM YY.MM.DD YY/MM/DD YYMMDD YYYY-MM-DD YYYY-MM-DD HH24:MI:SS YYYY-MM-DDTHHH24:MI:SS YYYY.MM.DD YYYY/MM/DD YYYYMMDD

Table 244: Functions Description (Continued)

Function	Description
date_format(date, format)	This function converts *date* from a date/time data type to a string and reformats it to match the format specified by *format*. *Date* can be a date/time type column or a literal string in the format YYYY-MM-DD or YYYY-MM-DD HH:MI:SS. For example, the expression `date_format('2013-11-25 22:25:00', 'DAY, MONTH DD, YYYY, HH12:MI PM')` returns the value `Tuesday, November 25, 2013 10:25 PM.`
date_diff(date, date)	This function returns the number of seconds occurring between two dates. For example, the expression `date_diff('2014-07-26 22:25:00', '2014-07-25 10:30:00')` returns the value `129300`. Another example is `date_diff(sysdate(),incidents.updated)`. This expression returns the number of seconds between the current time and the time that incidents were last updated. **Note:** To change the format of the output, use the time_format function. For example, `time_format(date_diff('2014-07-26 22:25:00', '2014-07-25 10:30:00'), 'HH24h MIm SSs')` returns the value `35h 55m 00s.`
rel_date_diff(date2, date1, rr_id)	This function returns the number of seconds between two dates, taking holidays and the work hours specified in response requirements into account. For example, if a site's response requirements are configured with work hours from 9 A.M. to 5 P.M., the expression `rel_date_diff('2014-07-26 22:25:00', '2014-07-25 10:30:00',1)` returns the value `52200`. Another example is `rel_date_diff(sysdate(),incidents.rel_due,incidents.rr_id)`. This expression returns the number of seconds between the current time and incidents' due dates, excluding holidays and taking the work hours configured in the response requirements associated with the incidents into account. **Note:** This function is not available for use in variables, filters, or exceptions. In addition, it cannot be nested in other expressions.
date_trunc(date, units)	This function truncates *date* to the unit specified by *units*, with *units* being a time interval of SECONDS, MINUTES, HOURS, DAYS, WEEKS (Sunday through Saturday), IWEEKS (Monday through Sunday), MONTHS, QUARTERS, or YEARS. For example, the expression `date_trunc('2013-11-25 22:25:10', HOURS)` returns the value `2013-11-25 22:00:00`.

Table 244: Functions Description (Continued)

Function	Description
sysdate()	This function returns the current system date in the format YYYY-MM-DD HH:MI:SS.
time_format (seconds, format)	This function converts *seconds* to the specified time format. For example, the expression `time_format(86610,'HH24 MI SS')` returns the value `24 03 30.`
date_group(expr, format)	This function lets you group records together according to a date range that you specify, and include rows for date ranges that have no associated records. If you do not want to return rows for date ranges with no records, you could use date_format instead. For example, if you have incidents created in January and March, but none in February, and create a report with the expression for column A set to *date_group(incidents.created, 'YYYY-MM')*, and the expression for Column B set to *count(*)*, the report would output: 2014-01 10 2014-02 0 2014-03 15 If you changed Column A's expression to *date_format(incidents.created, 'YYYY-MM')* to use the date_format function instead of date_group, the output would be similar, but would not include a row for February. **Note:** When this function is used in a column, the report design center automatically groups the data in the output level, and sets the output level's group and sort order options. At least one date filter is required to use this function.
Logical Functions	Select from the following to use a logical function in the expression.
if(expression, then result, else result)	This function returns the then result if the expression is true and returns the else result if the expression is false. For example, the expression `if(incident.c$field=1, 'Yes', 'No')` returns Yes for incidents where the value of `c$field` is 1. If the value is not 1, No is returned. **Note:** You can use IS NULL and IS NOT NULL as part of the expression. For example, you could use the expression `if(incident.c$field IS NOT NULL, 'Yes', 'No')`.

Table 244: Functions Description (Continued)

Function	Description
decode(test expression, test value 1, result 1, [, next test value, next result]* [,default])	This function compares *test expression* to each *test value* in order and returns *result* for the first *test value* that *expression* matches. If *expression* does not match any *test value*, *default* is returned. If *default* is undefined, NULL is returned. The decode function can perform table lookups, allowing you to use text strings as test values rather than requiring coded values (for example, you can use Review as a test value for the expression *faqs.status* even though the table contains code value in the *status* column).
nvl(expr1, expr2)	If the value *expr1* is null, this function returns the value *expr2*. However, if the value *expr1* is not null, then the value *expr1* is returned. The value of *expr2* must match the data type of *expr1*.
Math Functions	Select from the following to use a math function in the expression.
bitand(X, Y)	This function returns the bitwise AND of two integers, *X* and *Y*.
ceiling(X)	This function returns the smallest integer value greater than or equal to *X*.
floor(X)	This function returns the largest integer less than or equal to *X*.
power(X, Y)	This function returns the value of *X* to the power of *Y*. For example, `power(2,3)` would return `8`.
rand()	This function generates a random number between 0 and 1. This output can be used to produce a random sampling of data. For example, to generate a random sample of incidents, add a column with an expression of `rand()` to an incidents report and sort on the column. The report will show information for incidents meeting your search criteria, sorted randomly.
round(X, D)	This function returns the value *X* rounded to the nearest number with *D* decimals. For example, `round(5.55555,2)` returns the value `5.56`.
truncate(X, D)	This function returns the value *X* truncated to the *D* decimal places. For example, the expression truncate`(5.55555, 2)` returns the value `5.55`.

Table 244: Functions Description (Continued)

Function	Description
Currency Functions	Select from the following to use a currency function in the expression.
cvt_currency(expr, str)	This function converts the currency value *expr* to the specified currency *str*. For example, the expression `cvt_currency(opportunities.rep_value, 'USD')` returns the *rep_value* in U.S. dollars when "USD" is stored as the abbreviation for U.S. dollars in the *currencies* table.
make_currency(expr, str)	This function converts an integer or decimal number to the specified currency *str*. For example, the expression `make_currency(100.00, 'USD')` returns the *expr* in U.S. dollars. You can also replace *str* with the value *dflt* to convert the expression to the user's currency.
to_currency(expr, str)	This function converts an integer *expr* to a value in *str* currency. The numeric value is converted to an amount in the user's default currency. The conversion rate used for this function is the exchange rate defined in the exchange_rates table. For example, for a user with a default currency of `USD`, `to_currency(sa_products.c$price, 'EUR')` returns an amount in `USD` that is equal to the number in the `sa_products.c$price` custom field converted to Euros.

Adding columns to reports

The procedures to add report columns are the same whether you are adding standard or custom fields from the database, functions, variables, or computed fields. If your column returns information directly from the database, and does not require a complicated expression, you can add the column using the data dictionary. If your column's expression is complicated, perhaps using several functions, it can be easier to add the column from the Column Definition window.

Tip Each output level can have a maximum of 100 output columns. In addition, the number of tables used in a report is limited to 20.

To add an output column from the data dictionary

1 Select the field, **function**, **variable**, or **computed field** you want from the data dictionary.

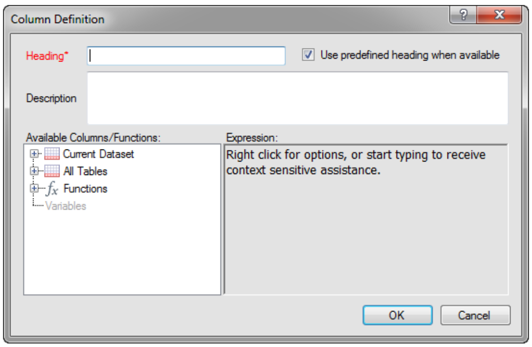
Note If the data dictionary is not shown on the design surface, click the Home tab and click the Data Dictionary button to display it.

2 Drag the field you selected to the data area on the design surface.

When you drag an item from the data dictionary to the data area, you can place it in any position. If other columns are in the data area when you drag a field, arrows appear between column headers indicating where the field will be placed. When the field is in the desired location, drop it onto the data area.

To add a column from the Column Definition window

1 Click the Home tab and click the Add Column button. The Column Definition window opens.



2 Enter the following field information.

Table 245: Column Definition Window Description

Field	Description
Heading*	Type a heading for the column. This heading displays in the report output.
Use predefined heading when available	Select this check box to use the default heading for the column. This is the name of the field as it appears in the data dictionary.

Table 245: Column Definition Window Description (Continued)

Field	Description
Description	Type an optional description for the column. Text that you enter in this field displays in the report when you include the Output Descriptions report section. Refer to Output descriptions.
Available Columns/ Functions	This area displays the data dictionary, which lists the available fields, functions, and parameters you can add as columns to the report. To add an item, expand the tree, select the item, and drag it to the Expression section. **Note:** This option does not display when defining columns for **computed fields**.
Expression	This area displays the field, function, or parameter you have defined as a column. If you know the specific field or function you want to add, you can also type it in this field to add it as an output column without dragging it from the Available Columns/Functions field. You can also manually edit the expression shown in this section. The Expression area does not display when defining columns for computed fields. **Note:** The maximum number of characters allowed in the expression field is 3,500. You can use replacement variables to create expressions that require more characters. Refer to Creating variables.

3 Click the OK button to add the output column.

The column is added as the last column on the report level. Refer to Moving columns for information about how to reposition the column.

Once you add columns to the data area, the report design center displays the columns on the design surface. Four rows of sample text display under each column to give you an idea of what the report output will look like.

Adding comparison columns to reports

Adding a comparison value **computed field** to a report lets you view the same data for two different time periods side-by-side in a report. You can specify the time periods used, and change them while running the report to view the data for different time periods. For example, you could have a report that shows the number of incidents created in the current week and the number of incidents created in the previous week. You could then run the report again to compare numbers of incidents created in the current month and previous month.

Once you add a comparison value column to a report, the Comparison button on the ribbon's Home tab becomes active and you can select the comparison time period. The comparison time period is relative to the time specified in a required date filter you must add to the report.

To add a comparison value column to a report

1. Add an output column that returns values you want to compare. For example, if you want to compare the number of incidents created from one week to the next, you could add a column for *count(incidents.i_id)* to return a count of incidents.
2. Expand the Computed Fields tree in the data dictionary.

Tip You can also add comparison columns by clicking the column you want to compare on the design surface, clicking the Design tab, clicking the arrow on the Insert Column button, and selecting the column you want to add.

3. Click the column you want to compare.
4. From the right side of the data dictionary, drag Comparison Value (*column name*) and drop it on the design surface.
5. Click the Home tab.
6. Click the Comparison button and select Edit Comparison Date Offset.
7. Type the relative value you want to use for the default comparison date offset. For example, entering `-1 Weeks Exactly` returns values in the comparison value column that are derived from data that is exactly one week earlier than the data returned in the column that is being compared.

   Or

   Click the Calendar button to specify relative date and time values. Refer to Selecting date ranges.

   When you run the report, the default comparison date offset can be changed on the Search window. This allows you to run the report several times to compare different time periods.
8. Click the OK button to save the default comparison date offset.

9 Add a **fixed** or **run-time selectable** date filter to the report. This date filter is used to filter the data returned in the column being compared and determines the time period that the comparison column's relative comparison date offset is based on. Refer to Creating report filters.

Changing comparison options

When using comparison values in a report, the comparison and compared values do not necessarily display on the same row as the corresponding values in the other column. This is because a value is not automatically returned in a comparison column if there are no records to return. For example, if a report outputs numbers of incidents assigned to two staff members during the current week and previous week, but the top staff member listed in the report had no incidents assigned in the previous week, there will not be an entry for that staff member in the comparison value column. This results in the comparison value for the second staff member displaying on the first row of the report.

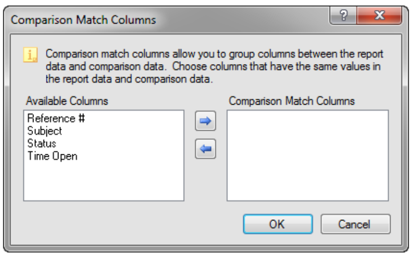
To prevent this, you can set comparison options to have the report output a zero for any rows that lack a value in a column. This results in the corresponding values lining up with one another.

To change comparison options

1 Add a comparison value column to a report.

2 Click the Home tab.

3 Click the Comparison button and select Edit Comparison Match Columns.



4 Select the column(s) that define the corresponding values. For example, to keep the number of incidents assigned to the same staff member on the same row, select the Assigned Account column.

5 Move the selected column to the Comparison Match Columns panel by dragging the field or clicking the right arrow.

6 Click the OK button to save the change to the comparison options.

Adding comparison percentage columns

Once you add a comparison value column to a report for a numeric field, you can then add a Comparison Percentage **computed field** column to the report. This column returns the percentage difference between the comparison value column and the column being compared. For example, if a value in the compared column is 10, and the corresponding comparison value is 15, the percentage difference would be 50%.

To add a comparison percentage column to a report

1 Add a comparison value column to the report, as described in [Adding comparison columns to reports](#).

2 Expand the Computed Fields tree in the data dictionary.

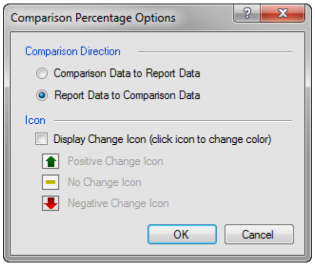
Tip You can also add comparison percentage columns by clicking the comparison column you added on the design surface, clicking the Design tab, clicking the arrow on the Insert Column button, and selecting Comparison % Change.

3 Click the comparison value column you added.

4 From the right side of the data dictionary, drag Comparison Percentage (*column name*) and drop it on the design surface.

5 To set options for the column, right-click the column on the design surface and select Edit Comparison Percentage Options.

Tip You can also adjust options by selecting the column and using the buttons on the Design tab's % Change group.



a Enter the following field information.

Table 246: Comparison Percentage Options Window Description

Field	Description
Comparison Direction	Select whether the comparison column or the compared column is used as the initial column to derive the comparison percentage.
Comparison Data to Report Data	Select this radio button to use the comparison value column as the initial column to derive the comparison percentage. If the value in the comparison value column is greater than the corresponding value in the compared column, a positive percentage is returned.
Report Data to Comparison Data	Select this radio button to use the compared column as the initial column to derive the comparison percentage. If the value in the compared column is greater than the corresponding value in the comparison value column, a positive percentage is returned.
Display Change Icon	Select this check box to display icons next to the percentage values returned in the column. The icons indicate whether there is a positive change, negative change, or no change. To alter the colors used for the icons, click the icon to open the Color window. Refer to Choosing colors.

b Click the OK button to save the comparison percentage options.

Adding trending columns to reports

Trend value **computed fields** are similar to comparison value computed fields. However, where comparison value columns return data from previous time periods, trend value columns return forecasts of data in future time periods, calculated from current data.

Note Trend values are best used when trending a column that groups data together by a time period, such as a column that shows the number of incidents created in the same week.

To add a trend value column to a report

1 Add a numeric output column that returns values you want to trend. For example, if you want to forecast the number of incidents that will be created in future weeks, you could add a column for *count(incidents.i_id)* to return a count of incidents.

2 Expand the Computed Fields tree in the data dictionary.

3 Click the column you want to trend.

4 From the right side of the data dictionary, drag Trend Value (*column name*) and drop it on the design surface.

Tip You can also add trend value columns by clicking the column you want to trend on the design surface, clicking the Design tab, clicking the arrow on the Insert Column button, and selecting Trend Value.

Specifying trend value duration

You can edit trend options to specify the number of time units that are forecast forward. For example, if the trended column groups data by week, trending forward three units shows data trended three weeks in the future.

To change trend options

1 Right-click the trend value column on the design surface and select Edit Trend Options.

2 Select the Perform Forecast check box to enable forecasting.

3 Type the number of units.

4 Click the OK button to save the number of trending units.

Tip You can also edit trend options from the Trend Options group on the Design tab after selecting the column on the design surface.

Adding trend percentage columns

Once you add a trend value column to a report, you can then add a Trend Percentage **computed field** column to the report, either from the data dictionary or the Design tab's Insert Column button. Trend Percentage columns return the percentage difference between the trend value column and the column being trended. For example, if a value in the trended column is 10, and the corresponding trend value is 15, the percentage difference would be 50%.

To add a trend percentage column to a report

1 Add a trend value column to the report, as described in Adding trending columns to reports.

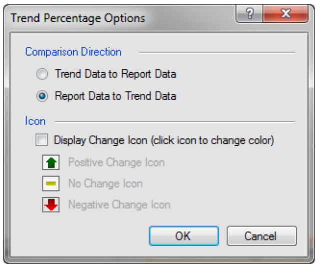
2 Expand the Computed Fields tree in the data dictionary.

3 Click the trend value column you added.

4 From the right side of the data dictionary, drag Trend Percentage (*column name*) and drop it on the design surface.

5 To set options for the column, right-click the column on the design surface and select Edit Trend Percentage Options.

Tip You can also edit trend percentage options from the % Change group on the Design tab.



a Enter the following field information.

Table 247: Trend Percentage Options Window Description

Field	Description
Comparison Direction	Select whether the trend value or the trended column is used as the initial column to derive the trend percentage.
Trend Data to Report Data	Select this radio button to use the trend value column as the initial column to derive the trending percentage. If the value in the trend value column is greater than the corresponding value in the trended column, a positive percentage is returned.
Report Data to Trend Data	Select this radio button to use the trended column as the initial column to derive the trending percentage. If the value in the trended column is greater than the corresponding value in the trend value column, a positive percentage is returned.

Table 247: Trend Percentage Options Window Description (Continued)

Field	Description
Display Change Icon	Select this check box to display icons next to the percentage values returned in the column. The icons indicate whether there is a positive change, negative change, or no change. To alter the colors used for the icons, click the icon to open the Color window. Refer to Choosing colors.

b Click the OK button to save the trend percentage options.

Editing columns

Once you add a column to the data area, you can edit it to change the header, definition, sorting, or position in the report. Depending on the type of information the column returns, you may also have options to add calculations to the column or change how the data is displayed. Other options let you show data in the column as URL links or images. Refer to Adding column calculations and URL Tab Description.

If you decide you no longer need a column in the report, you can also easily remove it. Refer to Removing columns from reports.

Moving columns

You can rearrange the columns displayed on the design surface by clicking anywhere in the column's header and dragging it to the new position in your report. You can also move a column by clicking it on the design surface to select it, clicking the Home tab, and selecting Move Left or Move Right.

Changing column options

To view the available edit options for a column, you can right-click the column on the design surface to display a list of options. You can also click the column on the design surface to select it and then choose from options shown on the ribbon's Design and Format tabs.

The options shown in the list when you right-click a column are described in the following table.

Table 248: Column Options Description

Button	Description
Edit Definitions	Select this option to open the Column Definition window where you can edit the column heading, descriptions, and expression. Refer to To add an output column from the data dictionary.
Edit Format	Select this option to open the Column Format window where you can change the column format, alignment, width, and styles. Refer to Editing column format options.
Edit Calculations	Select this option to open the Calculations window where you can select calculations on the column values to display beneath the column. Refer to Adding column calculations.
Sort Ascending/Sort Descending	Select these options to sort the values in the column in ascending or descending order. Refer to Changing sort options.
Move Column Left	Select one of these options to move the column left or right. You can also move columns by dragging them on the design surface.
Move Column Right	
Insert New Column Before	Select one of these options to add a new column before or after the column you have selected. When you select this option, the Column Definition window opens so you can create the new column.
Insert New Column After	
Delete Column	Select this option to delete the column from the report. You can also delete a column by selecting the column and pressing **Delete**.
Freeze Column	Click this button to fix the selected column in place so it does not move when you horizontally scroll the report. This can be helpful if you want to continue to view the first column in the report while scrolling the report to see the columns on the right of the report. **Note:** When you fix a column, all columns to the left of the column are also fixed. You can still scroll the columns to the right of the fixed column.

Table 248: Column Options Description (Continued)

Button	Description
Hide Column	Select this option to prevent the column from displaying in the report output. The column is only hidden, so you can display the column when running the report if you need to see it. For information about showing and hiding columns, refer to Selecting columns to display.
Insert Hidden Column	Select this option to view a list of any hidden or rolled-up columns in the report. Click the hidden or rolled-up column you want to display.

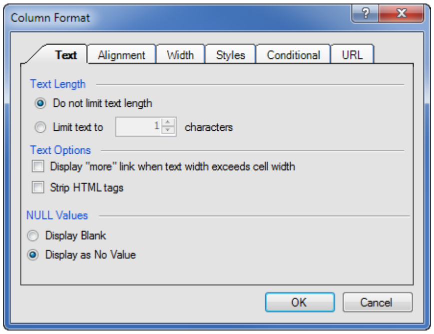
Editing column format options

Format options are available to output a column's data differently and to modify the column's display. You can adjust a column's fonts, colors, width, and alignment settings, and modify other settings that are specific to the column's data type. In addition, conditional formatting can be added to a column to flag data that meets your specified criteria, and numeric values returned in a column can be replaced with gauges to display graphical representations of the data. You can also add a URL link to a column that, when clicked, launches the web page you specify.

Note The following procedure describes editing column format options from a window. However, many of the options available from the window are also available on the ribbon.

To edit column format options

1 Right-click the column and select Edit Format to open the Column Format window. The tab that is initially displayed when you open the window varies depending on whether you are editing a column that contains text, dates, numbers, or currency. The following figure shows the column format options for a text column.



2 To define options for a text column, enter the following field information.

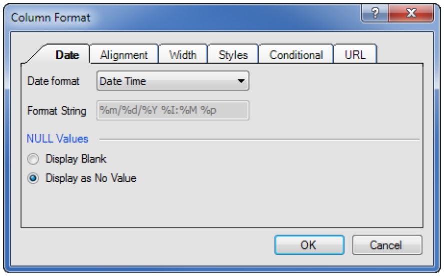
Table 249: Text Tab Description

Field	Description
Text Length	Define limits to the length of text strings appearing in the column.
Do not limit text length	Select this radio button to allow an unlimited length of text strings in the column. The column is automatically resized to fit the length of the output text. **Note:** This option is not available for menu type fields.
Limit text to *x* characters	Select this radio button to limit the text string length to a certain number of characters and then type the number of characters. Text strings that exceed this value are truncated.
Text Options	Define options to determine how column contents are displayed.
Display “more” link when text width exceeds cell width	Select this check box to display a link in a row whose text exceeds the allowed width of the column. When a link is displayed, you can click the link or hover over it to open a window with the full text.
Display tooltip when cell text exceeds cell bounds	Select this option to display a tooltip showing the field’s entire text entry when hovering over a field with a text entry that exceeds the width of the column. **Note:** This option is available only from the Options button on the ribbon’s Format tab.
Strip HTML tags	Select this check box to remove HTML tags from text that is displayed in a column.

Table 249: Text Tab Description (Continued)

Field	Description
NULL Values	Define how NULL values in the database should display.
Display Blank	Select this radio button to display a blank for NULL values.
Display as No Value	Select this radio button to display “No Value” for NULL values.

The following shows the column format options for a date column.



3 To define options for a date column, enter the following field information.

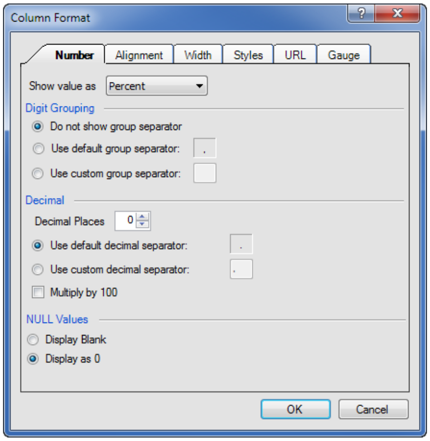
Table 250: Date Tab Description

Field	Description
Date Format	Click this drop-down menu to select the date format you want to use for date fields. The available options are Date Time, Long, Short, Month Year, Clock, Month Day, Year, Date Time (time zone), and Custom. **Note:** When you select any option other than Custom, the selected format displays in the Format String field so you can see the string that is used for the selected format.
Format String	Type the format string for the custom date format in this field when the Custom date format option is selected.
NULL Values	Define how NULL values in the database should display.
Display Blank	Select this radio button to display a blank for NULL values.

Table 250: Date Tab Description (Continued)

Field	Description
Display as No Value	Select this radio button to display “No Value” for NULL values.

The following shows the column format options for a numeric column.



4 To define options for a numeric column, enter the following field information.

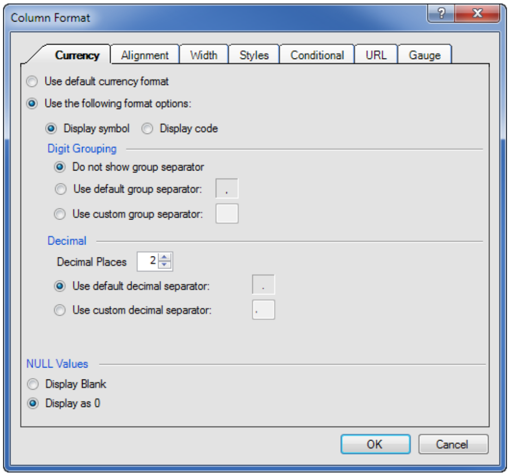
Table 251: Number Tab Description

Field	Description
Show Value As	Click this drop-down menu to select the format to use when displaying content in numeric columns. The available options are Number, Seconds, Minutes, Percent, and File Size. **Note:** The options available on the Number tab vary depending on the selected value format.
Digit Grouping	Define whether digits are grouped in threes. For example, instead of the column returning “123456,” you can group the digits to return “123,456.” **Note:** This option appears only when the selected value format is Number, Decimal, or Percent.
Do not show group separator	Select this radio button to prevent the values in the column from including a separator character.

Table 251: Number Tab Description (Continued)

Field	Description
Use default group separator	Select this radio button to use the default group separator character. The default separator is a comma.
Use custom group separator	Select this radio button to define your own group separator character. Type the character you want to use in the field.
Decimal	Define how decimal and percentage formats should be displayed. **Note:** This option appears only when the selected value format is Percent.
Decimal Places	Enter the number of decimal places to display in the output.
Use default decimal separator	Select this radio button to use the default group separator character. The default separator is a period.
Use custom decimal separator	Select this radio button to define your own decimal separator character. Type the character you want to use in the field.
Multiply by 100	Select this check box to multiply the decimal values by 100. **Note:** This option appears only when the selected value format is Percent.
Seconds	Define how time units should be displayed. **Note:** This option appears only when the selected value format is Seconds or Minutes.
Seconds	When the column outputs a value in seconds, specify the format you want to display the time in. The available options are "Days, Hours, Minutes," and "Hours, Minutes, Seconds."
Minutes	When the column outputs a value in minutes, specify the format you want to display the time in. The available options are "Days, Hours, Minutes," and "Hours, Minutes."
NULL Values	Define how NULL values in the database should display.
Display Blank	Select this radio button to display a blank for NULL values.
Display as 0	Select this radio button to display 0 for NULL values.

The following shows the column format options for a currency column.



5 To define options for a currency column, enter the following field information.

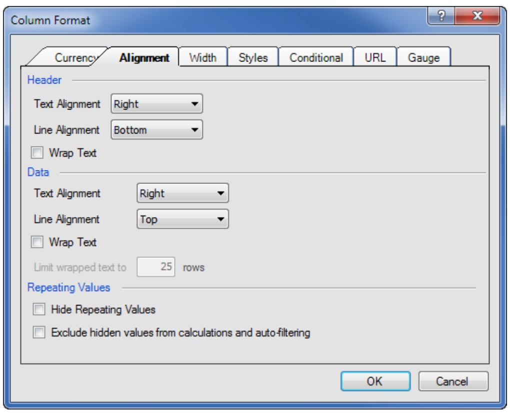
Table 252: Currency Tab Description

Field	Description
Use Default Currency Format	Select this radio button to use default currency settings, as specified by your **administrator**. When this radio button is selected, most of the other fields on the Currency tab are disabled.
Use the Following Format Options	Select this radio button to define your own currency format settings. When you select this option, the fields on the Currency tab are enabled.
Display Symbol	Select this option to display the symbol for the currency. For example, ten U.S. dollars would display as $10.00.
Display Code	Select this option to display the code for the currency. For example, ten U.S. dollars would display as 10.00USD.
Digit Grouping	The radio buttons in this section let you group digits in threes. For example, instead of the column returning “$123456,” you can group the digits to return “$123,456.”
Do Not Show Group Separator	Select this radio button to prevent the values in the column from including a separator character.

Table 252: Currency Tab Description (Continued)

Field	Description
Use Default Group Separator	Select this radio button to use the default group separator character. The default separator is a comma.
Use Custom Group Separator	Select this radio button to define your own group separator character. Type the character you want to use in the field.
Decimal	Define how decimal and percentage formats should be displayed.
Decimal Places	Enter the number of decimal places to display in the output.
Use Default Decimal Separator	Select this radio button to use the default group separator character. The default separator is a period.
Use Custom Decimal Separator	Select this radio button to define your own decimal separator character. Type the character you want to use in the field.
NULL Values	Define how NULL values in the database should display.
Display Blank	Select this radio button to display a blank for NULL values.
Display as 0	Select this radio button to display "No Value" for NULL values.

6 Click the Alignment tab to define the column's alignment.



7 Enter the following field information.

Table 253: Alignment Tab Description

Field	Description
Header	The fields in this section determine the alignment for the column's header.
Text Alignment	Click this drop-down menu to select the column header's horizontal alignment. The available options are Left, Center, and Right.
Line Alignment	Click this drop-down menu to select the column header's vertical alignment. The available options are Bottom, Center, and Top.
Wrap Text	Select this check box to allow the column header's text to wrap to a new line if it exceeds the width of the column.
Data	The fields in this section determine the alignment for the column's data.
Text Alignment	Click this drop-down menu to select the horizontal alignment for the column's data. The available options are Left, Center, and Right.
Line Alignment	Click this drop-down menu to select the vertical alignment for the column's data. The available options are Bottom, Center, and Top.
Wrap Text	Select this check box to allow the column's data to wrap to a new line if it exceeds the width of the column.
Limit Wrapped Text to *x* Rows	If the Wrap Text check box is selected, type the maximum number of wrapped rows that should be shown in the report output. You can type a value between 1 and 100.
Repeating Values	The fields in this section let you hide repeating values in the column.
Hide Repeating Values	Select this check box to hide repeating values in the column. The value will display in the first row with value, but subsequent rows with the same value will be blank. Selecting this option can make a report's output more legible by hiding repetitive text in a column.
Exclude Hidden Values from Calculations and Auto-Filtering	Select this check box to exclude hidden values from consideration in column calculations and column auto-filter options.

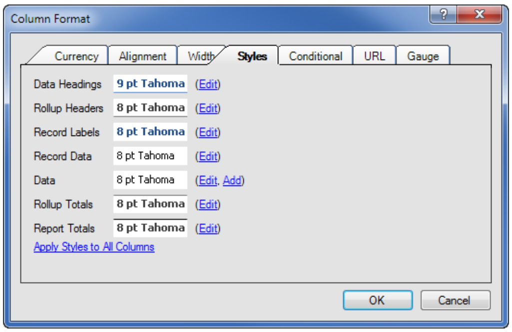
8 Click the Width tab to define the column's width.

9 Enter the following field information.

Table 254: Width Tab Description

Field	Description
Best Fit	Select this radio button to allow the width of the column to be automatically sized to the best fit for the report.
Specific Width	Select this radio button to define a width for the column. Type the width of the column and select the unit to use from the drop-down menu. You can choose Percentage (of the total width of the report), Pixel, Inch, Cm (centimeter), Mm (millimeter), Pica, Point, Em, and Ex.

10 Click the Styles tab to define the column's text styles. Text styles control the font, color, margins, background colors, and borders for text fields. The current setting for each text field's style is shown next to the name of the text field.



11 Enter the following field information.

Table 255: Styles Tab Description

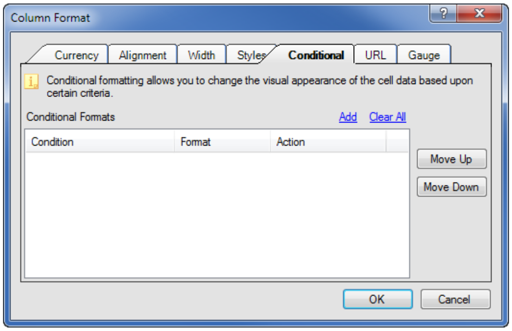
Field	Description
Data Headings	Click Edit to define the style for the column's heading when the report is shown with a tabular layout.

Table 255: Styles Tab Description (Continued)

Field	Description
Rollup Headers	Click Edit to define the style for the rollup headers if shown in the report's output.
Record Labels	Click Edit to define the style for the column's heading when the report is shown with a record layout.
Record Data	Click Edit to define the style for the column's data when the report is shown with a record layout.
Data	Define the style for the data text in the column when the report is shown with a tabular layout.
Edit	Click Edit to edit the style that is currently used for the data text in the column.
Add	Click this text to add other styles for alternating data rows in the column. The new style you create is initially identical to the original data style. Once you add the new style, another data style appears. The data rows in your report then alternate between the two styles you have defined. If you add a third data style, it is used in every third row.
Remove	Click this text to remove the new data style. "Remove" appears next to new data styles you add. You cannot remove the original data style.
Rollup Totals	Click Edit to define the style for the rollup totals if shown in the report's output.
Report Totals	Click Edit to define the style for the report totals headers if shown in the report's output.
Apply Styles to All Columns	Click this text to apply the styles you defined on this tab to all the columns currently in your report.

12 Click the Conditional tab to apply conditional formatting to the column.

Note Conditional formatting is not available for columns that return hierarchical values.



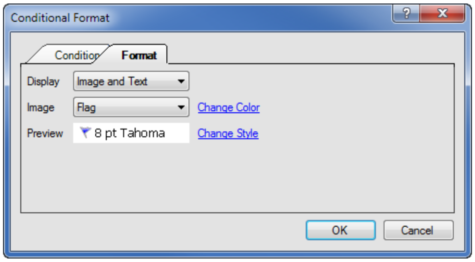
Conditional formatting flags information in output columns without creating a data exception. For example, you could add formatting to a column in an incidents report to display the column's output in red text if an incident's status is Unresolved. Multiple format options can be used to flag output using images, background colors, and fonts.

13 Click Add to open the Conditional Format window.

Note The options shown on the Condition tab depend on the type of data output in the column the condition is added to. For example, a column that outputs dates has operators and values that are unique to date fields.

14 Select the operator and value(s) you want flagged.

15 Click the Format tab to define how the flagged data is displayed.



16 Enter the following field information.

Table 256: Conditional Format Window Description

Field	Description
Display	Click this drop-down menu to select the type of formatting you want to use to indicate column output that meets the selected condition(s).
Image and Text	Select this option to show images next to the column output that meets the selected condition(s) and display the output with different font options.
Image Only	Select this option to show an image next to the column output that meets the selected condition(s).
Text Only	Select this option to use different font options for column output that meets the selected condition(s).
Image	Click this drop-down menu to select the image to display. The options are Circle, Square, Flag, Check, Up Arrow, Down Arrow, and Custom. Select Custom to select the image from the Images explorer. **Note:** This drop-down menu is disabled if Text Only is the selected display option.
Change Color	Click this text to change the color of the selected image. **Note:** The color of custom images cannot be changed.
Preview	This field displays a preview of the selected image, text, or both, depending on the selected display option.
Change Style	Click this text to select font attributes for conditional column text.

17 Click the OK button to save the conditional formatting.

18 If multiple conditional formats are applied to the column, define the order in which the formats should be applied.

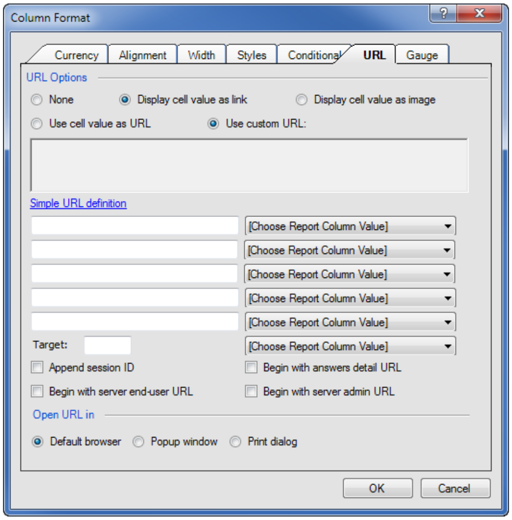
Multiple conditional formats can be applied to the same column to indicate different values. For example, different incident statuses can have different font colors or images. When a column has multiple formats, the order of the conditions is important since this determines which condition is applied first. If a row in a report meets both the first and second conditions in a column, only the first condition is applied to the value.

a Select the conditional format to move from the Conditional Formats list.

b Click the Move Up or Move Down button to move the conditional format up or down in the list.

19 Click the URL tab to add URL links to your column.

Note When you click a URL link in a report, your web browser launches and the website the URL points to opens. You can customize the URL and add variables to the link, using the values in any of the report's columns. For example, you could direct a URL to open an answer on the **customer portal**, or you could direct the URL to a page designed by your organization.



20 Enter the following field information.

Table 257: URL Tab Description

Field	Description
URL Options	Specify how you want to define the URL in this section.
Display Cell Value as Link	Select this radio button to enable URL options for the column. This lets you create a link to a website using either the value displayed in the field or a custom URL.

Table 257: URL Tab Description (Continued)

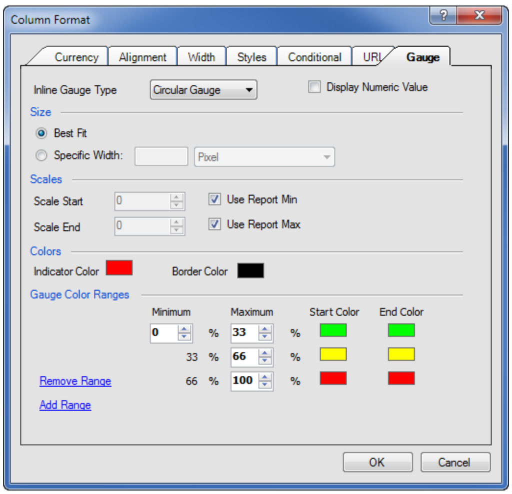
Field	Description
Display Cell Value as Image	Select this radio button to enable image options for the column. This lets you store images on a separate server and display the images in the column. Since you can point to external locations for the image files, you do not need to upload the images to Oracle Service Cloud. Instead, you specify the URL where the image you want to display is stored. Refer to Displaying external images in columns.
Use Cell Value as URL	Select this radio button to use the value in the field as the URL link. Select this option only if the value in the field is a valid URL.
Use Custom URL	Select this radio button to manually specify the URL. You can enter the URL you want in the text box, or click Advanced URL Definition to view options to help you define the URL.
Advanced URL Definition	Click this text to display advanced URL formatting options. **Note:** When you click Advanced URL Definition, the text changes to read Simple URL Definition. Click this text to hide the Advanced URL Definition options.
Report Column Selection	You can add variables and variable values to the custom URL in this section. Type the variable you want to add to the URL in the text field, and then select the column to use to populate the variable's values from the drop-down menu.
Target	Type the value you want for the customer portal URL's *target* attribute in this field. This is optional and is used to specify where the customer portal page that is linked to opens. This can be used to customize the browser window used to display content customers can view, such as answers.
Append Session ID	Select this check box to append the session ID number to the URL. Use this option when the URL links to a customer portal page to ensure the URL for the page is valid.
Begin with Server End-User URL	Select this check box to automatically prepend the path to the Oracle Service Cloud server to the custom URL.
Begin with Answers Detail URL	Select this check box to automatically prepend the path to the customer portal's answers detail page to the URL. This is defined in the CP_ANSWERS_DETAIL_URL configuration setting.

Table 257: URL Tab Description (Continued)

Field	Description
Begin with Server Admin URL	Select this check box to automatically prepend the path to the Oracle Service Cloud server's PHP directory to the custom URL.
Open URL in	You can use the options in this section to specify where you want the web page that is linked to from the column to open.
Default Browser	Select this radio button to open the web page in the computer's default browser. A new browser window opens if one is not already open.
Popup Window	Select this radio button to open the web page in a pop-up window.
Print Dialog	Select this radio button to open the web page in the Print window. You can then print the content displayed in this window.

21 Click the Gauge tab to configure the column to display values using gauges.

Note The Gauge tab is available only for columns that return numeric or currency values.



22 Enter the following field information.

Table 258: Gauge Tab Description

Field	Description
Inline Gauge Type	Click this drop-down menu to select the type of gauge you want to use. The available options are None, Linear Gauge, Circular Gauge, and Progress Bar.
Display Numeric Value	Select this check box to display numeric values on the gauge.
Size	Define the size of the gauge in this section.
Best Fit	Select this radio button to allow the width of the gauge to be automatically sized to the best fit for the report.
Specific Width	Select this radio button to define a width for the gauge. Type the width of the gauge and select the unit to use from the drop-down menu. You can choose Percentage (of the total width of the column), Pixel, Inch, Cm (centimeter), Mm (millimeter), Pica, Point, Em, and Ex.
Scales	Define the scale ranges used for the gauge in this section.
Scale Start/Scale End	Enter the starting value (lowest value) and ending (highest value) for the gauge's scale in these fields. **Note:** These options are enabled only when defining a custom scale.
Use Report Min	Select these check boxes to use the lowest value or highest value returned in the column as the scale start value.
Use Report Max	Select this check box to use the highest value returned in the column as the scale end value.
Colors	Select colors used for the gauge in this section.
Indicator Color	Click this color box to select the color to use as the gauge indicator color.
Border Color	Click this color box to select the color to use as the gauge border color.

Table 258: Gauge Tab Description (Continued)

Field	Description
Gauge Color Ranges	Add color ranges and define range colors in this section. Color ranges can be used to display numeric ranges in different colors. For example, a range of 0-33 could be green, 34-65 could be yellow, and 66-100 could be red. **Note:** Color ranges are not available with Progress Bar gauges.
Add Range	Click this text to add a color range. **Note:** A maximum of five ranges can be shown on the gauge. The range values cannot contain gaps or overlap.
Remove Range	Click this text to remove a range you have added.
Minimum/Maximum	Enter the starting and ending value for the range in these fields.
Start Color/End Color	Click these color boxes to select colors to indicate the start and end points of the range.

23 Click the OK button to save the changes to your column's format.

Displaying external images in columns

If you store images on a separate server, you can display those images in reports by configuring column format options. Since you can point to external locations for the image files, you do not need to upload the images using the Images explorer.

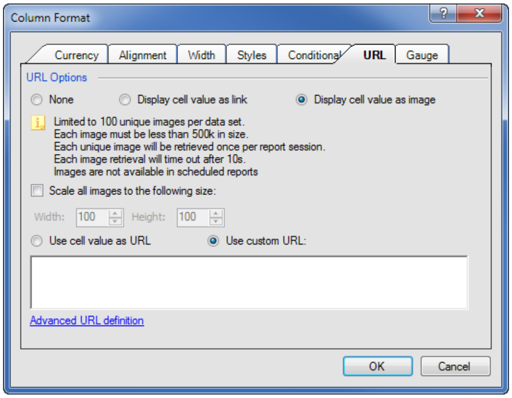
For instance, you can create a text system attribute for the Accounts standard object to store the URLs to photos of your staff members. You can then display the photos in reports that include the system attribute field. Refer to Creating system attributes.

Important There are some considerations when configuring column image options.

- Column format image options can only be configured using the report design center. They cannot be configured when viewing a report.
- Some restrictions exist on the external images you can display in reports. Each image file must be smaller than 500K in size, and a maximum of 100 unique images can be displayed each time the report is generated. (If you generate the same report multiple times using different search criteria, different images can be displayed.) In addition, to ensure reports run successfully, retrieval of the images times out after 10 seconds.
- External images will display in exported, published, and printed reports. However, they do not display in scheduled reports.
- The image file formats you can use in reports are BMP, EXIF, GIF, JPEG, PNG, and TIFF. If an unsupported file type is encountered when the report runs, the column output displays "Invalid Image."

To display external images in a report

1. Click the Analytics button on the navigation pane.
2. Double-click Reports Explorer.
3. Right-click the report you want to add the image to and select Edit.
4. Right-click the column on the report where you want the image displayed and select Edit Format. The Column Format window opens.
5. Click the URL tab and then select the Display Cell Value as Image radio button.



6 To specify a custom size for the images, select the Scale All Images to the Following Size check box and select width and height values between 1 and 500 pixels. By default, images are sized to 100x100 pixels.

7 In the text box, type the URL of the image file.

8 Click the OK button to save the column format options and close the Column Format window.

9 Save the report.

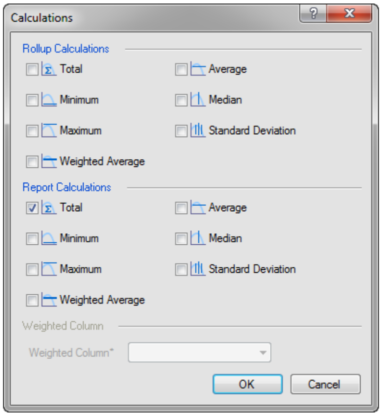
Adding column calculations

You can add rows to the bottom of a column to display calculations performed on the column's data. You can also perform calculations on data rollups. Refer to Displaying rollup levels.

The Calculations window displays all the calculations that can be performed on the data in the column. If the report does not have rollup columns, the Rollup Calculations section does not appear. Also, columns that do not contain numeric values have only the Minimum, Maximum, and Median calculations available.

To add calculations to a column

1 Right-click the column and select Edit Calculations. The Calculations window opens.



2 Enter the following field information.

Table 259: Column Calculations Window Description

Field	Description
Rollup Calculations	The check boxes in this section apply to calculations for data rollups. **Note:** These options display only when a rollup is defined in the report output.
Total	Select this check box to display the total value of the output column for all records.
Minimum/Maximum	Select these check boxes to display the minimum and maximum values of the output column for all records.
Weighted Average	Select this check box to display the weighted average of the column for all records.
Average	Select this check box to display the average value of the output column for all records.
Median	Select this check box to display the median (middle) value of the output column for all records.

Table 259: Column Calculations Window Description (Continued)

Field	Description
Standard Deviation	Select this check box to display the standard deviation of the column for all records. Standard deviation is the square root of the variance. It projects how various values in a set of values deviate from the mean for that set.
Report Calculations	The check boxes in this section apply to calculations for the output columns in the report.
Total	Select this check box to display the total value of the output column for all records.
Minimum/Maximum	Select these check boxes to display the minimum and maximum values of the output column for all records.
Weighted Average	Select this check box to display the weighted average of the column for all records.
Average	Select this check box to display the average value of the output column for all records.
Median	Select this check box to display the median (middle) value of the output column for all records.
Standard Deviation	Select this check box to display the standard deviation of the column for all records. Standard deviation is the square root of the variance. It projects how various values in a set of values deviate from the mean for that set.

Table 259: Column Calculations Window Description (Continued)

Field	Description
Weighted Column	Click the Weighted Column drop-down menu and select the column to use in conjunction with the current column to derive the weighted average. This drop-down menu is activated when the Weighted Average report or rollup calculation is selected, and displays only numeric columns you can use with weighted averages. For example, if you have a report with column X showing the number of incidents solved by a group, and column Y showing the average amount of time spent solving the incidents, a weighted average calculation can determine the average amount of time spent solving each incident regardless of how many incidents each group solved. That is, if group A solves 30 incidents and averages 30 minutes per incident, and group B solves 10 incidents averaging 110 minutes per incident, a normal average would calculate 70 minutes per incident, which would not reflect the different number of incidents for each group. A weighted average would show a more accurate average of 50 minutes per incident, since it takes the number of incidents solved by each group into account. The calculation used to determine weighted averages is `((x1*y1)+(x2*y2)) / (x1+x2)` or, in this example, `((30*30) + (10*110)) / (30 + 10) = 50`.

3 Click the OK button to save the column calculation.

Tip You can also add calculations from a selected column's Design tab.

Removing columns from reports

If you decide you no longer need a column in the report, you can remove it when working on the report design center.

To remove a column

1 Select the column you want to remove from the report.

2 Click the Delete button on the ribbon's Design tab.

Or

Press **Delete**.

Note If the column you delete uses a table that is no longer needed in the report, you should remove the table from the report to help the report run efficiently. Refer to Editing data set properties.

Creating data exceptions

You can create data exceptions to highlight data displayed in columns or charts that meets certain criteria. Exceptions can be created to flag data that matches expressions built from standard and custom database fields, functions, and variables. For example, you could create an exception to flag incidents with a response time greater than twenty-four hours. Incidents that match the exception could be shown on the report with custom colors, fonts, and markers. Information about the percentage of data meeting the exception can also be displayed.

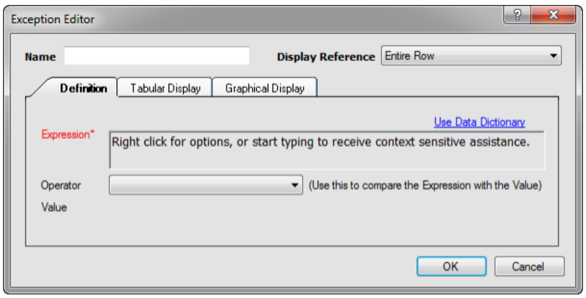
After you define your exceptions, you can **schedule** the report to send alerts whenever the criteria of a data exception is met. Refer to Scheduling reports.

Tip Each report level can have a maximum of thirty-two data exceptions.

To create a data exception

1 Click the Insert tab on the ribbon.

2 Click the Exception button to open the Exception Editor.

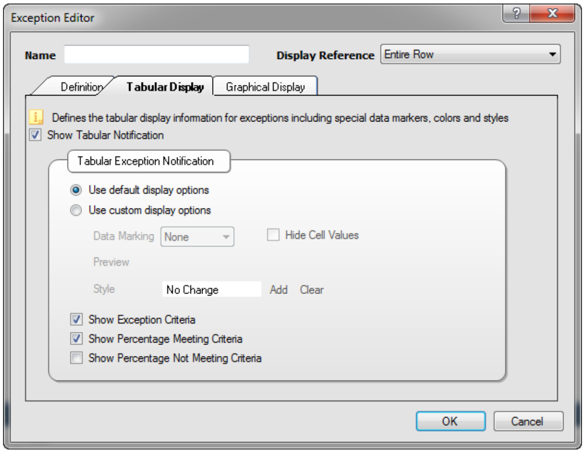


3 Enter the following field information.

Table 260: Definition Tab Description

Field	Description
Name	Type the name of the data exception.
Display Reference	Click this drop-down menu to select how the data is highlighted. Options are Entire Row or specific columns from the report.
Expression*	Right-click in this field to select the database column used to except data in the report.
Use Data Dictionary	Click this text to open the Edit Expression window where you can select **functions**, **variables**, and database fields.
Operator	Click this drop-down menu to select the operator to use in the exception criteria. This drop-down menu is activated once a database column is selected. Click here for a description of operators.
Value	Specify the second part of the expression in this field. The options available depend on the selected value type, the type of database field the exception is based on, and the operator that is used. You can type in a value, select items from a drop-down menu, or select dates from calendars.

4 To define how the data exception displays in the report's tabular output, click the Tabular Display tab.



5 Enter the following field information.

Table 261: Tabular Display Tab Description

Field	Description
Show Tabular Notification	Select this check box to display the data exception in the report's tabular output. If this option is cleared, the other options on the Tabular Display tab are unavailable.
Use Default Display Options	Select this radio button to display the exception using the color, font, and marking method defined in the style that is being used for the report. Refer to Styles explorer for information about creating styles and Changing report displays with styles for information about applying styles to reports.

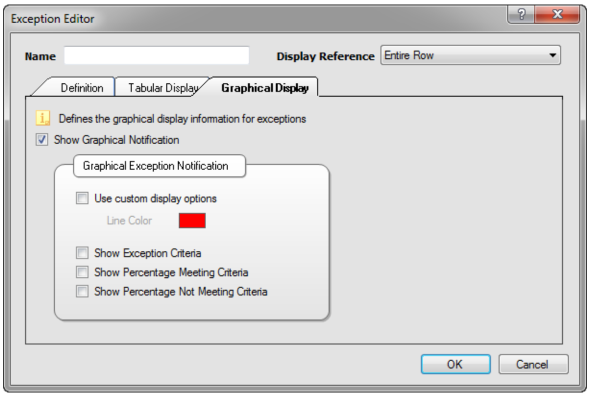
Table 261: Tabular Display Tab Description (Continued)

Field	Description
Use Custom Display Options	Select this radio button to define a custom color, font, and data marking method for the exception.
Data Marking	Click this drop-down menu to select a data marking to mark the data that meets your exception criteria. You can choose None, Circle, Square, Flag, Check, Up Arrow, Down Arrow, or Custom. • Select Custom to open the Select Image window and select images you have added in the Images explorer. Refer to Images explorer. • Select None to prevent a graphic from indicating the data exception. The text style you define for the marker will still be applied to the data exception. This allows you to change the color or font of tabular data that meets the exception without adding a graphic. **Note:** The data marking symbol displays in the window's Preview field so you can view the symbol as you define it.
Hide Cell Values	Select this check box to hide the value in the column that is used as the display reference. **Note:** This check box is available if the exception's display reference is set to a column rather than an entire row.
Change Color	Click this text to open the Color window to change the color of the graphic. Refer to Choosing colors. **Note:** This option appears if Circle, Square, Flag, Check, Up Arrow, or Down Arrow is selected in the Data Marking drop-down menu.
Change Image	Click this text to open the Select Image window to change the image data marking image. **Note:** Change Image appears only if Custom is selected in the Data Marking drop-down menu.
Style	Click Add next to the Style box to open the Edit Style window where you can change the font, colors, margins, and borders for the data in the report that matches your data exception criteria. Refer to Selecting style options. To remove a style that has already been defined, click Clear next to the Style box.

Table 261: Tabular Display Tab Description (Continued)

Field	Description
Show Exception Criteria	Select this check box to display the exception criteria at the bottom of the report in the Data Exceptions report section. For example, if the data exception marks opportunities that are still active, the criteria would display *opportunities.status_id = Active*.
Show Percentage Meeting Criteria	Select this check box to show the percentage of data in the report that meets the specified exception criteria. This displays at the bottom of the report in the Data Exceptions report section.
Show Percentage Not Meeting Criteria	Select this check box to show the percentage of data in the report that does not meet the specified exception criteria. This displays at the bottom of the report in the Data Exceptions report section.

6 To define how the data exception displays in the report's graphical output, click the Graphical Display tab.



7 Enter the following field information.

Table 262: Graphical Display Tab Description

Field	Description
Show Graphical Notification	Select this check box to display the data exception in the report's chart output. If this option is cleared, the other options on the Graphical Display tab are unavailable.

Table 262: Graphical Display Tab Description (Continued)

Field	Description
Use Custom Display Options	Select this radio button to choose your own line color for the data exception. If this box is not selected, the exception uses the line color defined in the chart style that is being used for the report. Refer to Chart Styles explorer for information about creating chart styles and Adding and editing charts for information about applying chart styles to reports.
Line Color	Click the color box to open the Color window and select a line color for the excepted data. Refer to Choosing colors.
Show Exception Criteria	Select this check box to display the exception criteria in an exceptions box in the chart.
Show Percentage Meeting Exception	Select this check box to show the percentage of data in the report that meets the specified exception criteria. This displays in an exceptions box in the chart.
Show Percentage Not Meeting Exception	Select this check box to show the percentage of data in the report that does not meet the specified exception criteria. This displays in an exceptions box in the chart.

Ordering data exceptions

When you add multiple data exceptions that are based on the same database field to the same output level, the ordering of the exceptions can impact which exception the data matches. In such cases, you want the most restrictive exception listed first, since the data is checked against the first exception before other exceptions in the list are matched.

For example, you could create exceptions in a report that show the number of open incidents each of your contacts have. You could create an exception to indicate contacts with five or more incidents and another exception to indicate contacts with ten or more incidents. If the first exception is *count(incidents.i_id) > 5*, and the second is *count(incidents.i_id) > 10*, then your data would match only the first exception even if a row had an incident count greater than ten. This occurs because the first exception has precedence over the second exception. To correct this, you would reorder the data exceptions.

To order data exceptions

1 Select the data exception you want to move on the design surface.

2 Click the Design tab.

3 Click the Move Up or Move Down button to move the exception to the position you want.

Tip You can also reorder exceptions by dragging them in the exceptions report section on the design surface.

Adding row limits and page breaks

Reports can return large amounts of data, especially if they lack fixed filters or required run-time selectable filters. It can be difficult to print or view a report with thousands of rows, and finding specific records in such a report can be challenging. However, you can limit the number of rows returned on each page or on the entire output level. Limits are set for each output level in the report.

To set record limits

1. Select the level you want to add the record limit to from the Level drop-down menu at the top of the design surface.
2. Click the Level tab.
3. Click the Record Limit button.
4. Enter the following field information.

Table 263: Edit Row Limit Window Description

Field	Description
Limit To	Select this check box to limit the records returned on the output level.
Rows	Type the maximum number of rows you want returned. **Note:** The VRL_HARD configuration setting sets a hard limit on the number of rows that can be returned in a report. Values entered in this field that exceed the VRL_HARD limit are ignored. Refer to Analytics Configuration Settings for information about this and other configuration settings that can impact reports.
Per Page	Select this check box to apply the record limit to each page of the report. If this check box is not selected, the row limit you enter restricts the total number of rows returned in the selected output level.

5 Click the OK button to save the change to the record limit.

Managing table relationships

When you use fields from different database tables in a report's columns or filters, the fields' tables are automatically added to the report, and the tables are joined by their fields that are linked together in the database. Tables such as *incidents* and *contacts* are tied together with a single field in each table, specifically the *incidents.c_id* and *contacts.c_id* fields. Since there is only one way to link these tables together, Analytics links them in the report automatically using a table join. By joining the tables, information from both tables can be displayed together.

Note When viewing a report, you can see the report's tables in the report definition. Refer to Viewing and exporting report definitions. When editing a report, you can see and manage the report's tables by clicking the Tables button on the Home tab of the report design center's ribbon. Refer to Editing table relationships.

Some reports you create may need to reference numerous tables with different relationships. For example, you may need to use fields from tables that are not linked together in the database, or you may need to use fields from tables that can be linked together in more than one way. In these instances, you will need to select the fields you want to use to join the tables. Refer to Manually defining table joins.

In addition, if you require a high degree of control over the tables used in a complex report, you can manually add them to the report instead of having the tables added automatically. Refer to Manually adding tables.

Note In general, we recommend using as few tables as possible in a single report to help the report run efficiently. If you need to reference numerous tables in a report to return a wide array of information, you can instead create multiple reports, each with a minimum of tables that are focused on one area of the information you are interested in. You can then link the tables together so they function like a single report. Refer to Linking reports.

Types of table joins

Analytics uses two types of table joins. The join type that is used to link the tables in your report impacts what records the report can return. If the report does not return the information you want to see, you may need to change the join type to allow the report to access the appropriate records in the tables. Refer to Editing table relationships.

Inner joins

When tables are linked with an inner join, only records in the tables that share common data can be returned. For example, when the *contacts* table and the *incidents* table are linked with an inner join, only contacts that have incidents associated with them can be returned by the report. Information about a contact who has never submitted an incident cannot be returned.

Inner joins are used when tables are automatically joined together since they meet the requirements of most reports and are easier to process in database queries than outer joins.

Outer joins

When tables are linked with an outer join, all rows from the first table added to the report (referred to as the primary table) can be returned in the report, regardless of their relationship to rows in the secondary table. Information in the secondary table that is related to information in the primary table can also be returned. For example, if *accounts* is the primary table and *incidents* is the secondary table in a report, it can return information about all staff accounts, whether or not they have incidents assigned to them. The report can also return information about incidents that are assigned to staff members, but cannot return information about incidents that are not assigned.

Since outer joins allow all data from the primary table to be returned, but only some from the secondary table, the ordering of the tables is important when using outer joins. If your report does not return the information you want from two tables that are outer joined, you may need to change which table is the primary and which is the secondary. Refer to Repositioning tables in the data set.

Tip When using outer joins, it can be helpful to add a field from the table you are most interested in first. If your report's purpose is primarily to output information about contacts, a field from the *contacts* table should be added as a column before fields from other tables.

Outer joins are not automatically used in reports since inner joins meet the requirements of most reports and are easier to process in database queries than outer joins. Outer joins are also referred to as left joins by those familiar with database queries.

Manually defining table joins

Generally, you do not need to specify which fields are used to join tables together in reports since the tables that are commonly used in reports are often joined automatically. However, some tables can be joined through more than one field and other tables do not have linked fields in the database and cannot directly join together. If you encounter one of these situations when adding a field to a report, you need to specify how the tables are joined.

Note The relationships between **custom object** tables and other tables are defined when the custom object is created. Refer to Defining relationships.

Specifying joins for tables with multiple relationships

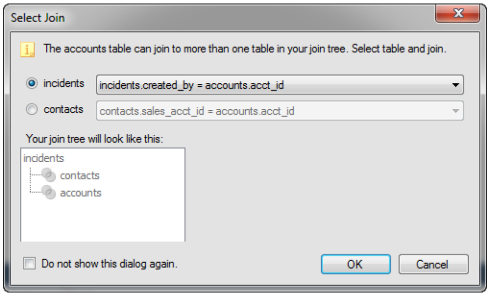
Some tables are linked together in the database using more than one field. For example, *incidents* can link to *accounts* through three fields in the *incidents* table. When joining these tables, the link between the tables is not automatically created, so you must define which field should be used to tie the tables together in the report. You'll do this on the Select Join window, which automatically opens when you add fields from tables such as this to the same report.

The Select Join window also appears if your report already has multiple tables and you add a field from another table that can be related to more than one of the tables already in the report. In this case, you must define which table the new table should be joined to, since different data can be returned by joining different tables. By default, the new table is joined to the primary table in the report using an inner join.

An example that illustrates both cases is if your report includes the *incidents* and *contacts* tables, and you then add a field from the *accounts* table. The *accounts* table can link to the *incidents* table through three *incident* fields and can link to the *contacts* table through one *contact* field. In this instance, you would be asked if the *accounts* table should link to *incidents* or *contacts*, and, if it is the *incidents* table, which field in the *incidents* table should be used as the link.

To select linked fields

1 Add a column or filter to the report from a table that can be linked in more than one way to the other tables in the report. The Select Join window opens.



2 To accept the default table relationship that is displayed, click the OK button.

3 To define which tables should be linked, select the radio button next to the table that the new table should join to.

a If the new table can link to the selected table by more than one field, select the correct field from the drop-down menu that displays next to the table's radio button.

The field you join the new table to should be associated with the information you want to output in the report. For example, if you are joining the *accounts* table to the *incidents* table, select the *incidents.created_by* => *accounts.acct_id* option to output information about the staff member who originally created the incident. If you instead want to output information about the staff member the incident is assigned to, select the *incidents.assgn_acct_id* => *accounts.acct_id* option.

4 To prevent the Select Join window from displaying again when editing the current report, select the Do Not Show This Dialog Again check box. If you then add another field that requires defining a table relationship, you need to define the relationship from the Data Set window. Refer to Editing data set properties.

5 To not define any table relationship, click the Cancel button.

Important If you click the Cancel button, the field you added is still added to the report output, and the new table is added to the report as another primary table. However, there will not be a relationship between this table and the other tables in the report until you manually define the relationship from the Data Set window. You will not be able to save the report until you define this relationship. Refer to Editing table relationships.

6 Click the OK button to save the table relationship.

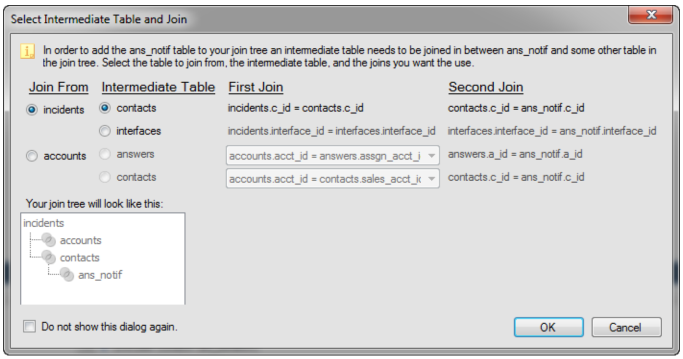
Defining intermediate table joins

If your report uses data from tables that are not directly linked together in the database, you need to choose how you want to link the tables together when you create your report. Tables that are not directly linked together in the database can still be joined by going through intermediate tables that are common to both.

Note If you attempt to use fields from two tables related to different areas of the application, it may not be possible to join them using an intermediate table. In these instances, both tables will be considered primary tables in the report and you will need to manually edit the table relationships before you can save the report. Refer to Editing table relationships. However, if you encounter this scenario, we recommend reconsidering the report's design since a single report is not intended to report on unrelated information.

To define intermediate table joins

1 Add a column or filter to the report that requires an intermediate table join. The Select Intermediate Table and Join window opens.



2 In the Join From column, select the radio button next to the table you want to join the new table to.

3 In the Intermediate Table column, select the radio button next to the table you want to use as the intermediate table to join the new table with the table selected in the Join From column.

4 In the First Join column, click the drop-down menu and select the fields you want to join from the intermediate table and the table selected in the Join From column.

5 In the Second Join column, click the drop-down menu and select the fields you want to join from the intermediate table and the new table you are adding. The join tree you define displays on the window.

6 To prevent the Select Intermediate Table and Join window from displaying again when editing the current report, select the Do Not Show This Dialog Again check box. If you then add another field that requires defining an intermediate table relationship, you need to define the relationship from the Data Set window. Refer to Editing data set properties.

7 Click the OK button to save the intermediate table join.

Editing table relationships

If you create a report that returns data from multiple tables and find that the data you want is not being returned, you may need to change the relationships of the report's tables. You can change the order of the tables, the join types connecting the tables, and the specific fields that are linked together in the tables, as long as the fields are linked in the database. You can also delete tables that are no longer needed in the report.

Editing data set properties

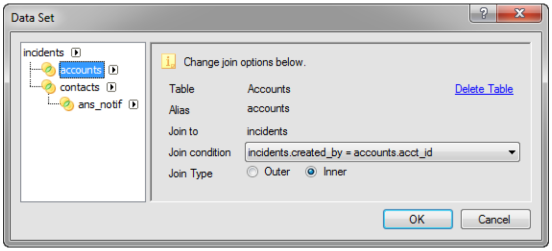
You can edit your report's **data set** to change the tables' join types. In addition, if the tables can be linked by more than one field, you can select a new field to link to.

To change the table join and linked fields

1 Click the Home tab.

2 Click the Tables button to open the Data Set window.

Note When you open the Data Set window, you see the tables in your report and their relationships. When two tables are inner joined, displays next to the secondary table. When two tables are outer joined, displays next to the secondary table.



3 Click the table that is joined to the primary table. In the previous figure, the *contacts* table is joined to the *incidents* table, which is the parent in the table relationship.

4 Enter the following field information.

Table 264: Data Set Window Description

Field	**Description**
Table	This field displays the database name of the table you have selected.
Delete Table	Click this text to remove the table you have selected from the report. If the table acts as a parent to other tables in the report, the child tables are also removed. **Note:** Columns are not automatically removed from the report when their associated tables are deleted. These need to be manually removed before the report can be saved.
Alias	This field displays the alias name of the table you have selected. The alias allows you to add multiple instances of the same database table to the same report. For example, the first instance of the *contacts* table could have an alias of “contacts,” and the second instance could have an alias of “contacts2” to distinguish it from the first instance.
Join To	This field displays the table the selected table is joined to.
Join Condition	If the table join can link to more than one field in the joined tables, click this drop-down menu to select the fields you want to use to join the tables.

Table 264: Data Set Window Description (Continued)

Field	Description
Join Type	Select the Inner radio button to use an **inner join** or the Outer radio button to use an **outer join**. Refer to Types of table joins. **Note:** To change the join type, you can also right-click the joined table in the data set tree and select Toggle Join Type.
Join Filters	You can add, delete, or view join filters in this section. Refer to Creating join filters. **Note:** Join filters apply only to outer joins and are not available if the Inner join type radio button is selected.

Repositioning tables in the data set

When using outer joins to combine tables, the ordering of tables can affect what data the report can return (refer to Outer joins). If multiple tables are used in the report, you may also need to change which secondary tables are directly linked to the primary table or change the relationships between secondary tables in the data set.

To change the ordering of tables

1 Open the Data Set window.

2 To select a different table in the data set as the primary table, right-click the table and select Set as Root.

Note When you set a new table as the root, or primary table, the relationship between the table and the old primary table is broken, resulting in the data set having two primary tables.

3 To move a table beneath another to make it a secondary table, drag the table onto the primary table. The tables are automatically joined and the new table relationship is displayed on the Data Set window.

Manually adding tables

When you add output columns or filters, the appropriate database tables are automatically added to the report. However, if you require a high degree of control over the tables used in a complex report, you can manually add them to the report instead of having the tables added automatically.

Caution To ensure report queries are efficient, manually adding tables to a report should be performed only by individuals with a thorough understanding of SQL queries.

To manually add tables to a report

1 Delete all columns and filters from an existing report, or start with a report with no columns.

2 Click the Home tab.

3 Click the Tables button. The Data Set window opens.

4 Click Select Table. A list of all tables displays.

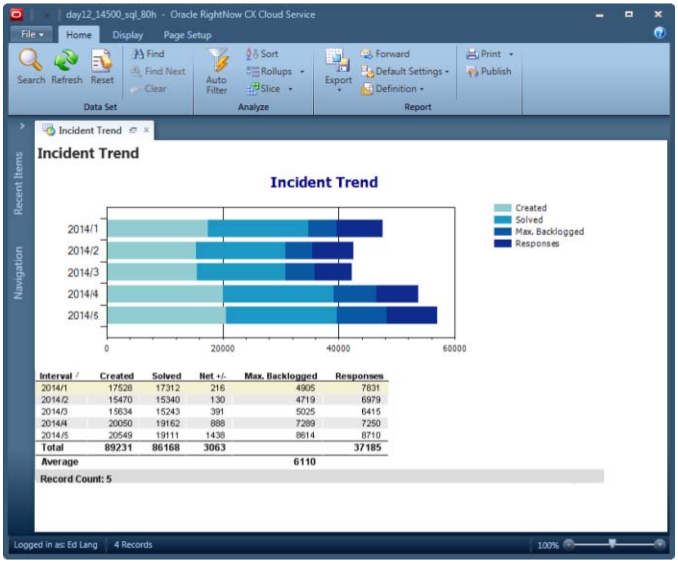
5 Select the table you want from the list.

6 Click the OK button to add the table to the report.

7 To join additional tables to the table you added, right-click the table you added, select Join To, and select the table to join. Repeat this step for each table you want to add.

Adding and editing charts

You can add charts to your reports to provide the audience with graphical representations of the report's data. Using charts, you can clearly compare data or highlight trends or patterns in the data. For example, a pie chart could show comparisons in the number of incidents assigned to staff accounts in the previous week, or you could use a bar chart to view patterns in sales opportunities generated during the previous quarter.



You can manually add charts to reports, or you can use a chart table layout to automatically add generic charts with preconfigured positions. You can edit charts with the Chart Wizard, which lets you select the chart type, the data used in the chart, labels for the chart, and other settings. You can change the appearance of your chart by selecting a chart style created from the Chart Style explorer, or you can define custom style attributes for an individual chart by selecting from style options on the ribbon. You can also edit display attributes for the report's chart section, which contains the charts you add to your report.

Tip Each report level can have a maximum of twenty charts.

Adding charts manually

When you manually add a chart to a report, you can define all the chart elements, determine how the chart should be sized, and where it should be located in the report.

Note This procedure describes adding charts using the buttons on the Insert tab. You can also add charts by selecting the Charts report section, clicking the Options tab, and clicking the Add Chart button to open the Chart Wizard. Refer to Using the Chart Wizard.

To manually add a chart

1 Open the report you want to edit.

2 If your report has multiple output levels, select the level you want to add the chart to from the Level drop-down menu at the top of the design surface.

3 Click the Insert tab. Buttons for the types of charts you can add to the report are displayed on the tab's Chart group.

4 Click the button for the chart type you want to add and select the chart subtype you want to add to your report. Click here for descriptions of the available chart types.

5 Click the Charts report section to add the chart to the report. The Chart Wizard opens.

6 Configure the chart and select a chart style with the Chart Wizard. Refer to Using the Chart Wizard.

Note If you have applied a report style to the report, the chart style that is associated with the report style is used by default You can select a different chart style on the Chart Wizard or by clicking the Chart Style button on the Design tab. Refer to Changing report displays with styles.

7 Apply any custom style attributes you want for the chart from the ribbon's Design, Layout, and Format tabs. For information about the options available on these tabs, refer to Creating and editing chart styles.

8 To enable automatic positioning and sizing for your chart, edit style options for the chart's report section. Refer to Modifying chart placement and sizing.

9 Repeat steps 2 through 7 to add additional charts to your report.

Adding charts with chart table layouts

If you do not want to manually place charts in your report, you can add them using chart table layouts. When you use a layout, charts are automatically added to your report and are given optimal placement. In addition, the charts are automatically sized in your report. For information about changing chart size and placement, refer to Modifying chart placement and sizing.

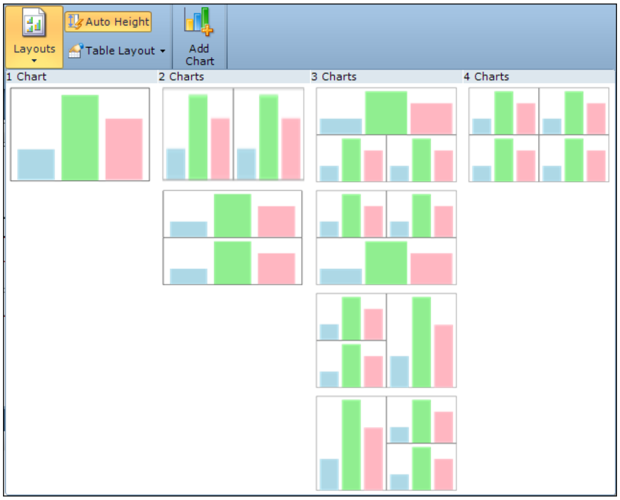
To add charts using chart layouts

1 If the Charts report section is not displayed on the report level, click the Display tab and select the Charts check box.

2 Click the Charts report section on the design surface to select it.

3 Click the Automatic button on the Options tab to apply automatic formatting to the report section. Refer to Editing section layout properties.

4 Click the Layouts button to view chart section layouts.



5 Click one of the table layouts to apply it to the current output level. The table layout you select determines how many blank charts are added to your report and how they are arranged.

6 Right-click a blank chart on the design surface and select Edit Chart to configure the chart with the Chart Wizard. Refer to Using the Chart Wizard.

Or

Select a chart on the design surface.

a Click the Design tab.

b Click the Type button and select the chart type and subtype you want to use. The wizard opens automatically if the new chart type requires different source data than the previous chart type.

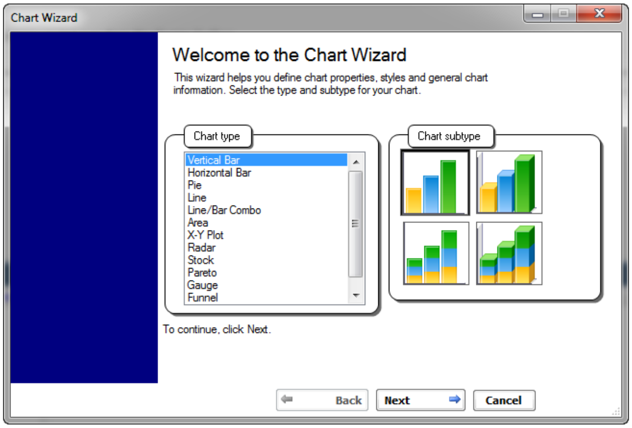
c To change data options for a chart type that does not require different source data, click the Define Data Source button to manually open the Chart Wizard.

Using the Chart Wizard

The Chart Wizard displays a series of windows for customizing charts. The first window displays the list of available chart types and subtypes. Each successive window contains additional options for customizing your chart. The available options on each succeeding window depend on the chart type and subtype selected. The options that differ are noted in the procedure.

To add or edit a chart with the Chart Wizard

1 Add or edit a chart to open the Chart Wizard. Refer to Adding charts manually and Adding charts with chart table layouts.



2 Select the chart type you want from the Chart Type menu. Refer to the following table for descriptions of the available chart types.

Table 265: Chart Types Description

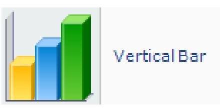
Chart Type	Description
	Vertical bar charts display data as a series of vertical bars. Subtype options can display the chart with single or stacked bars and as two- or three-dimensional.

Table 265: Chart Types Description (Continued)

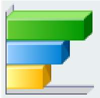
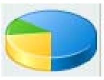
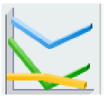
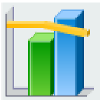
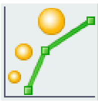
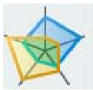
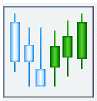
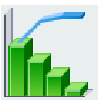
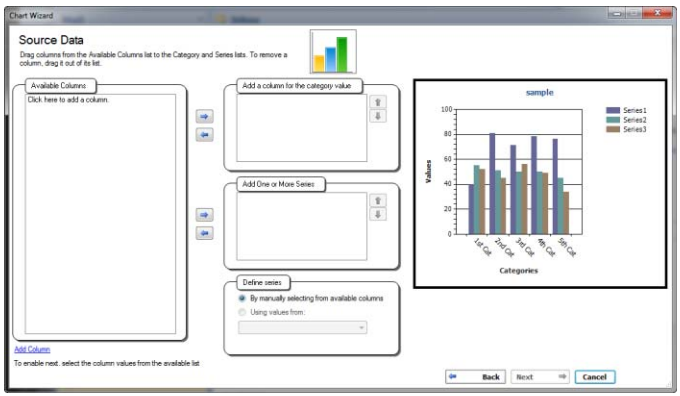
Chart Type	Description
 Horizontal Bar	Horizontal bar charts display data as a series of horizontal bars. Subtype options can display the chart with single or stacked bars and as two- or three-dimensional.
 Pie	Pie charts display data as a percentage of a whole. Subtype options can display two- or three-dimensional pie charts or doughnut charts.
 Line	Line charts display data as a series of points connected by a line. Subtype options can display the chart as two- or three-dimensional.
 Line/Bar Combo	Line/bar combo charts display both a line chart and a vertical bar chart. Subtype options can display the chart with single or stacked bars and as two- or three-dimensional.
 Area	Area charts display data as areas on an x- and y-axis. Subtype options can display the chart as two- or three-dimensional.
 X-Y	X-Y charts display data as a series of plotted points. Subtype options can display the plotted points as points, lines, or bubbles and as two- or three-dimensional.
 Radar	Radar charts display data in a radar format. Numeric values are plotted at markers on the perimeter.
 Stock	Stock charts display the minimum and maximum values for data. Subtype options can display the chart using squares or lines to represent the high and low points of each plot.
 Pareto	Pareto charts display data in descending order with an ascending plot line for cumulative percentage. Subtype options can display the chart as two- or three-dimensional.

Table 265: Chart Types Description (Continued)

Chart Type	Description
	Gauge charts display a numeric value as a percentage of a whole. Subtype options can display the chart as a gradation bar or a simple color meter. **Note:** Gauge charts cannot be used in reports that contain non-aggregate columns.
	Funnel charts display data as areas shown in ascending or descending order. Subtype options can display two- or three-dimensional funnel or pyramid charts.
	Gantt charts display time lines for completion of scheduled tasks. Subtype options can display the chart as two- or three-dimensional.

3 Select one of the chart subtypes from the Chart Subtype section.

4 Click the Next button to open the Source Data window.



The source data options let you specify the data to display in the chart. For example, if you are creating a vertical bar chart, you can specify a column to use as the chart's category value, displaying on the x-axis, and the column to use as the chart's series value, displaying on the y-axis. The wizard also displays a sample chart to help you identify chart elements.

5 Enter the following field information.

Table 266: Select Source Data Description

Field	Description
Available Columns	This field displays the columns you have added to the report level that can be used in the chart. **Note:** If you have not yet added columns to the report, you can click this area to open the Column Definition window. Refer to To add a column from the Column Definition window.
Add Column	Click this text to open the Column Definition window to add a column to your report level. This option provides a method to add columns if your report level does not have any columns or does not include a column you want to use for your chart. Refer to To add a column from the Column Definition window.
Add a Column for the Category Value	Select one or more columns from Available Columns and either drag them or click the arrow to move them to this grid. Columns added to this grid are used as categories in your chart. To remove a column, drag it back to the Available Columns section or select the column and press **Delete**. **Note:** This option is not available for Pie, Gauge, and Funnel charts.
	Select a column and then click these buttons to move the column up or down one position.
Add One or More Series	Select one or more columns from Available Columns and either drag them or click the arrow to move them to this grid. Columns added to this grid are used as series in your chart. To remove a column, drag it back to the Available Columns section or select the column and press **Delete**. Only numeric columns can be used as series. **Note:** This option is not available for Gauge and Line/Bar Combo charts. In addition, Pie and Funnel charts accept only one series.
	Select a column and then click these buttons to move the column up or down one position.

Table 266: Select Source Data Description (Continued)

Field	Description
Define Series	This section allows you to manually choose the output columns or column values to use for the series. **Note:** This section is not available for Pie, Line/Bar Combo, X-Y, Stock, Pareto, Gauge, and Funnel chart types.
By Manually Selecting from Available Columns	Select this radio button to manually select the columns used as values in the chart. For example, if you were reporting on incident statistics for different products, you could define the category as “Products” and the series as “Unresolved Incidents” and “Solved Incidents.” The category axis would display each product and the value axis would display a list of values. Each product would have two bars: one for unresolved incidents and one for solved incidents.
Using Values From	Select this radio button to choose the output column that is used to automatically populate values for the series. For example, if you were reporting on incident statistics for different products and assigned to different groups, you could define the category as “Products” and the series as “Unresolved Incidents.” If you selected groups from the drop-down menu associated with this radio button, each group would be used as a bar chart for each product. The category axis would display each product and the value axis would display a list of values (unresolved incidents). Each product would have bars for each group.
Get Labels From	Select one or more columns from Available Columns and either drag them or click the arrow to move them to this grid. Columns added to this grid are used as labels in your chart. Labels represent each piece of the pie. To remove a column, drag it back to the Available Columns section or select the column and press **Delete**. **Note:** This option is available only for Pie and Funnel charts.
Add Line Series	Select one or more columns from Available Columns and either drag them or click the arrow to move them to this grid. Columns added to this grid are used as the line series in your chart. To remove a column, drag it back to the Available Columns section or select the column and press **Delete**. Only numeric columns can be used as series. **Note:** This option is available only for Line/Bar Combo charts.

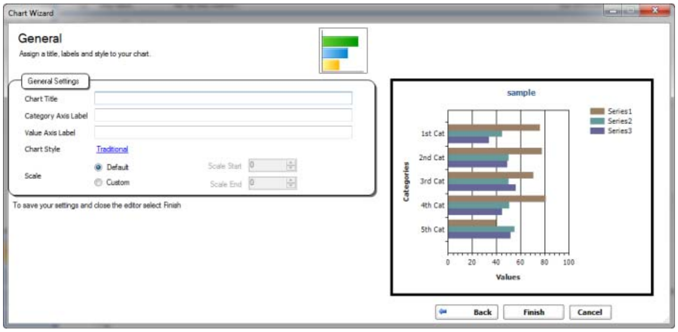
Table 266: Select Source Data Description (Continued)

Field	Description
Add Bar Series	Select one or more columns from Available Columns and either drag them or click the arrow to move them to this grid. Columns added to this grid are used as the bar series in your chart. To remove a column, drag it back to the Available Columns section or select the column and press **Delete**. Only numeric columns can be used as series. **Note:** This option is available only for Line/Bar Combo charts.
Select Gauge Series	Select one or more columns from Available Columns and either drag them or click the arrow to move them to this grid. Columns added to this grid are used as series in your chart. To remove a column, drag it back to the Available Columns section or select the column and press **Delete**. Only numeric columns can be used as series. **Note:** This option is available only for Gauge charts.
Select Line Series	Select one or more columns from Available Columns and either drag them or click the arrow to move them to this grid. Columns added to this grid are used as the line series in your chart. To remove a column, drag it back to the Available Columns section or select the column and press **Delete**. Only numeric columns can be used as series. **Note:** This option is available only for X-Y charts with a combo subtype.
Add Bubble Series	Select one or more columns from Available Columns and either drag them or click the arrow to move them to this grid. Columns added to this grid are used as the bubble series in your chart. To remove a column, drag it back to the Available Columns section or select the column and press **Delete**. Only numeric columns can be used as series. **Note:** This option is available only for X-Y charts with bubble or combo subtypes.
Add Bubble Values	Select one or more columns from Available Columns and either drag them or click the arrow to move them to this grid. Columns added to this grid are used as bubble values in your chart. To remove a column, drag it back to the Available Columns section or select the column and press **Delete**. **Note:** This option is available only for X-Y charts with bubble or combo subtypes.
Category Axis Series	Select a column to use as the category for the chart from this drop-down menu. **Note:** This option is available only for Gantt charts.

Table 266: Select Source Data Description (Continued)

Field	Description
Select Progress Series	Select a column to use as the progress series for the chart from this drop-down menu. Only integer columns can be selected for the progress series. **Note:** This option is available only for Gantt charts.
Select Start Date Series	Select a column to define the start date series from this drop-down menu. Only date columns can be selected for the start date series. **Note:** This option is available only for Gantt charts.
Select End Date Series	Select a column to define the end date series from this drop-down menu. Only date columns can be selected for the start date series. **Note:** This option is available only for Gantt charts.

6 Click the Next button to define general chart settings.



7 Enter the following field information.

Table 267: General Chart Settings Description

Field	Description
Chart Title	Type the title of the chart in this text box.
Category Axis Label	Type the label of the category axis in this text box. **Note:** This option is not available for Pie, Radar, Gauge, or Funnel charts.

Table 267: General Chart Settings Description (Continued)

Field	Description
Value Axis Label	Type the label of the value axis in this text box. **Note:** This option is not available for Pie, Line/Bar Combo, Radar, Gauge, or Funnel charts.
Bar Value Axis Label	Type the label for the chart's bar value. **Note:** This option is available only for Line/Bar Combo charts.
Line Value Axis Label	Type the label for the chart's line value. **Note:** This option is available only for Line/Bar Combo charts.
Sync Bar Line Scales	Select this check box to use the same range for the chart's bar and line scales. **Note:** This option is available only for Line/Bar Combo charts.
Chart Style	Click the underlined text to select a chart style for the chart. The chart style you select appears on the sample chart displayed on the Chart Wizard. **Note:** Once you apply a chart style, you can customize the style options for the chart you are editing using options on the ribbon's Design, Layout, and Format tabs. Refer to Chart Styles explorer.
Scale	Specify the scale used by the chart in this section. **Note:** This option is not available for Pie, Radar, or Funnel charts.
Default	Select this radio button to use the scale values specified in the selected chart style.
Custom	Select this radio button to define a custom scale for the chart. For example, if the values listed in a chart range from 10 to 50, you can create a custom scale to use these values as the scale's start and end points to prevent the chart from displaying ranges with no data.
Scale Start/Scale End	Enter the starting value (lowest value) and ending (highest value) for the chart's scale in these fields. **Note:** These options are enabled only when defining a custom scale.
Gauge Color Ranges	Add color ranges and define range colors in this section. Color ranges can be used to display numeric ranges in different colors. For example, a range of 0-33 could be green, 34-65 could be yellow, and 66-100 could be red. **Note:** This option is available only for Gauge charts.

Table 267: General Chart Settings Description (Continued)

Field	Description
Add Range	Click this text to add a color range. **Note:** A maximum of five ranges can be shown on the gauge. The range values cannot contain gaps or overlap.
Remove Range	Click this text to remove a range you have added.
Minimum/Maximum	Enter the starting and ending values for the range in these fields.
Start Color/End Color	Click these color boxes to select colors to indicate the start and end points of the range.

8 Click the Finish button to save your chart.

You can edit or delete any chart you add by right-clicking the chart on the design surface and selecting the appropriate option. You can also click the chart on the design surface and edit the chart with options available on the Design, Layout, and Format tabs. Refer to Creating and editing chart styles for information about the options on these tabs.

Modifying chart placement and sizing

The Charts report section can be configured to use automatic or manual section layouts, described in Editing section layout properties. Each type of layout for the report section affects the display of data in your charts.

When the Charts section has a manual layout, you can select a chart on the report section and drag it to reposition it. You can also select a chart and drag the handles on the chart's outline to resize the chart. When you specify a specific chart size using a manual layout, the data displayed on the chart is adjusted to fit the chart. A large chart displaying a small amount of data may appear too large. Also, a small chart displaying a large amount of data can be difficult to read since the data is compressed to fit the chart.

However, when using an automatic section layout, charts you add are automatically sized to best display the data initially presented in the charts. In addition, when you adjust the report's search parameters, the charts are automatically resized to ensure that all the data is clearly displayed. For example, if your chart shows incidents created over a date interval, and the report's interval is adjusted to a longer period, the chart automatically expands to clearly display all the additional intervals shown in the report.

Specifying filters

Filters are added to a report to limit the data the report returns. If filters were not used, a report that included information from a certain table would always return all the records in that table. Some filters set hard limits as to what the report can return and other filters can be changed when you run the report so you can look at different records. Filters also help improve report performance by preventing the report from examining data you do not want included in the report.

You can restrict the data returned in a report using the following filters.

- **Report fixed filters**—Fixed filters restrict the data the report can access. Fixed filters cannot be changed or edited when the report is run. Refer to Creating report filters.
- **Report run-time selectable filters**—Run-time filter values can be changed from their default values when running a report. This lets you run the report to view data about records that share the values selected in the filter and then immediately run the report again with different values selected in the filter. Refer to Creating report filters.
- **Level filters**—Level filters are fixed or run-time selectable filters that limit data at the individual output levels. Level filters can restrict data from appearing in one level, while allowing it to be returned in other levels in the same report. Refer to Creating level filters.
- **Group filters**—Group filters are applied to an output level's grouped data to filter out certain groups from displaying in the report level's output. Refer to Creating group filters.
- **Join filters**—Join filters restrict data returned in the secondary table of outer table joins. Refer to Creating join filters.

Tip Each report can have up to 100 report filters and each output level in a report can have 100 level filters and one hundred group filters.

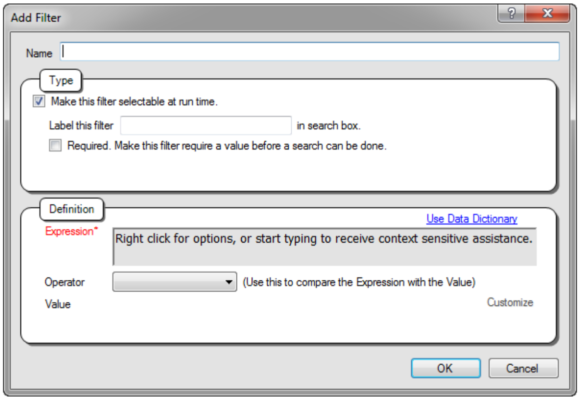
Creating report filters

Report filters limit the data that can be returned in any level of the report. Report filters can be fixed or run-time selectable. These filters are similar in that both restrict the data that is returned in the report according to what the filter allows and are created in the same way. However, run-time filters can be changed when the report is run, whereas fixed filters cannot. Run-time filters values can be changed by anyone viewing the report, either from the Search window or from docked filters, to return different data each time someone runs the report. Fixed filter values cannot be changed when the report is run, which allows you to restrict the data that report users can view.

Tip Most reports used on workspaces automatically attempt to filter on the record shown in the workspace to display only information that is related to the record. For this reason, when creating reports for use on workspaces, we recommend including a filter based on the unique identifier for the primary type of record shown in the workspace. For example, a report used on an incident workspace could filter on the incident ID field (*incidents.i_id*).

To create a fixed or run-time selectable report filter

1. Open the report you want to edit.
2. Click the Home tab.
3. Click the Add Filter button.



4 Enter the following field information.

Table 268: Add Filter Window Description

Field	Description
Name	Type a name for the filter in this field. The name identifies the filter on the report design center but does not display when the report is run. Entering a value for this field is optional. If a name is not entered, the name defaults to the name of the filter's database field.
Make This Filter Selectable at Run-time	Select this check box to make the field a run-time selectable filter. If this check box is cleared, the filter becomes a **fixed filter**.
Label This Filter	Type a label for the filter in this text field. This label displays on the Search window when the report is run.
Required	Select this check box to require the report's user to enter a value for the filter when running the report. If this option is selected, the Search window opens automatically when the report is opened and the filter's value must be specified before results are returned.

Table 268: Add Filter Window Description (Continued)

Field	Description
Expression*	Enter the expression you want to use for the filter in this field. You can right-click to select from a list of database tables, fields, and functions, or you can type the expression. A menu displays when you start typing that lists the database tables that begin with the typed letters. You can either continue typing the expression or select a table and field from the list. For descriptions of the types of columns and functions you can use in the expression, refer to Adding columns to reports. **Note:** The maximum number of characters allowed in the expression field is 3,500. You can use replacement variables to create expressions that require more characters. Refer to Creating variables. **Note:** Only indexed database fields are available for use in filters.
Use Data Dictionary	Click this text to open a window containing the data dictionary tree where you can select fields, functions, and variables for the expression.
Operator	Select the operator to use with the expression. The available operators vary depending on the type of field used in the expression. Click here for descriptions of operators.
Value	Enter the value for the filter. If you are creating a run-time filter, this value is the filter's default value which can be changed when the report is run. If you are creating a fixed filter, this is the filter value the report uses when it is run. **Note:** The available options in the Value field change depending on the type of field and the operator you select. For example, a menu field's values display in a drop-down menu, whereas a date field's values display date and time options. Text area fields are not available for use in report filters.
Customize	Click this text when using In List or Not in List operators with menu fields to select menu options you want displayed to the report's audience. Refer to Hiding menu options.

5 Click the OK button to save the filter.

6 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Hiding menu options

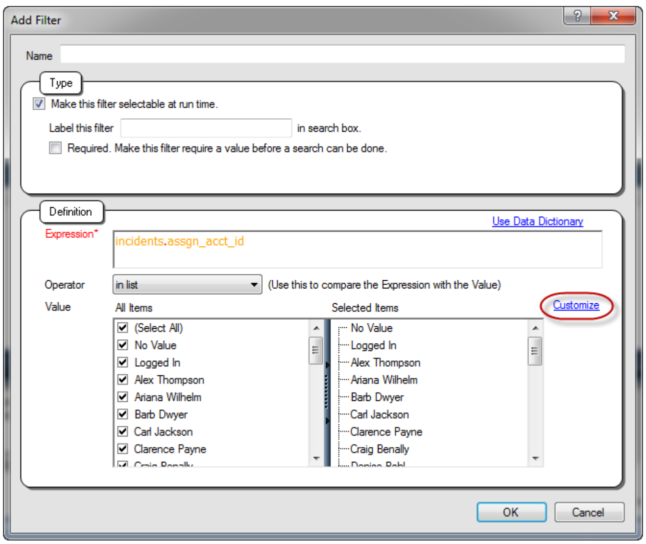
In some instances, you may have run-time filters that display a large number of menu options. If the staff members using the report do not need to see all the menu options, you can hide the ones that are irrelevant to them to make it easier to navigate the menu list. For example, if an incidents report includes a filter on the assigned group, and some staff members don't need to see incidents assigned to particular groups, you can hide those groups in the filter.

Note If you need a report to display different menu options to different audiences, create a copy of the original report for each audience and choose the menu options you want in each of the new reports. You can then specify which profiles have permission to open each report. Refer to Copying items and Specifying permissions.

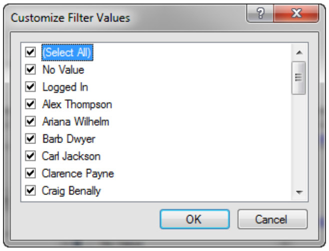
To customize menu filter options

1 Open the report on the report design center.

2 Click the Filters button on the ribbon's Home tab, select the filter you want to customize, and select Edit Filter. The Edit Filter window displays the filter details.



3 Click Customize. The Customize Filter Values window opens.



4 Clear the check boxes next to the menu options you do not want to display.

5 Click the OK button.

6 Click the OK button to close the Edit Filter window.

7 Save the changes to the report.

Creating level filters

Level filters are similar to the filters that are applied to the main report. However, while report filters are applied to the report as a whole, restricting the data that is returned at any level in the report, level filters are applied to individual output levels and only restrict the data returned at the level where they are created. If the report has multiple output levels, the other levels are not subject to the level filters applied to other levels in the report.

To create a level filter

1 Open the report you want to edit.

2 Select the level you want to add the filter to from the Level drop-down menu at the top of the design surface.

3 Click the Level tab.

4 Click the Add Level Filter button. The Add Filter window opens.

5 Enter field information described in Add Filter Window Description.

6 Click the OK button.

7 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Creating group filters

Group filters can be used in output levels with grouped data to prevent rows with a certain number of grouped items from displaying. For example, an output level that returns rows showing the number of unresolved incidents for each staff member could have a group filter to display only rows for staff members with more than ten unresolved incidents. Group filters can be **fixed** or **run-time** selectable.

To create a group filter

1 Open the report you want to edit.

2 Select the level you want to add the filter to from the Level drop-down menu at the top of the design surface.

3 Click the Level tab.

4 Click the Add Group Filter button. The Add Filter window opens.

5 Enter field information described in Add Filter Window Description.

Important The filter options for group filters are identical to those for filters applied to the overall report. However, you generally want group filters to filter on the results in the output level's aggregate column. For example, if the aggregate column in your report counts the number of unresolved incidents a staff member has with *count(incidents.i_id)*, then the group filter's expression could be *count(incidents.i_id)* > 10, to return rows for staff members with more than ten incidents.

6 Click the OK button.

7 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Selecting filter operators

The operator you select when creating filters greatly impacts the data that is returned, so it is important to understand the functionality of each operator. The types of operators available for a filter depend on the data type of the filter's expression. The following table describes all available operators.

Table 269: Filter Operators Description

Operator	Description
equals	The expression matches the value exactly, including case. **Note:** When using this operator with menu fields, you can quickly locate the menu item you want by typing the first few characters of the item's name. Menu items that do not start with the text you type are removed from the list.
not equals (exclude No Value)	The expression does not match the value exactly, including case. This operator excludes any values of No Value (Null). For example, a report with a filter of `field X not equals (exclude No Value) Y` cannot return any records with a value of Y or No Value in field X. **Note:** When using this operator with menu fields, you can quickly locate the menu item you want by typing the first few characters of the item's name. Menu items that do not start with the text you type are removed from the list.
not equals (include No Value)	The expression does not exactly match the value, or is No Value (Null). For example, a report with a filter of `field X not equals (include No Value) Y` cannot return records with a value of Y, but does return records with a value of No Value. **Note:** When using this operator with menu fields, you can quickly locate the menu item you want by typing the first few characters of the item's name. Menu items that do not start with the text you type are removed from the list.
less than	The expression is less than the value.
less than or equals	The expression is less than or equal to the value.
greater than	The expression is greater than the value.
greater than or equals	The expression is greater than or equal to the value.

Table 269: Filter Operators Description (Continued)

Operator	Description
between	The expression is between two specified values. The between operator is available to use with date, currency, and numeric (integer and float) expressions. **Note:** When using this operator with a date expression, records matching the beginning value's date and time are returned, but those matching the ending value's date and time are not. This prevents records from being displayed twice on a report that is run once to view records created between 9:00 AM and 10:00 AM, and run again to view records created between 10:00 AM and 11:00 AM, for example.
like	The expression matches any part of the value. When using the Like operator, you should use the % wildcard symbol to offset your value. For example, if you were looking for all fields that contain "all," you should type %all% in the field.
not like	The expression does not match any part of the value. Wildcard characters are supported.
not like or null	The expression does not match any part of the value, or is a null value. **Note:** This operator is not available in run-time selectable filters.
in list	The expression values you want to search for are specified by selecting check boxes in a menu. The selected options are displayed in a separate Selected Items list to assist you when selecting from menus with a large number of options. **Note:** When using this operator with menu fields, you can quickly locate the menu item you want by typing the first few letters of the value you want in the filter's Search Text field. To view the menu options you have selected from a long menu list, click the splitter bar to the right of the list. **Note:** When using this operator with integer fields, the numbers in the Value field must be comma-separated. When using this operator with text fields, the text strings in the Value field must be comma-separated and each text string must be offset by single quotes (for example, `'red','green','orange'`). Spaces between entries are ignored.

Table 269: Filter Operators Description (Continued)

Operator	Description
not in list	The expression values you do not want to search for are specified by selecting check boxes in a menu. The selected options are displayed in a separate Selected Items list to assist you when selecting from menus with a large number of options. This operator is available only with menu field expressions. **Note:** When using this operator with menu fields, you can quickly locate the menu item you want by typing the first few letters of the value you want in the filter's Search Text field. To view the menu options you have selected from a long menu list, click the splitter bar to the right of the list. **Note:** When using this operator with integer fields, the numbers in the Value field must be comma-separated. When using this operator with text fields, the text strings in the Value field must be comma-separated and each text string must be offset by single quotes (for example, `'red','green','orange')`. Spaces between entries are ignored.
is null	The expression has a null value. **Note:** This operator is not available in run-time selectable filters.
is not null	The expression does not have a null value. **Note:** This operator is not available in run-time selectable filters.
Complex Expression	The expression matches any part of the value. This operator allows wildcard searching using an asterisk (*) at the end of a word or partial word and a tilde (~) before a word to perform a similar phrases search on that word only. Refer to Using special characters when searching.
Not Complex Expression	The expression does not match the complex expression in the value. The Not Complex Expression operator is available only with text field expressions.

Defining logical expressions

When you add multiple fixed or **run-time filters** at the same level in a report, the filters are automatically joined together with a logical expression. This defines how the filters should work together to return data. By default, the logical expression uses Boolean AND logic rather than OR logic. If you have a filter of *incidents.status_id = Solved* and a filter of *inci-*

dents.queue_id = *Queue A*, the logical expression is *incidents.status_id* = *Solved* AND *incidents.queue_id* = *Queue A*. This expression would result in the report returning only solved incidents that are in Queue A.

If the default logical expression does not suit your needs, you can modify the expression from the Edit Logical Expression window. You can also delete, edit, and add filters from this window if you decide your existing filters need to be changed while editing the logical expression. Report filters, level filters, and group filters are joined with separate logical expressions, though each expression is edited in the same manner.

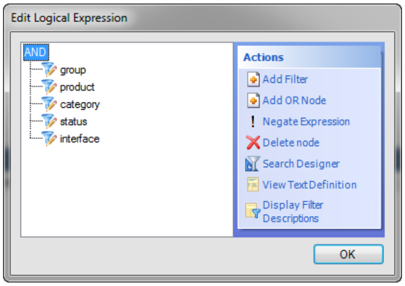
To edit a logical expression

1 Open the report you want to edit.

2 Open the Edit Logical Expression window for the report filters, level filters, or group filters, depending on the type of filters you want to change the expression for.

a To open the Edit Logical Expression window for report filters, click the Home tab and click the Filters button.

b To open the Edit Logical Expression window for level filters or group filters, select the report level you want from the Level drop-down menu at the top of the design surface. Click the Level tab and then click the Level Filters or Group Filters button.



When you add filters, they are automatically joined with AND logic and display in an AND tree. Run-time selectable filters are displayed in the tree along with **fixed filters**, which have an icon displaying a lock.

3 To add a filter joined with OR logic to the logical expression.

a Click Add OR Node. The node is added to the logical expression.

b Click the filter that should be joined with OR logic and drag it to the new OR node.

When you add nodes to the expression, the nodes are displayed in a tree structure, with filters displayed either under an AND node or an OR node. Filters under the same AND node are joined to each other using AND logic. Filters under the same OR node are joined to each other using OR logic.

4 To negate a filter, select the filter and click Negate Filter. To negate a node in the expression, select the node and click Negate Expression.

   A negated filter or node displays on the Edit Logical Expression window with an exclamation mark. Negated filters and nodes add NOT logic to the filter. For example, if your filter is *incidents.status_id=Solved* and you negate the filter, the filter becomes *incidents.status_id NOT= Solved*.

5 To add a new filter, select the node you want to add the filter to and click Add Filter. Refer to Creating report filters.

6 To edit a filter, select the filter you want to edit and click Edit Filter. Refer to Creating report filters for information about editing filters.

7 To delete a filter, select the filter you want to remove and click Delete Filter.

Note If the filter you delete uses a table that is no longer needed in the report, you should remove the table from the report to help the report run efficiently. Refer to Editing data set properties.

8 To display the filters' field definitions rather than their names, click Display Filter Descriptions. The Edit Logical Expression window is updated to display the filters' definitions. To display the filters' names again, click Display Filter Names.

9 To view a text definition of the current filters' logical expression, click View Text Definition.

10 Click the OK button to close the Text Definition window.

11 Click the OK button on the Edit Logical Expression window to save the logical expression.

12 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Combining run-time selectable filters

When your report includes multiple **run-time selectable filters** that expect the same type of search input, you can combine the filters to display a single search field on the report's Search window or **docked filters**. This lets report users enter one search value to search by two or more filters simultaneously. For example, you could have one search field to search by contacts' first names, last names, and organizations' names.

The combined filters can be joined using AND or OR logical expressions. Using AND logic, the search value you enter must match values in all the combined fields to return results. Using OR logic, the search value you enter needs to match a value in only one of the combined fields. By default, filters are joined using AND logic. Refer to Defining logical expressions.

Run-time selectable filters that have the same data type, operator, and search options, such as items in a menu field, can be combined. You can combine multiple report filters and multiple level filters, though you cannot combine report filters with level filters.

To combine run-time selectable filters

1 Create a run-time selectable filter. Refer to Creating report filters.

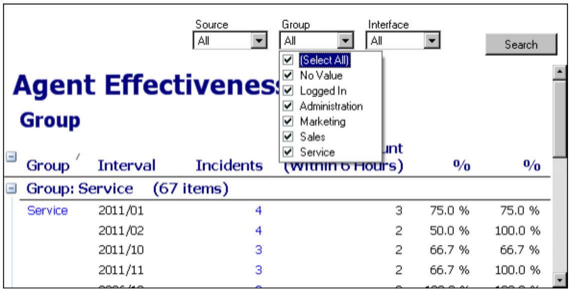
2 Create a second run-time selectable filter.

Important This filter must have the same name as the other filter you are combining. In addition, the two filters must use the same operator and must be of the same data type. For example, you can combine two integer fields, but you cannot combine an integer field with a menu field.

Docking variables and run-time selectable filters

When you open a report or output level with variables or run-time selectable filters, you can select the variables' or filters' values from one of three locations.

- If variables or run-time filters are required, the Search window automatically opens when the report is opened and you must enter values for the variables or filters.
- If run-time filters are present, but not required, you can click the Search button on the report's Home tab to open the Search window. Refer to Opening reports.
- If variables or run-time selectable report or level filters are added to an output level's **docked filters**, you can select variable and filter values at the top of the report. Docked filters in a sample report are shown in the following figure.



To add variables or run-time filters to an output level's docked filters

1. Open the report you want to edit.
2. Click the Home tab.
3. Click the arrow on the Views button and select Data Set View.

Tip Using the data set view, you can see every filter and variable in your report, and you can select them on the design surface for editing.

4. Click a filter or variable on the design surface.
5. Click the Design tab.
6. Select the Display in Docked Filters check box.

Tip You can double-click docked filters and variables shown on the design surface to open them for editing.

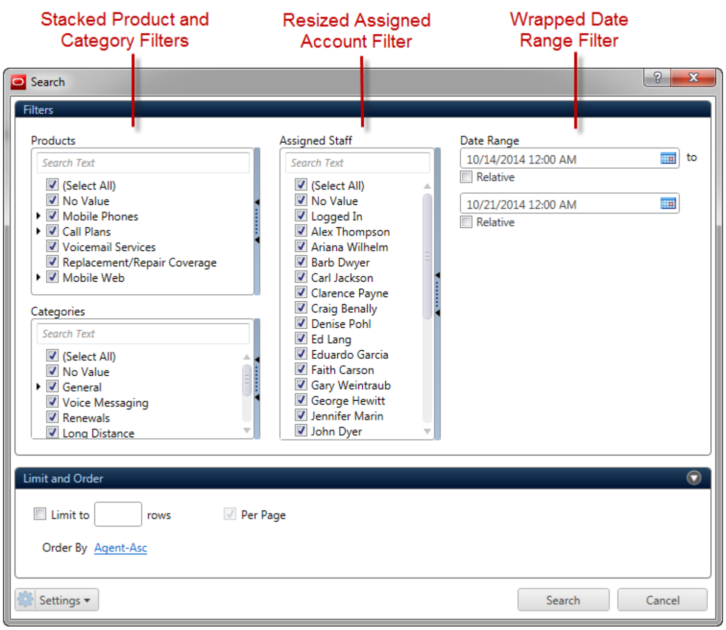
7. Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

When you run your report or view it using a different view, the filters and variables you selected in the Docked Filters report section display at the top of the report.

Customizing the Search window

The Search window you use to search for information in a report or **dashboard** displays the variables and run-time filters configured for it. By default, the controls for the filters and variables have fixed sizes and are grouped by the type of input field they use. For instance, filters for text fields are grouped together as are filters for menu fields. The contents of each group are further arranged according to the operators used by each field in the group. The controls on a dashboard's Search window are also grouped by the items common to all reports on the dashboard and those that are report specific (refer to Searching dashboard reports).

If the default layout of your report's Search window does not meet your needs, you can resize and organize the window's contents to ensure that they display as you want them to. For example, you can place the filters you regularly use before the filters with default values you seldom change. In addition, you can manage whitespace on the window by stacking smaller filters and wrapping date range filters. A customized Search window indicating some of these options is shown here.



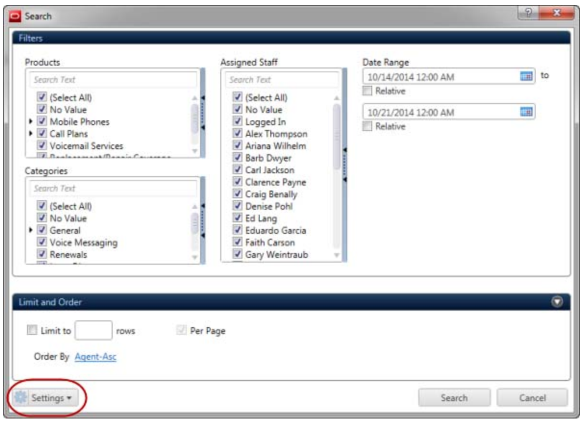
When you customize a Search window layout from the report or dashboard design center, the layout you save is used as the default layout for all users of the report or dashboard. However, they can also customize the layout and then save it to their local workstation so they see the same layout when they next open the report or dashboard.

Note If you define a custom layout for a report that is later modified on the report designer, any changes made to the report will not overwrite the layout you define. If new filters are added to the report, they will display last in the user's customized layout, and any filters deleted from the report will disappear from the layout.

To customize the Search window

1 Open the search designer.

a To open the search designer when viewing a report or dashboard, open the Search window and click the Gear button next to Settings. Refer to Searching in reports and Searching dashboard reports.



Or

Click Settings and select Enter Search Design Mode.

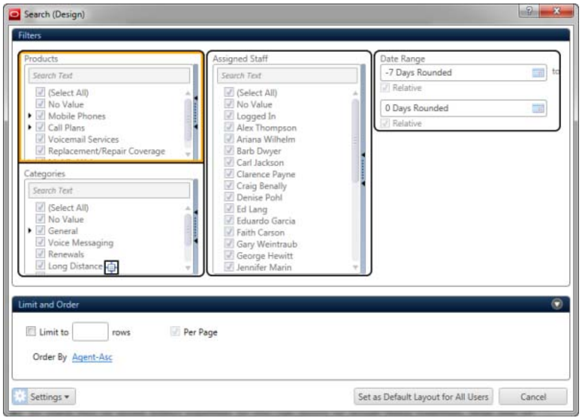
b To open the search designer when editing a report, add the filters you want to the report, click the arrow on the Home tab's Filters button, and select Search Designer.

Or

Click the Filters button on the ribbon's Home tab to open the Edit Logical Expression window and click Search Designer.

c To open the search designer when editing a dashboard, click the Parameters Values button and click the Gear button next to Settings. Dashboard filters are grouped by filters common to multiple reports and filters unique to individual reports. When configuring the search layout for a dashboard, you cannot move filters between the groups.

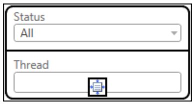
A search designer with several filters is shown here.



2 To move a filter, hover over it. The active filter is outlined and the cursor displays as positioning arrows. Drag the filter to the position you want. Blue indicators display, showing you where the filter will be placed.

3 To resize a filter, hover over a border of the filter and then drag the border until the filter is sized as you want.

4 To stack two or more filters together so you can move or resize them together, drag one of the filters immediately below another. An icon displays at the bottom of the stack, as shown here.



a To move the stacked filters as a group, click the icon and then drag the filters where you want.

5 To save the layout you configured when editing a report or dashboard, click the Set as Default Layout for All Users button. The search designer closes. Once you save the report or dashboard, the layout is saved to the report's or dashboard's definition.

6 To save the layout you configured for a report or dashboard you are viewing, click the Set as Default Layout button. The search designer closes and the layout you configured is saved to your workstation.

Creating join filters

You can create join filters to filter data in tables that are joined to the primary table with an outer join. Join filters are fixed and cannot be changed when the report is run. Join filters are similar to report filters in that they set restrictions on the records that can be returned by the report, but they apply to the table join rather than to the data that is returned by the query on the database. Join filters limit the data contained in the secondary table of the table join. Without join filters, there would be no way to add a report filter to limit returned data from the secondary table, while not preventing data from the primary table from being returned.

Note From an SQL perspective, join filters are a condition of the ON clause, whereas report filters are a condition of the WHERE clause.

For example, suppose you want your report to return a list of organizations and the number of incidents they have opened before January 1st. You also want to return any organizations even if they have not submitted any incidents, so you need to join the *incidents* table to the *organizations* table with an outer join. Using an inner join would prevent organizations that have no associated incidents from being returned in the report. You would then add a join filter of *incidents.created* < *January 1st*. If you also wanted incidents created after March 1st, you would add an OR join filter of *incidents.created* > *March 1st* to the first filter. The resulting join filters definition would be *incidents.created* < *January 1st* OR *incidents.created* > *March 1st*.

The method of adding join filters is similar to that for adding report filters. However, unlike report filters, join filters allow you to use either a constant value, as report filters do, or an expression you create from the database fields and the functions. Click here for function descriptions.

To create join filters

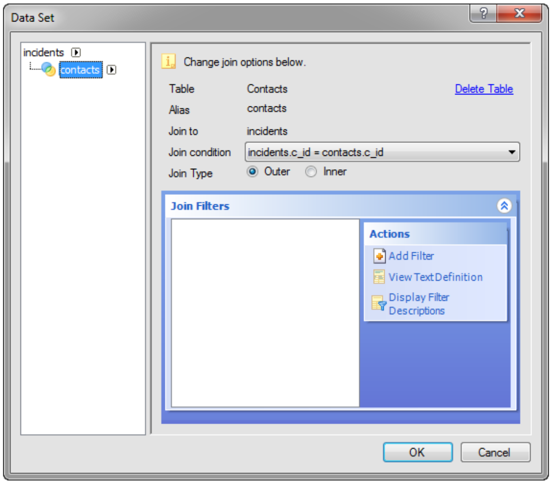
1 Click the Home tab while editing a report that has multiple tables.

2 Click the Tables button.

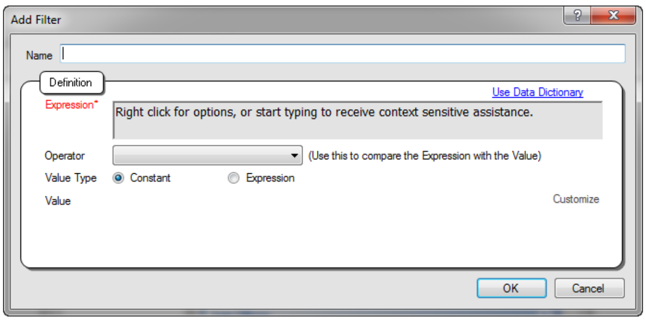
3 Select the table you want to add a join filter to.

4 Click Join Filters. The Data Set window displays the Join Filters section.

Important Join filters are not applicable to tables joined with an **inner join**. Tables joined with an inner join do not have the Join Filters option.



5 Click Add Filter to open the Add Filter window.

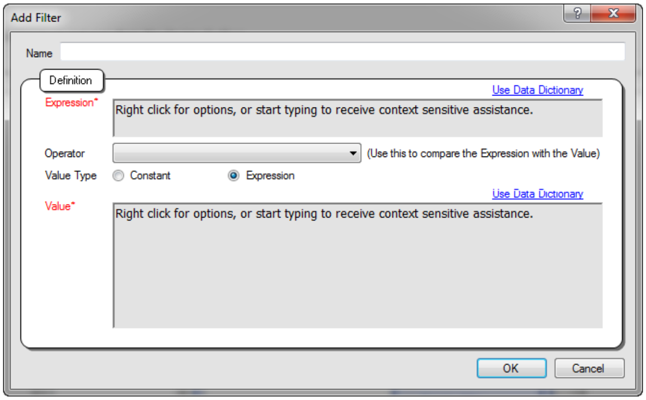


6 Enter the expression for the join filter.

Or

Click Use Data Dictionary to open the data dictionary where you can define the filter’s expression.

7 To use an expression filter value, select the Expression radio button. The Add Filter window then displays a Value field.



8 Enter the expression in the Value field.

Or

Click Use Data Dictionary to open the Edit Expression window, from which you can create the value's expression using database fields, functions, and variables listed in the data dictionary.

Note Currency fields are not available for use in join filters.

9 Click the OK button to save the join filter.

Once you add a join filter, the Data Set window is updated to display the filter, along with additional actions that are identical to those used when creating **logical expressions** for report, group, and level filters. These actions allow you to edit your filter, create additional filters, add OR logic to the join filters, negate filters, view a text definition of the join filters' logical expression, and toggle between the filters' descriptions and names. Refer to Defining logical expressions.

Adding additional output levels

Once you configure the primary output level in your report, you can add additional output levels, also referred to as drill-down levels, that contain details about records in the first level. These secondary levels are configured just like the primary output level and are accessed by clicking on records in the first level that act as links. You can have multiple drill-down levels in your report which can be linked to from the same output level or from sub-levels of the primary output level. Refer to Drilling down in reports.

Tip You can also add drill-down functionality to reports by linking reports together. Refer to Linking reports.

When adding drill-down levels to reports, you can group data in one output level and then create a drill-down level with more information about the group's data. You can also create **comparison periods**, graph data trends, and specify **data exceptions**, and choose to graph your data and specify the type of chart used in the report.

For example, you could create a report listing all unresolved incidents in your knowledge base grouped by the queue they are associated with. The report's first output level could display every queue and the number of unresolved incidents in the queue. You could then create a second output level to display incident details when drilling down on a queue's name, or on the number of unresolved incidents in the queue.

Tip Each report can have up to fifty output levels.

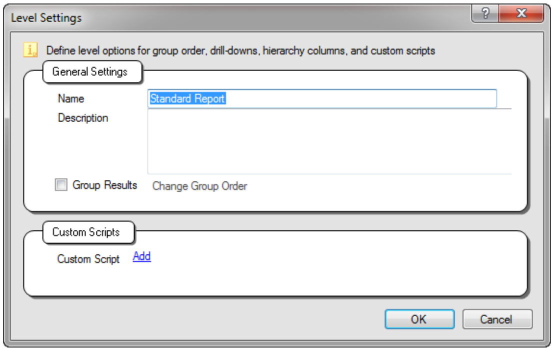
Result grouping

Grouping data in an output level allows you to combine records with similar data into one row. Output levels with grouped data often have additional output levels added to them, so you can drill down into another output level to view details about the grouped records. When you group data, you can order the grouped columns to best suit your needs when you create drill-down output levels.

Important When you add an aggregate column to an output level, grouping is automatically enabled in the output level. For example, if you were to add a column with an expression of *count(incidents.i_id)* to an output level to see how many incidents a contact has, the output level would automatically be grouped since you are using a **function** to group records together in the column.

To enable grouping in an output level

1. Open the report you want to edit.
2. Select the output level you want to edit from the Level drop-down menu at the top of the design surface.
3. Click the Level tab.
4. Click the Edit button to open the Level Settings window.



5. Select the Group Results check box.
6. Click the OK button.

7 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Changing group ordering

When data is grouped in a level, it is automatically grouped in the order in which the columns are listed in the output level. If you add a drill-down level to the output level, the filter options for the drill-down level are also listed in this order.

For example, if an output level has columns for Reference #, Subject, and Status Type in that order, the output level's data are also be grouped in that order. If you then add a drill-down level and configure the level settings, the options in the Filter drop-down menu are listed in the following order.

- incidents.ref_no
- incidents.ref_no, incidents.subject
- incidents.ref_no, incidents.subject, incidents.status_id

Group ordering does not affect the rows displayed in the grouped output level. It instead affects the ordering of the drill-down filters on the output level that you drill down into. The order of the drill-down filters in an output level impacts what records can be viewed when drilling down into the level. For example, a drill-down level with *incidents.ref_no* as the first group item in the drill-down filter would have limited usefulness. This is a unique field, so multiple incidents cannot be grouped together based on this field.

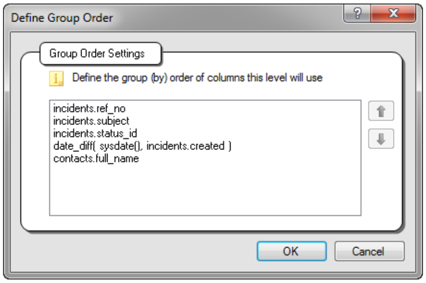
Note Unique fields contain values that only a single record in the database can have. Some examples of unique fields are the Reference #, Contact ID, and Organization ID fields.

If *incidents.ref_no* was the first ordering field for a drill-down level, it would return only information related to the particular incident you drilled down on. If you wanted to drill down on all incidents grouped by a different field, such as the incidents' status, you would need to reorder the grouping so *incidents.status_id* is grouped first.

To change group order

1 Select the Group Results check box on the Level Settings window. Refer to To enable grouping in an output level for information about the window.

2 Click Change Group Order to open the Define Group Order window. The window is populated with the columns included in the output level.



3 Select the field in the list that you want to move.

4 To move the field higher in the list, click the up arrow.

5 To move the field lower in the list, click the down arrow.

6 Click the OK button to save the order.

Adding output levels

Once you configure your primary output level, adding a drill-down output level is simple, requiring only that you identify the column to filter on and the column(s) to link from in the parent output level. By default, the new output level displays the same report sections shown on the parent level, such as the charts and data area sections, though you can select different sections to display on the new level from the ribbon. You can add content such as text fields, charts, and columns to the new output level just as you did in the primary output level.

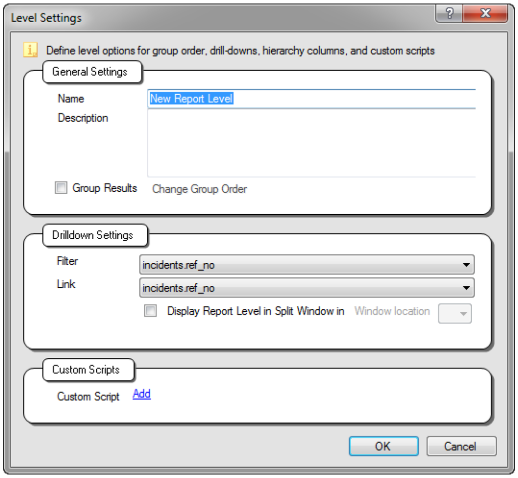
To create an additional output level

1 Open the report you want to edit.

2 Select the parent level you want to add the new output level to from the Level drop-down menu at the top of the design surface.

3 Click the Level tab.

4 Click the Add Drilldown button to open the Level Settings window with drill-down options.



5 Enter the following field information.

Table 270: Level Settings Window Description

Field	Description
Name	Type the name of the new level in this text box.
Description	To add an optional description for the output level, type the description you want in this text box. The description displays in the level's Output Descriptions section. Refer to Adding output and search criteria descriptions.
Group Results	This check box is not used when initially creating new output levels. Refer to Result grouping.
Drill-Down Settings	This section defines the data and the link in the parent output level you use to open the drill-down output level.
Filter	Click this drop-down menu to select the output column or columns to use as the filter for the new level. The drill-down filter determines the data set displayed in the drill-down level.

Table 270: Level Settings Window Description (Continued)

Field	Description
Link	Click this drop-down menu to select the output column that you click to open the drill-down level. You can also select Entire Row to open the drill-down level by clicking anywhere on a row in the parent output level. **Note:** If you want to drill down into another report level instead of opening a specific record when a value from the record is double-clicked on a report, select Entire Row as the drill-down link. When configuring record commands for the report, select None from the Default Record drop-down menu. Refer to Customizing record commands.
Display Report Level in Split Window	Select this check box to open the drill-down output level in a split window on the content pane. This results in the parent output level remaining visible on the other part of the content pane.
Window Location	When you select the Display Report Level in Split Window check box, you can then select the position where the split window should open. Click this drop-down menu to select Top, Bottom, Left, or Right.
Custom Script	This section allows you to create, edit, and remove custom scripts to modify the output level's output. Refer to Adding custom scripts to output levels.
Add	Click this text to add a custom script to the output level.
Edit	Click this text to edit an existing custom script. **Note:** This option is available only when a custom script has been added to the output level.
Remove	Click this text to delete an existing custom script. **Note:** This option is available only when a custom script has been added to the output level.

6 Click the OK button to save the output level.

7 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Configuring recursive drill-down levels

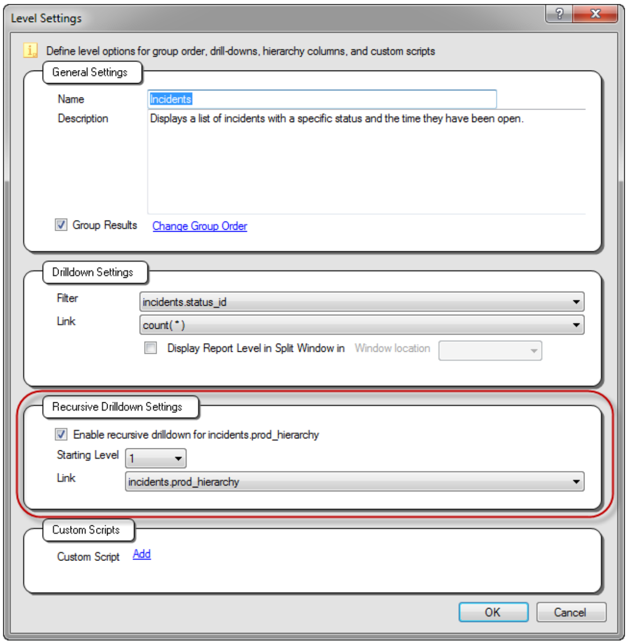
You can **drill down** recursively on hierarchical items (for example, accounts, products, and categories). Recursive drill-down allows you to start at specified levels of a hierarchy and become more specific at each lower level as you drill down into it. This feature enables automatic links for hierarchical items so you can access additional levels of detail when viewing a report.

You can enable recursive drill-down only for a level that has a hierarchical output column. If an output level has a hierarchical output column and you do not enable recursive drill-down for the level, then only data for the output column's first level can be displayed. A level can have both regular and recursive drill-down enabled, but the **drill-down links** cannot be the same.

To configure recursive drill-down levels

1 Create a report output column from a hierarchical item (for example, *accounts.hierarchy* or *incidents.prod_hierarchy*).

2 Click the Level tab and click the Edit button. The Level Settings window opens with recursive drill-down options.



The recursive drill-down feature is automatically enabled. To disable the feature, clear the Enable Recursive Drilldown check box.

3 Click the Starting Level drop-down menu and select the starting point for the drill-down level. For example, starting level 1 would be the top product in your list of products. Starting level 3 would be three sub-products down from the parent product.

4 Click the Link drop-down menu and select the output column you want as the drill-down link in the report. By default, this is the hierarchical item.

5 Click the OK button to save the recursive drill-down settings.

Adding custom scripts to output levels

You can add custom scripts to your output levels to further manipulate the data in your report. For example, a custom script could be used to convert a row of data into a table, remove unwanted data, or create a link to another web page.

Tip When troubleshooting reports, it can be helpful to remove or disable custom scripts since these can modify the reports' appearance and functionality.

PHP scripting language must be used when defining a custom script. PHP is a free, open-source scripting language and interpreter, similar in many ways to JavaScript and Microsoft's VBScript. Like other scripting languages, PHP allows server-side scripting to be embedded inside client scripting. We recommend that you do not attempt to create custom scripts unless you are familiar with the PHP language and programming concepts. For documentation and information, refer to the official PHP site.

Important Custom scripts cannot include direct SQL statements.

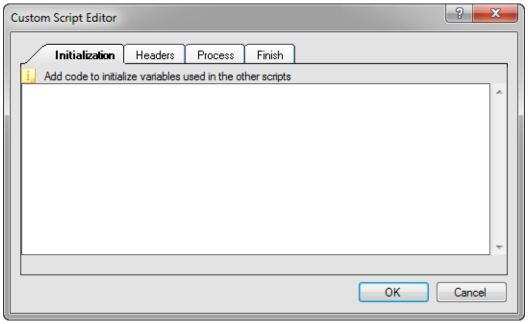
To create a custom script

1 Open the report you want to edit.

2 Select the output level you want to add the custom script to from the Level drop-down menu at the top of the report design center.

3 Click the Level tab.

4 Click the Custom Scripts button to open the Custom Script editor. If the output level already has a custom script, the editor displays the custom script for editing.



5 From the Initialization tab, type the script executed before the report is processed. This script is executed once when the report starts to process.

Important If the report is to be scheduled (refer to Scheduling reports), add the following to the Initialization pane to ensure the custom script runs correctly when recipients open the report.

```
putenv('TEMPORARY_RNW_CONF_DIRECTORY');
```

6 Click the Headers tab.

7 Type the script that runs during the start process. This script is called once while passing the column headings. The $headers parameter is an array that contains the column headers for the report. For example:

```
Array
(
 [0] => Account ID
 [1] => Full Name
)
```

You could manipulate this array by changing, adding, or removing column headers. The resulting array displays as column headers in the report.

8 Click the Process tab.

9 Type the script that runs while the report is generating. This script is called with each row passing the row data. The $rows parameter is a nested array, allowing you to return a “table” of data rather than just a row. Initially, the $rows parameter contains only data in

the first row of the table ($rows[0] [$i]). Each data cell contains a val variable that holds the value of the data cell. It can also contain a URL variable that contains a link for the data cell.

10 Click the Finish tab.

11 Type the script that runs during the exit process. This script is called after the rows have been processed. The Finish script returns data in the $exit_obj variable, which is added to the report after each row of the Process script.

12 Click the OK button to apply your custom script to your output level.

13 To remove a custom script, click the Level tab, click the Edit button, and click Remove. Click Yes at the removal confirmation.

14 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Linking reports

Just as you can drill down into different levels within a report, you can also drill down into another report or dashboard using report linking. You can create links to a report or dashboard from numerous reports, allowing you to use a single report or dashboard as a drill-down for a number of separate reports. Linking reports is particularly beneficial when you need to create multiple reports with identical drill-down levels, since you can create a single report and link to it instead of re-creating identical levels in multiple reports.

Since linked reports do not need to use the same database tables, you can access a large amount of data by linking to a number of reports from a single parent report. Conversely, a single report with multiple output levels must include all the database tables used by any of the report levels, so is more likely to run slowly or encounter limitations in the amount of data that can be queried. By linking reports that each use a smaller data set, you are far less likely to encounter data limits or negatively impact analytics performance.

Using report links

When a report link is created, it is applied to a specific column in the parent report. When you click the link in the column, the linked report opens on a new tab, an existing tab, or on the same tab as the parent report in a split window, depending on how the report link is configured. You close a linked report or dashboard by closing the tab or clicking the Top Level link in the report.

Since report links are specific to columns, you can have several links to reports and dashboards in the same report. Your report can also include drill-down links to other levels in the same report. Report links can be added to any of the output levels in the parent report, allowing you to link to a large number of reports and dashboards from one report.

While report links are easy to use, there are some considerations before adding them to reports.

- Report links function normally when they are added to workspaces, but the links are unavailable if the reports are used in workspace relationship items. Refer to Working with report controls for information about using reports in workspaces.
- Just as with drill-down links to other report levels, report links are unavailable when a report is forwarded, exported, published, or sent as a scheduled report. Refer to Distributing reports and dashboards.
- Report links are unavailable when the columns they are in are rolled up. Refer to Displaying rollup levels.
- While you can create links to dashboards, you cannot link to a dashboard from a report that is being viewed in a dashboard. Links to dashboards are unavailable when the reports they are in are viewed in a dashboard.
- You can create links to public or private reports and dashboards. Staff members with permission to view the parent report can view any reports or dashboards linked to from the parent report, whether they are public or private. Because of this, you should be familiar with the content of the report or dashboard you are linking so staff members are not able to access sensitive information.
- You cannot create report links from columns that display values from hierarchical fields, such as the *incidents product hierarchy* field. In addition, columns can be associated with a report link or with a drill-down level in the report, but not both.
- If a report or dashboard is deleted, any links to that report or dashboard are automatically disabled, but the reports containing the links continue to function normally.

Creating report links

Before you create report links, you should be familiar with the variables and run-time selectable filters in the reports or dashboards you are linking to since you define the values you want to use for these every time you create a report link. In addition, you should know whether you want to use unconditional or conditional links.

- **Unconditional links**—Use an unconditional link to open a specific report or dashboard when you drill down on any value in the parent report's linked column. The content in the linked report or dashboard vary depending on the report's variables and filters and the value you drill down on, but the same report or dashboard is linked to regardless of the value selected in the parent report's column. This functionality is similar to drilling down on a value in a column to open another report level.
- **Conditional links**—Use conditional links to open different reports or dashboards depending on the value you drill down on in the parent report's linked column. For example, if a column in your parent report lists contacts' SLAs (**service level agreements**), you could add a conditional link for each unique SLA listed in the column. When you click one of the SLAs in the column, a report that shows information specific to that SLA would open. Just as with unconditional links, the content in the linked reports or dashboards can vary depending on the values you specify for the linked reports' variables and filters.

You create links using the Report Linking wizard or the Conditional Report Linking wizard. The wizards are similar, though the Conditional Report Linking wizard includes an additional step. In addition, the ordering of conditional links is important.

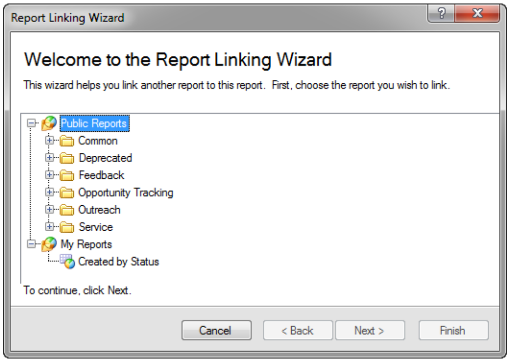
To create an unconditional report link

1 Open the report you want to create the link from on the report design center.

2 If your report has multiple output levels, select the report level where you want to create the link.

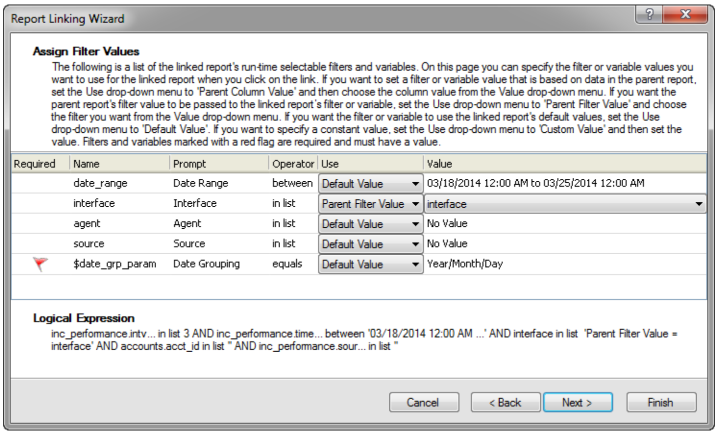
3 Select the column where you want the link to display. It does not need to be the column with the data used to filter shown on the linked report.

4 Click the Report Linking button on the ribbon's Design tab and select Add Report Link. The Report Linking wizard opens.



The first page of the wizard shows you the reports and dashboards you have access to, excluding published reports. You can create links to any of the reports or dashboards shown on the page, including those that are private.

5 Select the report or dashboard you want to link to and click the Next button.



Once you select the report or dashboard you want to link to, you select the values you want to use for the report's or dashboard's variables and run-time selectable filters. The values you specify are applied to the linked report or dashboard when it opens. Required variables and filters are indicated with a red flag and you must set a value for these. You can also choose to define values for items that are not required.

Important The values you specify determine the information shown in the linked report when it opens. You generally want to use a value that corresponds to the value clicked in the parent report to display data related to the value in the parent report.

6 Select the type of value you want to use for the linked report's or dashboard's variables and filters from the Use drop-down menu. The value types you can choose from are described in the following table.

Table 271: Variable and Filter Value Types Description

Type	Description
Parent Column Value	Select this option to use the values in the parent report's selected column to populate the linked report's variable or filter. When you click the link on a row in the parent report, the column's value from the selected row is used as the linked report's variable or filter value. **Note:** This option is available only when the parent report includes a column with the same data type, such as text, integer, or menu, as the linked report's variable or filter.
Parent Filter Value	Select this option to populate the linked report's variable or filter with the current value from one of the parent report's filters. **Note:** This option is available only when the parent report has filters with the same data type and operator as the linked report's variable or filter.
Parent Variable Value	Select this option to populate the linked report's filter with the current value from one of the parent report's variables. **Note:** This option is available only when the parent report has variables with the same data type and operator as the linked report's variable or filter.
Default Value	Select this option to use the default variable or filter value specified in the linked report for the variable or filter value.

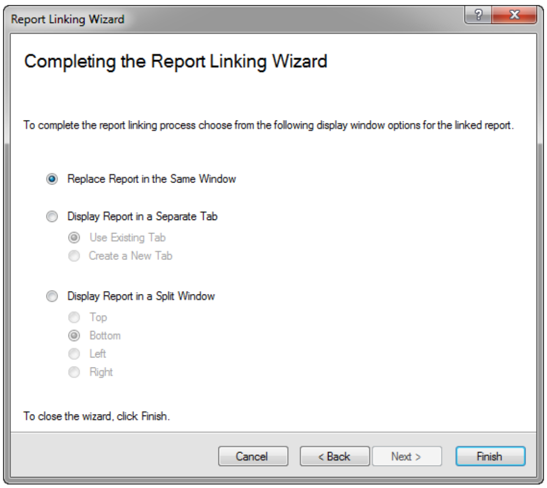
Table 271: Variable and Filter Value Types Description (Continued)

Type	Description
Custom Value	Select this option to specify a custom value for the variable or filter. The values you can enter depend on the data type and available options. For instance, if a filter uses a text field, you can type the text you want to use for the filter's value. If a filter uses a menu field containing staff accounts, you select the staff accounts you want from a menu.

7 From the Value drop-down menu, select the parent report's column, variable, or filter you want to use to populate the variable or filter in the linked report or dashboard. If you choose a custom value, you enter the custom value you want in the Value field.

Note When you select values for the linked report's variables and filters, the logical expression displayed at the bottom of the window is updated to reflect the values you select. This is the expression that is passed to the linked report or dashboard when you click the link. This information is displayed for reference and cannot be edited.

8 Click the Next button. The wizard presents options for specifying where you want the linked report to open.



9 Select the radio button next to the option you want to use to display the linked report or dashboard. The available options are described in the following table.

Table 272: Linked Report Display Options Description

Radio Button	Description
Replace Report in the Same Window	Select this radio button to close the parent report and display the linked report instead.
Display Report in a Separate Tab	Select this radio button to open the linked report on a separate tab on the content pane.
Use Existing Tab	Select this radio button to open the linked report on an existing tab each time you click the link. The tab is created the first time you click the link. When you open the report again from the same link, the report displays on the same tab.
Create a New Tab	Select this radio button to open the linked report on a new tab each time you click the link.
Display Report in a Split Window	Select this radio button to open the linked report in a split window. The parent report remains open on one half of the window, and the linked report displays above or below the parent report, or to the left or right of the parent report.
Top/Bottom	Select these radio buttons to display the linked report above or below the parent report.
Left/Right	Select these radio buttons to display the linked report to the left or right of the parent report.

10 Click the Finish button to save your changes.

11 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

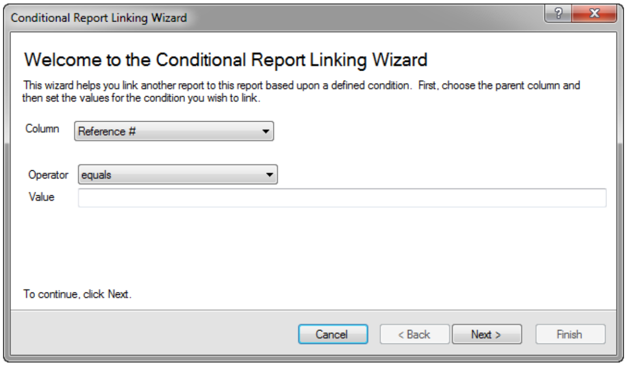
To create a conditional report link

1 Open the report that you want to create the link from on the report design center.

2 If your report has multiple output levels, select the report level where you want to create the link.

3 Select the column in the parent report where you want the link to display. It does not need to be the column with the data used to create the link's condition.

4 Click the Report Linking button on the ribbon's Design tab and select Add Conditional Report Link. The Conditional Report Linking wizard opens.



On this page of the wizard, you specify the condition(s) that must be met for the link to be triggered. The link you create is activated only when a value in the parent report meets the condition(s) you specify. You can add other conditional links to the same column to open different reports or dashboards when selecting other rows in the report.

5 Click the Column drop-down menu and select the column in the parent report that you want to use to create the link's condition. The column you select does not need to be the same column the link is displayed on. For example, you can use the values in a hidden column to create the link's condition, but display the link on another column in the report.

6 Click the Operator drop-down menu and select the operator you want to use for the link. The operators displayed depend on the column's data type.

7 Enter the value you want to use for the conditional link.

8 Click the Next button. The remaining pages of the Conditional Report Linking wizard are identical to those on the Report Linking wizard. Refer to the previous procedure for descriptions of these pages.

9 To add other conditional links, repeat steps 2 through 8.

10 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

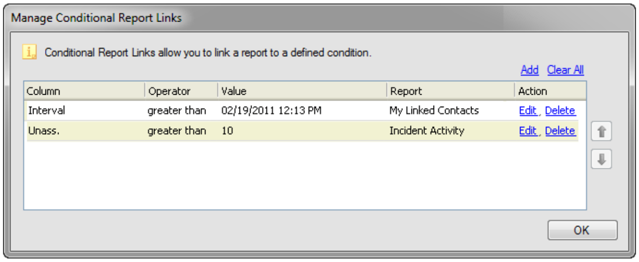
Ordering conditional links

If you create several conditional links on the same column, you may need to reorder them to ensure that links with conditions that might overlap are triggered in the order you want. While ordering is irrelevant for conditional links with exclusive conditions, it can impact which linked report or dashboard opens if you have multiple links that could match a particular column value.

To reorder a conditional link

1 Select the report column that is associated with the link and click the Report Linking button on the ribbon's Design tab.

2 Select Manage Conditional Report Links.



The Manage Conditional Report Links window shows all the conditional links that are associated with the selected column. From this window you can add, remove, edit, and reorder conditional links.

3 Select the link you want to move and click the up or down arrow to move it to the position you want. Conditional links are examined starting with the link at the top of the list. The first link that matches the column value is triggered and any other links that could match the column value are ignored.

4 Click the OK button to close the Manage Conditional Report Links window.

Editing and removing report links

Once you create conditional or unconditional report links, you can edit or remove them.

Tip You can use the standard Linked Reports and Reports with Disabled Links reports to list reports that contain links to reports and dashboards.

To edit a report link

1 Open the report that includes the link on the report design center.

2 Select the report column that is associated with the link and click the Report Linking button on the ribbon's Design tab.

3 To edit an unconditional report link, select Edit Report Link to open the Report Linking wizard. Refer to To create an unconditional report link.

4 To edit a conditional report link, select Manage Conditional Report Links to open the Manage Conditional Report Links window.

   a Click Edit next to the link you want to edit. The Conditional Report Linking wizard opens where you can edit the link. Refer to To create a conditional report link.

   b Click the OK button on the Manage Conditional Report Links window to close it.

5 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

To remove a link

1 Open the report that includes the link on the report design center.

2 Select the report column that is associated with the link and click the Report Linking button on the ribbon's Design tab.

3 To remove an unconditional link from the column, select Remove Report Link. The column's unconditional link is deleted.

4 To remove all conditional links from the column, select Clear All Conditional Report Links. All conditional links on the column are deleted.

5 To remove only some of the conditional links on the column, select Manage Conditional Report Links.

   a Click Delete next to the link you want to remove, and click the Yes button when asked to confirm the deletion.

   b Click the OK button to close the window.

6 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Configuring reports for editing records

When the rows in a report display information from unique records, such as incident reference numbers, contacts' names, or organizations' names, you can perform actions on the records using a variety of methods. You can double-click a row, click a link on the row, right-click the row and select from commands displayed on a menu, or click a button on the ribbon's Home tab to perform an action related to the highlighted record. In addition, you can edit information directly from the report without opening records using **inline editing**.

Note To edit records shown on reports, staff members' profiles must include permissions to modify the appropriate **record types**. Refer to Customizing profiles.

You can customize the actions you can perform on records when using any of these methods. You can choose the action performed when double-clicking a row and the commands available as buttons, links, and right-click menu options. You can also enable inline editing and specify the fields that can be edited directly on the report.

Note Record command options are not applied when viewing reports in workspaces. Refer to Working with report controls.

Customizing record commands

The record commands that are available on your report help your staff members work with records shown on the report. For example, staff members can open, print, and delete records using record commands. Record commands can be displayed as buttons on the report's Home tab, links displayed in a column, and as options displayed when right-clicking a row.

Using record commands, you can perform actions on the record types that are displayed in the report, but you can also perform actions on other **record types** that are related to the information displayed in the report. For example, if the report displays information about incidents, the report's record commands can be configured to perform actions on the contacts that are associated with the incidents.

You can select the record commands and record command links you want on your report and customize the actions performed when using record commands.

Note Add-ins that perform actions on records can also be added as record commands. For information about creating add-ins, refer to the Oracle Service Cloud Desktop Add-Ins Developer Guide. For information about installing add-ins, refer to Add-Ins.

Selecting record commands

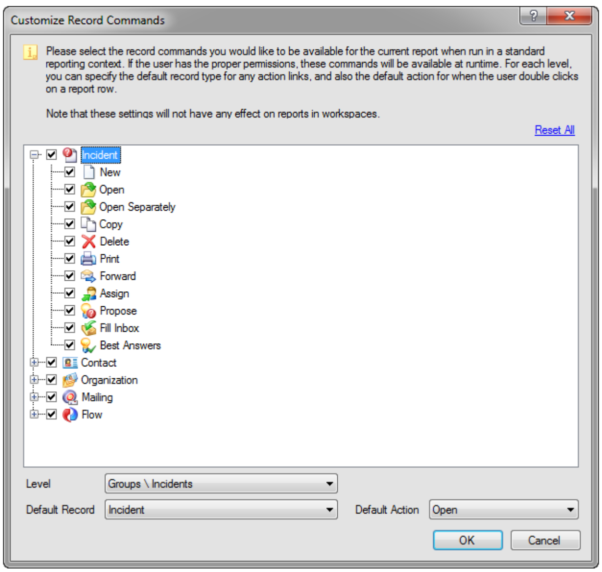
By default, every record command available for your report is enabled, with the exception of the Incident>Fill Inbox command, but you can remove record commands you do not want staff members to access. Record command buttons and right-click menu options are added automatically depending on which record commands are enabled for the report. The enabled record commands also determine which record command links are available, though these need to be added to the report manually. Refer to Adding record command links.

To select record commands

1 Open the report you want to edit.

2 Click the Home tab and click the Records button. The Customize Record Commands window opens.

Note The Records button is disabled on reports that do not have rows that display or are associated with unique records.



3 To remove a record command from the current report level, expand the record commands list to find the command you want to disable and clear the check box next to the command.

4 To restore the default record commands for all levels in the report, click Reset All.

5 Click the OK button to save your changes.

6 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Customizing record command actions

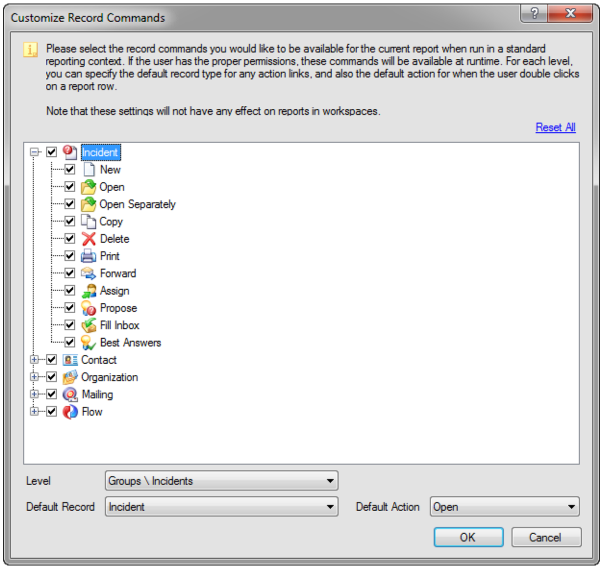
You can further customize the record commands in your report by selecting the **record type** that actions are performed on when you click record command links or double-click the report's rows. The record type you select is also used as the default record type for record command buttons and right-click menu options, though you can select any of the record types when using buttons or the right-click menu.

You can also choose the actions you want to perform when you double-click the report's rows. For example, you can choose to open a record, assign a record, or perform other actions when you double-click the row.

To customize record command actions

1 Open the report you want to edit.

2 Click the Home tab and click the Records button. The Customize Record Commands window opens.



3 To select the report level you want to configure, click the Level drop-down menu and select the report level you want. The options available on the Default Record and Default Action drop-down menus depend on the information displayed in the report level you select.

4 Click the Default Record drop-down menu and select the record type you want the record command actions to apply to.

Note The record type you select determines which links are available on the Links button on the report design center's Display tab, since different actions can be performed on different record types. Refer to Adding record command links.

a To drill down into another report level instead of opening a record when a row in the report is double-clicked, select None from the Default Record drop-down menu. The additional report level must be configured with a drill-down link of Entire Row. Refer to Adding output levels.

5 Click the Default Action drop-down menu and select the action you want performed when you double-click a row in the report.

6 To restore the default record command settings for all the levels in the report, click Reset All near the top of the window.

7 Click the OK button to save your changes.

8 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Adding record command links

When you add record command links, they are displayed in a column that is automatically added to your report. You can select the links you want to display, though the links' record commands must be enabled for the report on the Customize Record Commands window. Not all the record commands you specify for the report are available as links.

Tip When using the report, you can hide or display links that are enabled for the report from the Links button on the report's Display tab.

To add record command links to a report

1 Open the report you want to edit.

2 If your report has more than one output level, click the Level drop-down menu on the design surface and select the level you want to add links to.

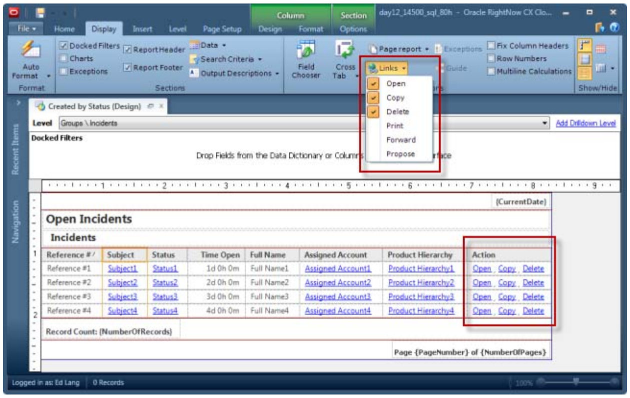
3 Click the Display tab.

4 Click the Links button and select the link you want to add to the report. When you add the first record command link to your report, the Action column is added to the report.

Note If the link you want to add to the report is not displayed on the Links button, verify that the associated record command for the link is enabled and that the **record type** you want the links to apply to is selected as the default record. Refer to Customizing record commands.

5 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

The following figure shows options on the Links button for an incidents report and the Action column where the record command links are displayed.



Enabling inline editing

When a report displays unique records, such as incidents or opportunities, the Inline Editing feature lets you edit the values in columns shown on the report without opening the records. Individual values can be edited directly from the report, or groups of records can be selected to edit values in multiple records. For example, if a report shows the staff member an incident is assigned to, you can change the assigned staff member from the report without opening the record, or you can reassign several incidents shown on the report to a selected staff member. Refer to Editing data inline.

Important You can configure inline editing in reports only if your profile includes the Modify Inline Report Editing permission on the Analytics tab. Refer to Analytics permissions.

To enable inline editing

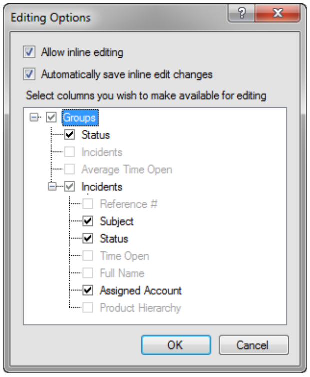
1 Open the report you want to edit.

2 Click the Home tab.

3 Click the Inline Editing button and select Allow Inline Editing. By default, inline editing is enabled for all editable columns in the report. Only certain columns, such as those containing unique values, can be edited inline.

Note **Custom objects**, other than menu-only objects, included in your report can also be edited inline. Refer to Analytics.

4 To specify the columns you want inline editing enabled for, click the Inline Editing button again and select Choose Editable Columns. The Editing Options window opens.



5 Enter the following field information.

Table 273: Editing Options Window Description

Field	Description
Allow Inline Editing	Select this check box to enable editing from the report.
Automatically Save Inline Edit Changes	Select this check box to enable the Auto Save feature by default. Refer to Saving changes to the server.
Select Columns You Wish to Make Available for Editing	Select the check boxes next to the report's columns that you want to make available for editing. **Note:** Reports with multiple output levels show all output levels in an expandable tree. Only columns that return unique, editable values from database fields are available for editing. For example, a column that returns the staff account an incident is assigned to is available for inline editing, whereas a column that returns incident creation dates or a count of incidents is not.

6 Click the OK button to save the editing options.

7 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Selecting report options

Once you create a report, you can choose which staff members can use the report, change the report's owner, set the time zone to use when the report is run, and modify other options that can impact how the report functions.

Viewing the audit log

You can open an audit log for a report to see when the report was created, edited, run, and **published**, and which staff members performed these actions. Since the audit log is a report, you can perform common report actions on the audit log, such as printing, forwarding, or slicing.

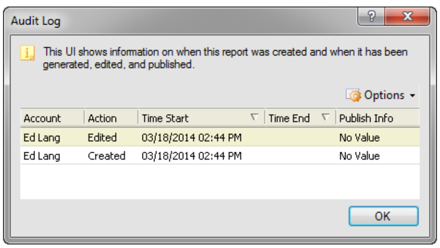
To view the audit log

1 Open the report on the report design center.

2 Click the Home tab.

Note This step is not necessary when viewing a standard report.

3 Click the Audit Log button to open the Audit Log window.



4 To access a list of actions that can be taken on the audit log, click the Options button. Refer to [Ribbon options when viewing reports](#) for descriptions of the actions.

5 Click the OK button to close the audit log.

6 Click X on the top right to close the report.

Specifying permissions

Report permissions allow you to specify which profiles can open or edit a report. You can select Open and Edit permissions for each profile defined in your system.

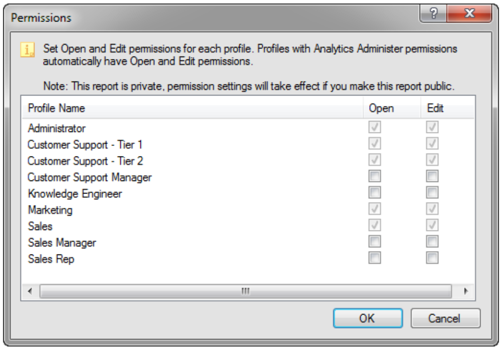
Note Permissions applied to private reports are irrelevant until the report is made public.

To specify report permissions

1 Open the report you want to edit.

2 Click the Home tab.

3 Click the Permissions button to open the Permissions window.



4 Select the check boxes next to the profile names to allow staff members assigned to the profiles to open or edit the report.

5 Click the OK button to save the permissions.

6 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Changing report properties

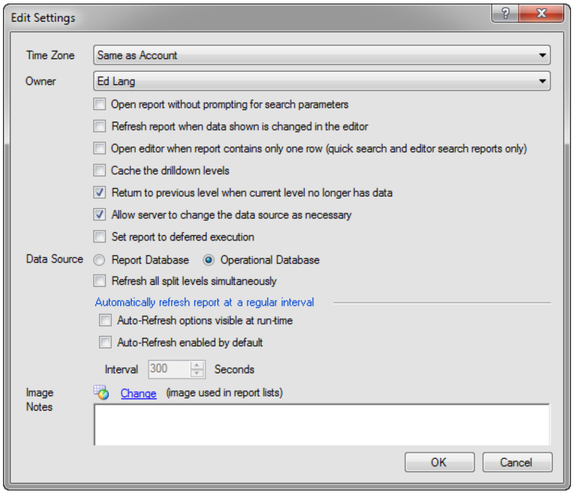
Report options allow you to select the time zone that should be used for the report, change the report's owner, and modify settings that impact how the report functions when it is opened for viewing. You can also configure automatic refresh of the data shown in the report, add notes to the report, and change the image displayed for the report in lists.

To change report properties

1 Open the report you want to edit.

2 Click the Home tab.

3 Click the Options button and select More Options to open the Edit Settings window.



4 Enter the following field information.

Table 274: Edit Settings Window Description

Field	Description
Time Zone	Click this drop-down menu to select the time zone to use with the report. The dates and times shown in the report's filters, variables, and output columns are adjusted to reflect the time zone you select. The available options include the following: • Same as Interface—The report's time zone matches the time zone set for the interface. This is the default setting. • Same as Account—The report's time zone matches that of the staff member who is running the report. Refer to Adding and editing staff accounts. • A specific time zone you can select from a list of standard time zones. **Note:** The database query used to return data in the report always uses the time zone of the interface. For example, if you select the GMT time zone for an incidents report and run it on an interface with an EST time zone, the report could return incidents with a created date of April 1st, 2011, but with reference numbers starting with 110331. This indicates that the incidents were actually created on March 31st, 2011, in the EST time zone, but the displayed date and time are adjusted to reflect when the incidents were created in the GMT time zone. In addition, if the report groups incidents by the day they were created, the same number of incidents will display each day regardless of the time zone that is used since they are grouped according to the interface's time zone.
Owner	Click this drop-down menu to select a report owner. The report owner is the only staff member who can view or edit the report, unless the owner grants permissions to other profiles. Refer to Specifying permissions. **Note:** Changing the owner of a private report makes the report unavailable to the previous owner.
Open report without prompting for search parameters	Select this check box to have the report automatically run and return data when it is selected from a navigation list. The report uses the default values specified in the report's filters. **Note:** This option is referred to as Initial Run on the Reports explorer's Find menu. Refer to Searching in explorers for information about finding reports.

Table 274: Edit Settings Window Description (Continued)

Field	Description
Refresh report when data shown is changed due to an action initiated from this report	Select this check box to have the report's output automatically updated when an edit to a record is initiated from the report. The report refreshes only if a record is modified in such a way that it no longer matches the report's search criteria.
Open editor when report contains only one row (quick search and editor search reports only)	Select this check box to automatically open the record for editing when the report returns only one record. **Note:** This option applies only to Quick Search reports and reports used in workspaces.
Cache the drilldown levels	Select this check box to enable caching of data shown in report output levels. When this option is enabled, the data shown in the initial output level when you view a report is stored on your workstation. When you view a second output level and then return to the top level of the report, it loads quickly since the data you are viewing is cached on your workstation. The cache is cleared when you close the report. **Note:** When this option is not enabled, the database is queried every time you drill down to an output level or return to a previous level even if you have recently viewed the output level.
Return to previous level when current level no longer has data	Select this check box to instruct the report to automatically display the previous output level if the current output level no longer displays any records.
Allow server to change the data source as necessary	Select this check box to allow Analytics to automatically change the data source if necessary to allow the report to run. For example, if a report is configured to run on the operational database but is unable to do so due to data constraints, selecting this check box allows the report to run on the report database (also referred to as the replication database). Clearing this check box forces reports to run on the data source that is selected. Refer to Specifying the preferred database. **Note:** This check box is selected by default when you create a report, and is cleared automatically any time the data source is changed on the Edit Settings window.

Table 274: Edit Settings Window Description (Continued)

Field	Description
Set report to deferred execution	Select this check box to automatically queue the report when it runs. Refer to Preventing automatic queuing. **Note:** If this option is not selected but the report is automatically queued the next time it is run due to meeting queuing criteria, the Set Report to Deferred Execution check box is selected automatically. To prevent the report from being queued when it is next run, edit the report and clear this check box.
Data Source	Select which database you want the report to run on. You can choose the **operational** or the **report database** (also referred to as the replication database). Refer to Report databases for more information about data sources. **Note:** This option is available only if your site has a report database. If your site does not have a report database, contact your Oracle account manager for more information.
Report Database	Select this radio button if you want the report to run on your report database. This option is helpful if your report queries a large amount of data since the query size restrictions on report databases are more relaxed than those on operational databases. **Note:** If you select this option in a report that includes the Fill Inbox record command and a staff member clicks the Fill Inbox button when using the report, the report will be automatically configured to use the operational database. This ensures that current data is used when incidents are assigned. Refer to Filling your inbox and Report databases.
Operational Database	Select this radio button if you want the report to run on your operational database. This option is helpful if you need the report to return the most current data available. **Note:** The operational database is selected by default when you create a new report.
Refresh all split levels simultaneously	Select this check box to automatically refresh all report levels shown in split windows when data in one of the report levels is refreshed. When this option is disabled, only the data shown in the window selected when the refresh occurs is updated.

Table 274: Edit Settings Window Description (Continued)

Field	Description
Automatically refresh report at a regular interval	Options in this section let you configure automatic refresh of the report's data to ensure the most recent data is displayed.
Auto-refresh options visible at run-time	Select this check box to add an arrow on the Home tab's Refresh button. Clicking the arrow displays options to enable or disable automatic refresh and to change the refresh interval time. When this check box is not selected, the report's data is refreshed only when the button is clicked.
Auto-refresh enabled by default	Select this check box to enable automatic refresh of the data shown on the report.
Interval	Enter the number of seconds after which the data shown on the report is automatically refreshed.
Image	Click Change to select a different image to display next to the report in lists such as navigation lists. The image that is displayed by default is determined by the layout selected when creating a new report. When selecting an image, you can choose from a list of standard images or from custom images that have been added in the Images explorer. Refer to Images explorer.
Notes	Type any text you want to add as a note to the report. The note displays on the Edit Settings window, but does not display to anyone viewing the report.

5 Click the OK button to save the report options.

6 Click the arrow on the Save button on the Quick Access toolbar and select a save option. Refer to Saving items in explorers.

Reviewing report performance

Reports that are configured to examine large amounts of data may run slowly or may not run at all. These reports might use too few filters, include a large number of tables, or might be running on an excessively large database. Using certain standard reports and the report analyzer helps you identify such reports and determine why they don't run as efficiently as you want.

Important While you want to avoid running reports that examine large amounts of data, it may occasionally be necessary to do so to meet your business needs. In such cases, you have several options.

- Run the report on the **report database** instead of the **operational database** so the report can query more data. Refer to Report databases.
- Queue the report to run at a later time. Refer to Queuing reports.
- If the report includes multiple output levels, you may be able to use **report linking** to reduce the number of tables and rows queried by the report. Refer to Linking reports.

Identifying report run failures

You can view reports that fail to run and the types of failures they encounter using two standard reports available in the Reports explorer under Public Reports > Common > Site Administration > Reports.

- **Report Failure Details**—This report lists reports that failed to run, and how often they failed, during a specified date range. The reasons the reports failed to run are also listed. Reasons include Too Much Data, Timed Out, and Unexpected Error. You can drill down on the rows in this report to view more specific information about each failure.
- **Summary of Report Failures**—This report lists the types of report failures along with the number of times the failure was encountered during a specified date range. You can drill down on the rows in the report to access information in the Report Failure Details report.

Tip To create custom reports that display or filter on the success of report generation, you can use the Result Code (*result_code*) field in the Analytics Audit Log (*ac_audit_log*) table.

Examining reports with the report analyzer

If you encounter problems running a report, or want to view potential issues after you create a report, you can run the report analyzer to check the report's database queries. This helps you fine-tune custom reports to ensure they run as quickly and efficiently as possible.

The report analyzer examines your report and provides suggestions as to how you can improve the report by removing database tables, adding filters, and making other changes. The analyzer also shows you the estimated number of rows the report's query may need to access so you know if the report can run without encountering row limits.

Note Reports are analyzed using either the **report** or **operational database**, depending on which database they are configured to use. Refer to Report databases.

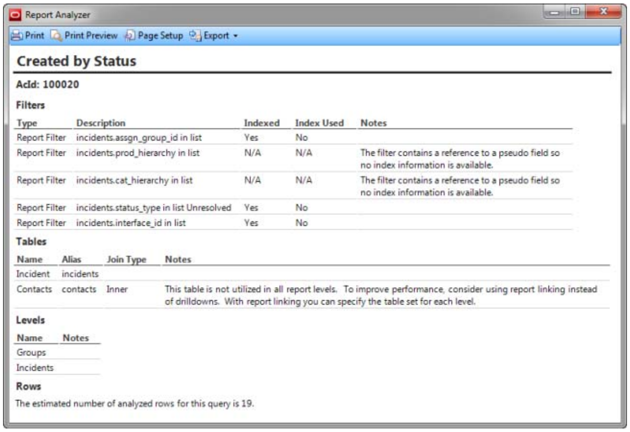
To analyze a report

1 Open the report you want to analyze on the report design center.

2 Click the Analyze button on the ribbon's Home tab. The report's Search window opens where you can enter the filter and variable values you want the report to use when it is analyzed.

Note If your report lacks required run-time selectable filters or the Open Report Without Prompting for Search Parameters check box is selected on the report's Edit Settings window, the Report Analyzer window opens instead of the Search window. Refer to Searching in reports

3 If you are presented with the report's Search window, enter the search criteria you want to use and click the OK button. The search criteria you specify can change the estimated number of database rows the query must examine.



The Report Analyzer window is similar to the Report Definition window and includes the same functions at the top of the window (refer to Viewing and exporting report definitions for information about the Report Definition window). The report analyzer lists the report's filters, tables, output levels, and the estimated number of rows the report's query will examine when it runs. If the analyzer finds potential issues with the report's query, it lists the issues in the Notes column next to the applicable report component.

The following table describes the four report components included on the Report Analyzer window and lists the messages you may see in the Notes column when potential issues are found.

Table 275: Report Analyzer Window Description

Report Component	Potential Issue
Filters	This section lists the expressions used for each report and level filter and identifies whether the filters' fields are indexed in the database and whether the index is used. Custom fields can be indexed for faster queries, though too many indexes can slow down queries. The following messages can be returned in this section. • The filter contains a custom field that does not have an index. To improve the performance of this query, consider adding an index on the custom field. • The filter contains a reference to a pseudo field, so no index information is available.

Table 275: Report Analyzer Window Description (Continued)

Report Component	**Potential Issue**
Tables	This section lists the tables that are used in the report, along with the types of joins used to link the data in the tables. Four messages can be returned in this section. • This table is in an **outer join** but there are one or more filters on fields in this table. Make sure this is by design. If not, consider changing the join type to **inner** or changing these filters to join filters to prevent an implicit inner join. • This table is not used in the report. Consider removing the table from the data set. If you need to filter out rows in the parent table that do not have rows in this table, consider adding a not null filter on the join field in the parent table. • This table is not used in all report levels. To improve performance, consider using report linking instead of drill-downs. With report linking, you can specify the table set for each level. • The data set contains the *inc_performance* and the *transactions* tables, but there are no filters that provide additional joins between the two tables. To increase performance, consider adding a filter that provides an additional join between the two tables.
Levels	This section lists the output levels (also called drill-down levels) that are used in the report. One message can be returned in this section. This level contains one or more columns with a *sum_distinct* expression. *Sum_distinct* expressions have a negative impact on performance. If possible, consider a different approach that does not involve using a *sum_distinct* expression. You may be able to remove the *sum_distinct* expression by converting any drill-down levels to linked reports.

Table 275: Report Analyzer Window Description (Continued)

Report Component	Potential Issue
Rows	This section lists the estimated number of rows that will be examined by the query. Messages display if the number of rows exceeds the threshold values for the operational and report databases (also referred to as replication databases). Three messages can be returned in this section. The messages vary depending on whether your site has a report database in addition to the operational database and the Data Source options specified on the report's Edit Settings window. • The estimated number of analyzed rows for this query is *X*. This value exceeds the threshold of 2,000,000 for the operational database. Consider using the report database for this report. Otherwise, it is likely this will occur automatically. • The estimated number of analyzed rows for this query is *X*. This value exceeds the threshold of 2,000,000 for the operational database. Since you have specified the operational database for this report, it is unlikely the report will execute. Consider using the report database for this report. • The estimated number of analyzed rows for this query is *X*. This value exceeds the threshold of 5,000,000 for the report database. Consider adding or refining filters to reduce the number of analyzed rows to below this threshold. Otherwise, it is unlikely the report will execute. • The report will likely return a large number of rows. Consider using filters instead of paging to navigate the result set. • A row estimate is not available because the report contains `sum_distinct` expressions. • Due to the complex nature of the report, a row estimate is not available. • The estimated number of rows is X. However, the underlying query contains a one-to-many relationship so the estimate may not be accurate.

4 Click X on the top right to close the Report Analyzer window.

5 Click X on the top right to close the report.

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Report Management

You manage standard and custom reports using the Reports explorer. From the explorer you can organize, locate, and view reports. When viewing a report, you can print, forward, and export the report. If the report allows **inline editing**, you can also edit data shown on the report directly from the report. In addition, you can adjust the report's display options to better suit your needs, and alter data characteristics to sort, filter, and output the data in different formats.

Viewing reports

Oracle Service Cloud includes numerous standard reports you can use to track activity in any application, such as Oracle RightNow Feedback Cloud Service (**Feedback**). You can view a detailed description of any report by viewing the report's definition. If one of the standard reports does not meet your needs, you can create a custom report to return the specific information you want. Custom and standard reports are opened in the same manner.

You can also use the options on the ribbon to search for information, change the report's display, share the report with others, and perform other actions. Some reports also include multiple output levels or link to other reports or dashboards that you open to view additional information.

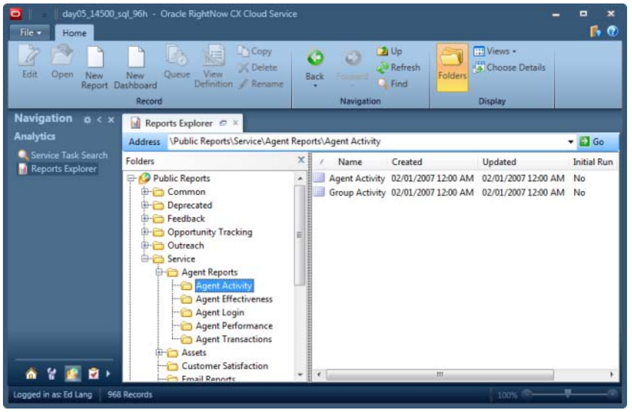
Opening reports

Staff members with the appropriate permissions can open standard and custom reports from the navigation pane or from the Reports explorer. You can double-click a report in a navigation list or double-click the Reports explorer to select a specific report to open.

To open a report from the Reports explorer

1 Click the Analytics button on the navigation pane.

2 Double-click Reports Explorer. The explorer opens on the content pane with the folders tree on the left and a detailed list of the selected folder's contents on the right.

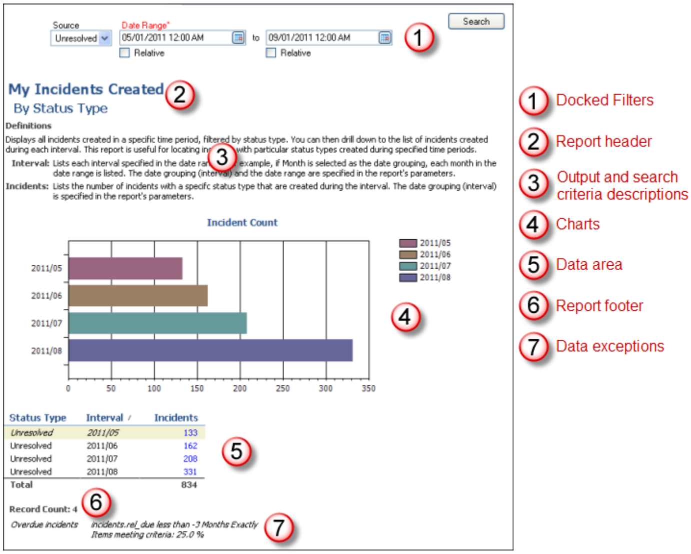


3 In the list on the right, right-click the report you want to open and select Open.

When you open a report, the Search window may be displayed where you can specify the search parameters you want to use for the report. The window displays if the report has required run-time selectable filters or is configured to display the Search window. For information about using the Search window, refer to Searching in reports.

Note When you attempt to open reports that examine a large amount of data or that may take a long time to run, you may be presented with an option to queue the report. Refer to Queuing reports.

An example of a report is shown below. Some of the standard sections you will see in reports are indicated.



The following table describes the standard sections you will see when you view reports, though some reports do not include all sections.

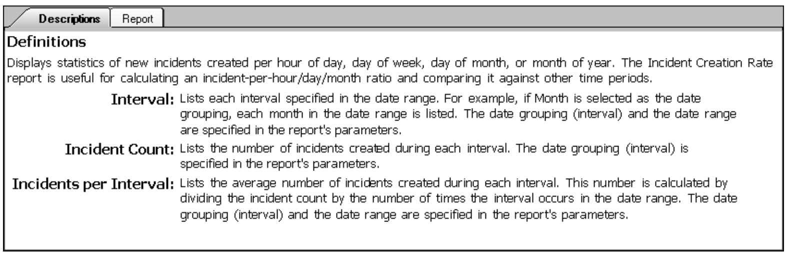
Table 276: Report Sections Description

Field	Description
Docked Filters	Docked run-time filters defined in the report display above the report output, allowing you to quickly select different filter values. For information about adding docked run-time filters, refer to Docking variables and run-time selectable filters. **Note:** You can dock output variables in reports in the same manner as run-time filters.
Report Header	Text added to this area displays near the top of each page in the report. Refer to Adding text fields to reports.
Output Descriptions	Report output descriptions let the report's creator relay information, such as the report's intended purpose, to those who view the report. Output descriptions can be displayed **inline**, on a separate tab, or on column rollover.

Table 276: Report Sections Description (Continued)

Field	Description
Search Criteria Descriptions	Descriptions of the filters in the report can be displayed to describe the report's filters and values. Refer to Search criteria descriptions.
Charts	Any charts defined in the report display above the tabular report output. Refer to Adding and editing charts. **Note:** When viewing a chart in a report, you can right-click the chart to switch to a two- or three-dimensional view. When viewing a three-dimensional chart, you can right-click the chart, select Rotate, and drag the chart to change the viewing angle.
Data Area	This area contains the tabular report output.
Report Footer	Text added to this area displays near the bottom of each page in the report. Refer to Adding text fields to reports.
Data Exceptions	Records matching **data exceptions** defined in the report are flagged, and a summary of the data exception can be displayed in the report output. Refer to Creating data exceptions.

4 If output or search criteria descriptions are displayed as a tab in the report, click the Descriptions tab to view the descriptions. Descriptions can also be displayed as inline text in the report header, or by rolling over the column names in the report. Refer to Adding output and search criteria descriptions.



Selecting report or layout view

When you open a report, you can choose to view it using a layout or report mode. The report view is used by default and lets you look at the report's data, print the report, and work with the report's records if you have permissions to do so. However, you cannot add column calculations or adjust column formatting options using the report view. Most staff members use the report view when they look at a report.

You can also look at the report using the layout view, which lets you apply formatting options and calculations to individual columns in the report. For example, if you wanted to add conditional formatting to a column to highlight data that met certain criteria in the column, you could change to the layout view, select the column, and configure conditional formatting for the column. Or, to display a calculation at the bottom of a particular column, such as the total of the values shown in a currency column, you could select the column and then select the calculation you want from the report's Design tab. When using the layout view, you can also change the width of individual columns, and move columns in a report if you want them displayed in a different order. For information about moving columns, changing column format options, and adding column calculations, refer to Editing columns.

To select the report or layout view

1 Open a report. By default, the report opens in the report view.

2 Click the ribbon's Display tab.

3 Click the arrow on the Views button and select Layout View to change the view.

4 To return to the report view, click the arrow on the Views button and select Report View.

Viewing and exporting report definitions

If you want to see descriptions of a report's output columns, search criteria, and other components, you can view the report definition. This can be helpful if you want to see exactly how the report was created or determine if the report meets your needs. You can print a report's definition, and you can export the output to a file for later viewing.

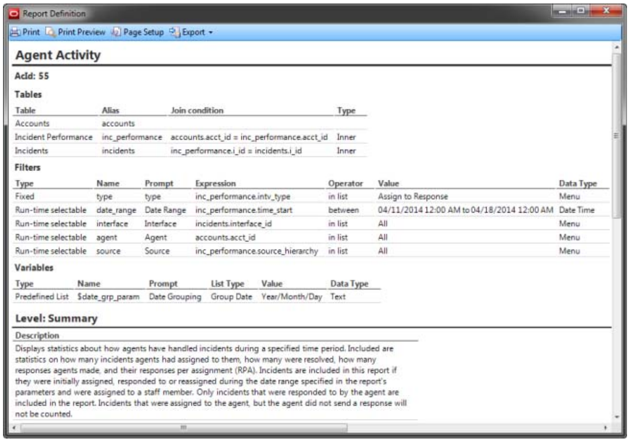
To view report definitions

1 From the Reports explorer, select a report and click the ribbon's View Definition button.

Or

Open a report, click the Home tab, click the Definition button, and select View. The Report Definition window opens.

Tip You can also open the Report Definition window by right-clicking reports in navigation lists or the Reports explorer and selecting View Report Definition.



2 To preview the page layout page before printing it, click the Print Preview button. Refer to Printing reports.

3 To configure the page layout, click the Page Setup button. Refer to Printing reports.

4 To save the output from the report definition to a file for later viewing, click the Export button and select the file type.

You can select HTML, PDF, Excel, Image, and Delimited file types. Refer to Exporting report output for a description of these file types. You can also choose to export the definition to an XML file which you can use to create duplicate reports on other interfaces. Refer to Exporting report definitions.

5 To send the report definitions to the printer, click the Print button.

6 Click X on the top right to close the Report Definition window.

Exporting report definitions

If you have multiple **interfaces**, you can use report definitions saved in XML files to create reports on other interfaces. This allows you to create duplicates of complex custom reports on other interfaces without manually re-creating the reports.

Important Since reports are not shared between interfaces, you must export a report from one interface and import it into another to have the same report available in multiple interfaces.

The following procedure explains how to export report definitions to XML files, which you can later import. Refer to Importing reports.

To export report definitions to XML files

1 Open the Report Definition window, as described in Viewing and exporting report definitions, click the window's Export button, and select Report Definition.

  Or

  When viewing a report, click the Home tab, click the Definition button, and select Export.

  The Save As window opens.

2 Select a location for the file and enter a file name.

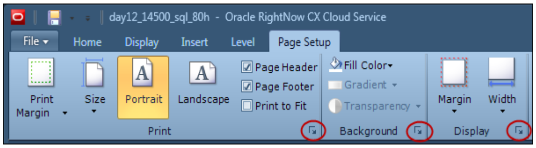
3 Click the Save button to save the report definition to an XML file.

Ribbon options when viewing reports

When viewing a report, you can move between the Home, Display, and Page Setup tabs on the ribbon to access buttons to modify the report's display, search for data, and edit records. When looking at a report using the layout view, you can also access Design and Format tabs to adjust formatting and display options. The buttons you see on some of the tabs vary depending on the report's configuration and on what is selected on the report.

Tip You can minimize the ribbon when viewing a report by double-clicking the active tab. Click the tab to temporarily display the buttons on the tab, or double-click the tab again to maximize the ribbon.

Each tab on the ribbon has one or more groups containing buttons you can use to modify the report or items on the report. Some groups have a button to the right of their name that you can click to open windows. For example, you can click the Background group's button on the Page Setup tab to open the Display Options window.

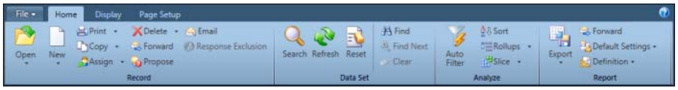


Windows give you access to the same features you can access from the ribbon, though the windows group the options differently, and sometimes contain options not available from the ribbon.

Important When explaining features that can be accessed from a window or the ribbon, we describe the feature using the window. However, the ribbon's buttons provide shortcuts to most of the same features available on windows.

Home tab

The buttons on the Home tab let you search for records in the report, refresh the report, and modify records displayed in the report. Buttons to modify records are shown on the tab only when the current report level displays individual records. These options vary depending on the type of records shown in the report and are disabled if the staff member viewing the report lacks permissions to perform the action. Here is the Home tab of an incidents report.



The groups and buttons on the Home tab are described in the following table.

Table 277: Home Tab Description

Group/Button	Description
Record	The buttons in this group let you work with the specific records returned in the report. The available buttons vary depending on the type of records returned in the report and permissions in your profile. When editing custom reports, you can choose the buttons you want to display on this group. Refer to Customizing record commands. **Note:** The buttons in this group are displayed only if the report level you view returns unique records that can be edited such as incidents, answers, contacts, or organizations.
Open	Click this button to open the selected record. To open a record that is associated with the selected record, click the arrow on the button and select the type of record you want to open. For example, you could open the contact record for the customer who submitted the selected incident.
New	Click this button to create a record of the same type as the record selected on the report. To create a record of a different type, click the arrow on the button and select the type of record you want to create.
Print	Click this button and select the record you want to print. You can print the selected record or another record associated with the selected record. For example, to print the contact record of the customer who submitted the selected record, click the Print button and choose Contact.
Copy	Click this button and select the record you want to copy. You can copy the selected record or another record associated with the selected record.
Assign	Click this button and select the record you want to assign to another staff member. You can assign the selected record or another record associated with the selected record.
Delete	Click this button and select the record you want to delete. You can delete the selected record or another record associated with the selected record.

Table 277: Home Tab Description (Continued)

Group/Button	Description
Preview Answer	Click this button to view the selected answer as it will display on your site's customer portal. This button is displayed only when viewing a report that lists answers.
Forward	Click this button to forward the selected record in an email.
Propose	Click this button to propose the selected incident as an answer. This button is displayed only when viewing a report that lists incidents.
Fill Inbox	Click this button to assign incidents to yourself from incident queues. This button is displayed only when viewing a report that lists incident information and when the permissions in your profile allow you to pull incidents from queues. This button must be manually enabled on custom reports. Refer to Customizing record commands. **Caution!** If the report is configured to use the **report database**, it will automatically be updated to instead use the **operational database** when you click Fill Inbox. This ensures that the report uses current data when assigning incidents. Refer to Filling your inbox and Report databases.
Email	Click this button to open your default email program to send an email to the contact associated with the record.
Monitor	Click this button to open the chat sessions workspace to monitor agents' chat sessions. This button is displayed only when **Chat** is enabled and when the permissions in your profile allow you to monitor chat sessions.
Force Logout	Click this button to log out the selected staff account. This button displays only when the report returns staff account information and can be enabled or disabled on custom reports. Refer to Customizing record commands.
Editing	This group is displayed when inline editing is enabled on the report. The buttons in this group let you save and edit records using inline editing. Refer to Editing data inline.

Table 277: Home Tab Description (Continued)

Group/Button	Description
Data Set	The buttons in this group let you search for data in the report, refresh the display, and reset the search criteria to the report's defaults. Refer to Searching in reports. **Note:** The buttons in this group are not available when viewing a report that was queued. Refer to Queuing reports.
Search	Click this button to open the report's Search window to select criteria for variables and run-time selectable filters.
Refresh	Click this button to reload the data shown using the report's current search criteria. If staff members are permitted to change automatic refresh settings, an arrow is added to the button. You can click the arrow to enable or disable automatic refresh and set the refresh interval. Refer to Changing report properties for information about changing refresh intervals.
Reset	Click this button to reload the data shown using the report's default search criteria.
Find	Click this button to open the Find window to enter text, numeric values, or special characters you want to locate in the report's output. Report cells that contain the search value are highlighted on the report. Refer to Finding content in reports.
Find Next	Click this button to highlight the next instance of the search values entered on the Find window.
Clear	Click this button to clear the search values entered on the Find window.
Analyze	The buttons in this group let you sort the data shown on the report and apply auto filtering, rollups, and slicing to the data.
Auto Filter	Click this button to enable auto-filtering in the report. Auto-filtering provides column filtering after the report has been generated. Refer to Using Auto Filter.
Sort	Click this button to open the Sort window and select which output columns to sort by and the sort method. Refer to Changing sort options.

Table 277: Home Tab Description (Continued)

Group/Button	Description
Rollups	Click this button to select rollup options and open the Rollups window. Refer to Displaying rollup levels.
Slice	Click this button to select slice options and open the Slice window. Slicing groups data so you can view only the subset of records you are interested in. Refer to Slicing report data.
Report	The buttons in this group let you export the report, forward the report in an email, save and restore default settings, and view and export the report definition.
Export	Click this button to export the data from a report to a file for use with third-party applications. You can export report data in the following formats: HTML, PDF, Excel, XML, Image, and Delimited. Refer to Exporting report output. **Note:** Permission to export, print, and forward reports must be enabled in your profile for this button to display. Refer to Analytics permissions.
Forward	Click this button to send the report to individuals or distribution lists in an email. Refer to Forwarding reports. **Note:** Permission to export, print, and forward reports must be enabled in your profile for this button to display. Refer to Analytics permissions.
Default Settings	Click this button and select Save as Default to save your personalized display and data settings for a report for later use. Select Restore to remove personalized display and data settings from a report and restore the settings to those defined in the report. Refer to Resetting display and data settings. **Note:** This button is not available on a report's Home tab when viewing the report in a dashboard.

Table 277: Home Tab Description (Continued)

Group/Button	Description
Definition	Click this button and select View to view the report definition, showing descriptions of the report's tables, columns, filters, and other information describing the report's structure. Click Export to export the definition to a file which you can import into another **interface** to copy the report. Click Edit to open the report for editing on the report design center. Refer to Viewing and exporting report definitions and Exporting report definitions. For information about editing reports, refer to Opening the report design center. **Note:** This button is not available when viewing a report that was queued. Refer to Queuing reports.

Display tab

The display tools let you adjust the fonts, colors, margins, and other display settings in the viewed report.

The groups and buttons on the Display tab are described in the following table.

Table 278: Display Tab Description

Group/Button	Description
Views	Click the arrow on this button to choose whether to view the report using the report view or layout view. Refer to Selecting report or layout view.
Auto Format	Click this button to apply a style to a report. Refer to Changing report displays with styles.
Sections	The check boxes in this section let you show or hide the Docked Filters, Charts, Exceptions, Report Header, and Report Footer report sections. You can also use the buttons in the group to select how you want to display the data, search criteria descriptions, and output descriptions.

Table 278: Display Tab Description (Continued)

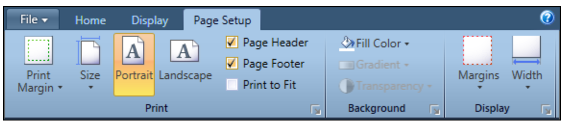
Group/Button	Description
Data	Click this button to select how you want to display the report's data. You can choose to hide the data, display the data in a tabular layout, or display it in a record layout. Refer to Selecting record or tabular layouts.
Search Criteria	Click this button to hide or show the report's search criteria. You can show the criteria inline or on a separate tab. Refer to Opening reports for information about search criteria descriptions.
Output Descriptions	Click this button to hide or show the report's output description. You can show the description on column rollover, inline, or on a separate tab. Refer to Opening reports for information about output descriptions.
Options	The buttons and check boxes in this group let you add page breaks to the report, apply cross tabs, add links and row numbers, fix column headers, show multiline calculations, and select the fields and data exceptions you want to view.
Field Chooser	Click this button to open the Field Chooser window and show or hide output columns in a report. Refer to Selecting columns to display.
Cross Tab	Click this button to select cross tab options and open the Cross Tab window and select the output columns to use as cross tabs. Refer to Displaying data using cross tabs.
Page Report	Click this button to add page breaks to a report and select the number of records to display on each page. Refer to Adding page breaks.
Links	Click this button to select the action links you want displayed on the report or to hide links that you do not want displayed. The available links vary depending on the type of record the report returns and on the links that are enabled when editing the report. **Note:** This button is active only if the current report level displays unique records and the report is configured to display links by default. Refer to Adding record command links.

Table 278: Display Tab Description (Continued)

Group/Button	Description
Exceptions	Click this button to show or hide data exceptions in the report. Refer to Showing and hiding data exceptions. **Note:** This button is active only if the current report level includes data exceptions.
Guide	Click this button to configure the report to display guided assistance response data in a tree format. Refer to Displaying guided assistance data in trees. **Note:** This button is active only if the report includes data from the Guided Assistance Responses (*decision_tree_responses*) table. The button is also disabled if the current report level is configured to display data using cross tabs.
Fix Column Headers	Select this check box to fix the column headers. Fixed column headers do not move when you use the vertical scroll bar.
Row Numbers	Select this check box to display row numbers in the report.
Multiline Calculations	Select this check box to display calculations on separate rows.

Page Setup tab

The options on the Page Setup tab let you configure printing options for the report. You can also change the report's background, margins, and width.



The groups and buttons on the Page Setup tab are described in the following table.

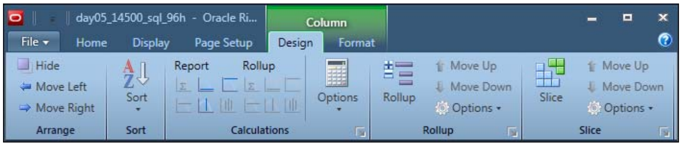
Table 279: Page Setup Tab Description

Group/Button	Description
Print	The buttons in this group let you configure the report for printing and add the Page Header and Page Footer sections. Refer to Printing reports. **Note:** This button group displays only if your profile includes the Print/Export/Forward Reports permission. Refer to Analytics permissions.
Print Margin	Click this button to select the size of the margins used when printing the report. The available options are Normal, Narrow, Medium, and Wide.
Size	Click this button to select the size of the paper used when printing the report. The available options are Letter, Legal, Executive, A3, A4, and A5.
Portrait/Landscape	Click these buttons to print the report in portrait or landscape mode.
Page Header/Page Footer	Select these check boxes to include a page header and page footer when printing the report.
Print to Fit	Select this check box to scale the report to your printer's default page width and send the report to the printer.
Background	The buttons in this group let you add a background color to the report. You can select the background color and add a gradient color to blend into the primary color. You can also choose how intense the colors should be with the Transparency setting.
Display	The buttons in this group let you add margins to the report and set the report's width.
Margin	Click this button to select the width of the margins around the report. The available options are None, Narrow, Medium, Wide, and Custom. Selecting Custom lets you specify the number of pixels for the top, bottom, left, and right margins.
Width	Click this button to select the width of the entire report. The available options are Best Fit and Fit to Window.

Design tab

When viewing a report in the layout view, you can select a column and select options on the Design tab to change how the data in the column is presented. For example, you can add calculations to the column or roll up the column’s data.

Note This tab displays only when editing reports or viewing them using the layout view. Refer to Selecting report or layout view.



The groups and buttons on the Design tab are described in the following table.

Table 280: Design Tab Description

Group/Button	Description
Arrange	The buttons in this group let you move and hide the selected column. **Note:** To show hidden columns, right-click the header of a visible column, select Insert Hidden Column, and select the column you want to show.
Sort	Click this button and select Sort Ascending or Sort Descending to sort the data in the report by the values in the selected column. Refer to Changing sort options.
Calculations	The buttons in this group let you add calculations to the selected column. You can hover over each button to view a description of the calculation. You can also choose to show multiple calculations on a single row or on separate rows. Refer to Adding column calculations.
Rollup	The buttons in this group let you group the information in the report by the selected column. You can also change the ordering if your report has multiple rolled-up columns. Refer to Displaying rollup levels.

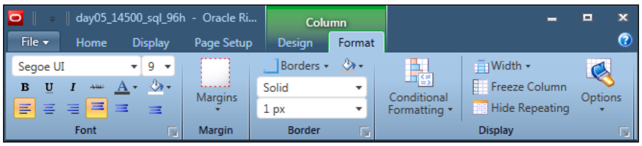
Table 280: Design Tab Description (Continued)

Group/Button	Description
Slice	The buttons in this group let you slice the data in the report by the selected column. You can also change the slice level if your report's data is sliced by more than one column. You can choose to display slice columns as a tree or as links. Refer to Slicing report data.

Format tab

When viewing a report in the layout view, you can select a column and select options on the Format tab to change how the data in the column is displayed. For example, you can change the fonts, hide repeating lines of data, and replace numeric data with gauges.

Note This tab displays only when editing reports or viewing them using the layout view. Refer to Selecting report or layout view.



The groups and buttons on the Format tab are described in the following table.

Table 281: Format Tab Description

Group/Button	Description
Font	The buttons in this group let you change the font style, size, and color. You can also select font attributes, such as bold and italic, and change the text's alignment. In addition, you can add a back-ground color.
Margin	Click this button to select the width of the margins around the selected column. The available options are None, Narrow, Medium, Wide, and Custom. Selecting Custom lets you specify the number of pixels for the top, bottom, left, and right margins.

Table 281: Format Tab Description (Continued)

Group/Button	Description
Border	The buttons in this group let you add borders to the column and change the borders' display options. You can identify which borders you want and choose the borders' color, size, and style.
Display	The buttons in this group let you apply conditional formatting to the column, change the column's width, freeze the column, and hide repeating values in the column. You can also select other display options for the column.
Conditional Formatting	Click this button to apply conditional formatting to the column's data. Refer to Editing column format options.
Width	Click this button to select a width for the column. Select Best Fit to automatically set the width based on the amount of space needed to display the column's contents. Best Fit also takes into account the width needed by other columns in the report. Select Percentage to specify a percentage of the total report width for the column.
Freeze Column	Click this button to fix the selected column in place so it does not move when you horizontally scroll the report. This can be helpful if you want to continue to view the first column in the report while scrolling the report to see the columns on the right of the report. **Note:** When you fix a column, all columns to the left of the column are also fixed. You can still scroll the columns to the right of the fixed column.
Hide Repeating	Click this button to hide consecutive repeating values in the column. For example, if the name of a staff member is shown in the column in five consecutive rows, you can hide repeating values to show the name in only the first column. **Note:** If the Exclude Hidden Values from Calculations check box is selected on the Column Format window's Alignment tab, any calculations on a column with the Hide Repeating option enabled do not include values in hidden rows. Refer to Editing column format options.
Options	Click this button to select display options for the column. Refer to Editing column format options.

Table 281: Format Tab Description (Continued)

Group/Button	Description
Number	The options in this group let you display numeric values as a gauge and select numeric formats. Refer to Editing column format options. **Note:** This group displays when selecting a column containing numeric values.
Date	The options in this group let you select a date format for the column and view the format. Refer to Editing column format options. **Note:** This group displays when selecting a column containing date/time data.

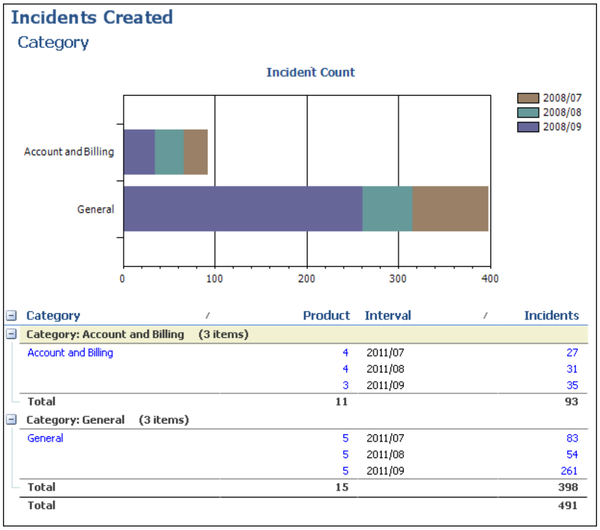
Drilling down in reports

The drill-down feature lets you click data in a report to open another report, dashboard, or output level to view information related to that shown in the first report or output level. For example, if you have a report displaying contacts and the number of incidents they have submitted, you can add a report link to the column showing the number of incidents. When you click the number of incidents on one of the report's rows, another report opens showing details about the contact's incidents.

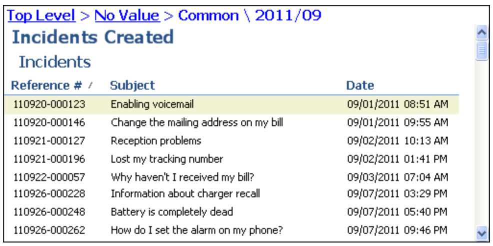
Drilling down to open another output level in the same report is similar to drilling down to open another report. For instance, the first level of the standard Incidents by Category report displays category names and the number of incidents in each category grouped by date range. By clicking a category name in the report's chart or tabular data, you can drill down on the category to open a new level showing the number of incidents in each sub-category. You can then drill down on each sub-category to open an additional level showing details about the incidents in the sub-category.

Tip By default, each time you drill down into another output level in a report, the database is queried to ensure the most current data is displayed even if you have already viewed the output level. However, this can take extra time and may be unnecessary when viewing reports with data that does not change frequently. To more quickly load report output levels you have already viewed, you can cache the data shown in each level. Refer to Changing report properties.

To drill down into a report, click the highlighted link shown on the row you want to drill down into. The Incidents Created by Category report has drill-down links in the Product and Incidents columns.



Clicking a link in the Product column opens another output level that shows the number of incidents submitted by product name. Clicking a link in the Incidents column opens another level showing details about the incidents.



By default, output levels opened from drill-down links replace the parent output level on the content pane. You navigate back to other output levels, including the report's top level, by clicking the level you want at the top of the report. Drill-down levels, reports, and dashboards opened from drill-down links can also be configured to display separately from the parent report.

For information about adding output levels to custom reports, refer to Adding additional output levels. For information about adding links to other reports or dashboards to a report, refer to Linking reports.

Searching in reports

You search for specific records in reports from the Search window. You can open the Search window from the report's Home tab. This window also opens automatically when the report includes required **run-time filters** or when the Open Report Without Prompting for Search Parameters report option is not selected. Refer to Changing report properties.

The options available when searching for information consist of the run-time filters, output **variables**, sorting options, and other search parameters added when the reports are created or edited. You can modify the layout of these options on the window and save the layout for later use (refer to Customizing the Search window). The search parameters are specific to each report, though many reports share similar filters and output variables. While most search parameters need little or no explanation, some are unique and require additional explanation.

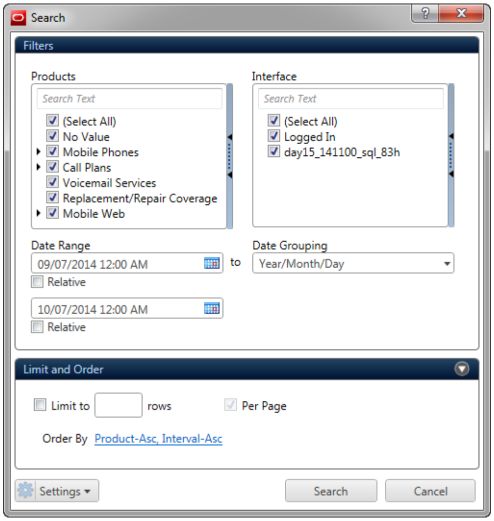
After you perform a search, you may find that the data does not include information from the current day. Certain database tables contain cached data that is updated nightly. Refer to Using cached data.

Important Reports are intended to output only the information you need to view or access for a specific purpose. We recommend that you configure custom reports to include fixed filters or required run-time selectable filters to limit the data they can return. Refer to Specifying filters.

After generating the report using the search criteria you want, you can quickly locate specific content displayed in the report using the Find feature. Refer to Finding content in reports.

To search for records in a report

1. Open the report you want to search in.
2. Click the Home tab.
3. Click the Search button to open the Search window.



4 To change the layout of the Search window, including the sizes and ordering of filters and variables, you need to switch to Search Design Mode.

a Click the Gear button next to Settings.

Or

Click Settings and select Enter Search Design Mode.

b Edit the layout as described in Customizing the Search window.

c Click the Set as Default Layout button to exit Search Design mode and save the layout to your computer.

When you view the Search window when you next open the same report from your computer, the window uses the layout you saved.

d To restore the default layout, click Settings and select Restore Default Layout.

5 To resize the Search window, drag the borders. The window size is saved to your **personal settings** so it will open with the size you specify the next time you open the window when running the same report.

6 Select the filters, sort options, and record limit for the report.

Note Search options often include date range filters and date grouping output variables. Refer to Selecting date ranges and Date grouping output variables.

The options available on the Search window are described in the following table.

Table 282: Search Window Description

Field	Description
Filters	This section displays the report's run-time selectable filters. The methods used to set the filter values vary depending on the filters' data types and operators. For example, the values might be multi-selected from menu lists, specified in date fields, or typed in a text field. Text area fields are not available for use in report filters. Refer to Creating report filters. This section also lists output variables that have been added to the report. Output variables can have the same types of selection methods as run-time selectable filters. Refer to Variables. **Note:** If the filter or variable displays a menu list, you can select all options in the list by selecting the Select All check box, or you can clear all options in the list by clearing the Select All check box. To quickly locate specific values in menu lists, type the first few letters of the value you want in the filter's Search Text field. To view the menu options you have selected from a long menu list, click the splitter bar to the right of the list.
Limit and Order	Options in this section let you limit the number of rows returned in the report and select how the report output should be sorted.
Limit To	Select this check box to limit the number of rows returned on each page of the report's output level or on the entire output level. Limiting the total number of records returned on the output levels prevents reports from returning more records than can be easily viewed or printed. **Note:** The VRL_HARD configuration setting sets a hard limit on the number of rows that can be returned in a report. Values entered in the Limit To field that exceed this are ignored. Refer to Analytics Configuration Settings for information about VRL_HARD and other configuration settings that can impact reports.
Rows	Type the number of rows that should be returned.
Per Page	Select this check box to change the number entered in the Rows text box from a hard limit on the total number of rows returned in the report to a limit on the number of rows returned on each page of the report.

Table 282: Search Window Description (Continued)

Field	Description
Order By	Click the current sort order fields to open the Sort window where you can select different sort options. The report's default sort order is displayed with the primary sort field listed first, followed by any subsequent sort fields. The direction each sort field is ordered in is also indicated (Asc for ascending order and Desc for descending order). Refer to Changing sort options.

7 To save the filter values you select to the **local settings** on your workstation, click Settings and select Save as Default Values. These saved values are used as the defaults when you run the report again when you are logged in with the same staff account.

The default values are overwritten if you select different values and click this button again. If the report is later edited to change filters, the default filter values stored in your local settings are ignored.

8 To restore the search values to the report's default search values, click Settings and select Restore Default Values. This deletes saved search values from personal settings.

This button is disabled if the report's current search parameters were not populated from your personal settings. Refer to Changing your personal settings.

9 To reset the search parameters' values to the default values that were populated when the report was opened, click Settings and select Reset Values.

10 To close the Search window without saving your changes, click the Cancel button.

11 Click the Search button to search the report with the search parameters you selected.

Unique search parameters

While most of the filters and variables you see on the Search window are self-explanatory, there are some unique search parameters that may require more information to use correctly. For information about adding filters and variables to custom reports, refer to Creating report filters and Variables.

Selecting date ranges

Most of the Oracle RightNow Analytics Cloud Service (Analytics) standard reports include **run-time filters** created from date/time fields that allow you to select a time and date range on which to filter the report's data. (Date ranges between January 1, 1901 and January 17, 2038 are supported.) Which records are included in the time period depend on the type of report. For example, the Incident Activity report includes the Date Created run-time filter, which you can use to display incidents created during a particular date range.

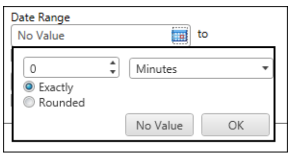
You have several options when selecting a date range. For example, you can select whether you want to use exact dates, a period of time relative to today's date, or even the current time. When the Relative check box is cleared, you can type in a specific date and time, or click the calendar next to the date and time to view a calendar and select a specific date. By selecting the Relative check box, you can define relative times to search on, such as the previous three months, instead of absolute times.

Note The Time Zone report option can be used to change the time zone reflected in the dates and times shown in a report's filters and output columns. By default, the time zone of the interface is used. Refer to Changing report properties.

To select a relative date range in report run-time filters

1 Select the Relative check box on the Search window to toggle from a specific date to a relative date.

2 Click the calendar to display the relative options.



3 Enter the following field information.

Table 283: Relative Date Range Description

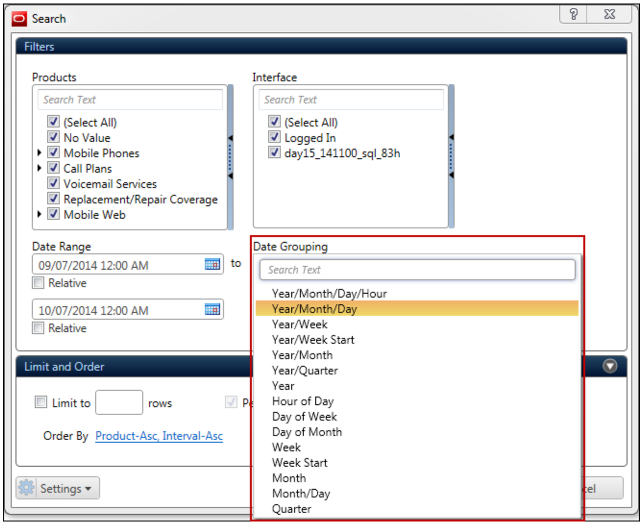
Field	Description
Offset By	Enter the number of time units to use in this field. Values can be positive or negative. For example, use negative values to report on a date range of 6 months ago to 1 month ago.
Time Units	Select the time unit to use from this drop-down menu. The available options are Minutes, Hours, Days, Weeks, Months, Quarters, and Years.
Exactly	Select this radio button to use the exact time period entered. For example, if you run a report at noon on a Wednesday that returns records created from exactly one week ago to the current day, the report returns records created between noon on Wednesday of the previous week and the current day.
Rounded to Beginning of Time Period	Select this radio button to round the selected time period to the beginning of the time period. For example, if you run a report on a Wednesday that returns records created from one week ago rounded to the current day, the report returns records created between 12:01 A.M. on Sunday of the previous week and the current day.

4 Click the OK button to save the relative date period you want to search on.

Date grouping output variables

While most options on the Search window are run-time selectable filters, which limit the returned data, date grouping options are output variables that group the report's data by the time period in which a specified event occurred. This output variable can be added to custom reports and is frequently used in standard reports.

For example, the Agent Activity standard report displays incidents that were assigned to staff members within a certain time range. The default time range is Year/Month/Day, so a row is displayed for each day in the selected date range listing the number of incidents assigned to the agent per day. However, you can select from the options on the Date Grouping menu to group the data by a different time period, such as week or quarter.



Note When date groupings are shown in the report's output, they display as the number associated with the time period. Selecting Year/Week, for instance, displays the year followed by the number of the week (*2015/23*). However, the display format of grouped date columns can be changed with the Group Date Format configuration settings, located at Configuration > Site Configuration > Configuration Settings, in the RightNow Common folder. Refer to Working with the Configuration Settings editor and Analytics Configuration Settings for descriptions of the configuration settings that impact reports.

Incident performance intervals

Incident performance intervals are used as run-time selectable filters in several standard Oracle RightNow Cloud Service (Service) reports, and can be added as filters or output columns to custom reports, using the Incident Performance (*inc_performance*) table. Refer to Creating report filters and Adding columns to reports. Incident performance intervals help you track the length of time between events that occur in the life of an incident. For example, the Create to Initial Response interval tracks the time between the incident's creation and when the first incident response was sent. There are several types of intervals, some of which can overlap others.

Important The content in the Incident Performance (*inc_performance*) table is updated nightly by the **Agedatabase** utility. Refer to Using cached data.

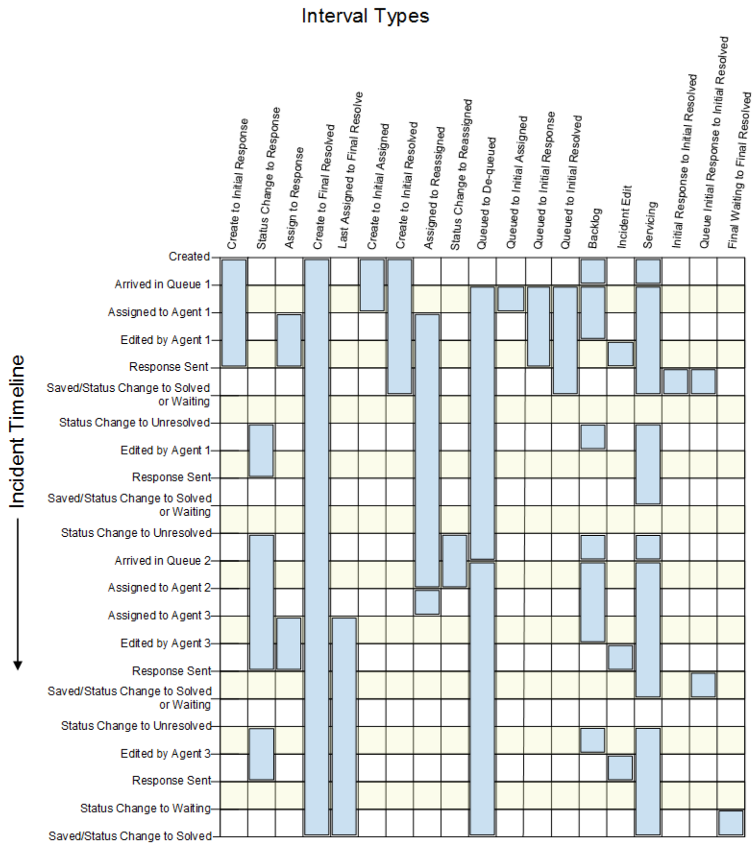
Some intervals can occur more than once in the life of an incident. For instance, the Assign to Response interval records the time between an incident being assigned to an agent and the agent sending a response to the incident. If the incident is assigned to and responded to by several agents, several instances of this interval are recorded for the incident.

The following incident performance intervals are available for use in reports:

- **Create to Initial Response**—Measures the interval between the creation of the incident and the first incident response being sent from an agent.
- **Status Change to Response**—Measures the interval between an incident's **status type** being changed from Waiting or Solved and being set to Unresolved.
- **Assign to Response**—Measures the interval between an incident being assigned to an agent and the first response following the assignment.
- **Create to Final Resolved**—Measures the interval between the creation of the incident and the last time the incident was set to the Solved status type.
- **Last Assigned to Final Resolve**—Measures the interval between the last time the incident was assigned and the last time the incident was set to the Solved status type.
- **Create to Initial Assigned**—Measures the interval between the creation of the incident and the first time the incident was assigned to an agent.
- **Create to Initial Resolved**—Measures the interval between the creation of the incident and the first time the incident was set to the Solved status type.
- **Assigned to Reassigned**—Measures the interval between the incident being assigned to an agent and the incident being assigned to a different agent or to no agent.
- **Status Change to Reassigned**—Measures the interval between the incident being changed from a Waiting or Solved status type to Unresolved and the incident being reassigned to another agent.
- **Queued to De-queued**—Measures the interval between the time an incident enters a **queue** to the time the incident is moved to no queue or a different queue. If the incident's queue does not change, the interval ends when the incident is set to the Solved status type.

- **Queued to Initial Assigned**—Measures the interval between an incident being placed in a queue and the incident being assigned to an agent for the first time.
- **Queued to Initial Response**—Measures the interval between an incident being placed in a queue and being responded to for the first time.
- **Queued to Initial Resolved**—Measures the interval between an incident being placed in a queue and being set to the Solved status type for the first time.
- **Backlog**—Measures the interval between an incident being created, or being changed from the Waiting or Solved status type to the Unresolved status type, or being added to a queue, to the incident being edited (with the edit saved).
- **Incident Edit**—Measures the interval between an incident being edited and the edit being saved.
- **Servicing**—Measures the interval between an incident being created, added to a queue, or changed from the Waiting or Solved status type to the Unresolved status type, to the incident being set to the Waiting or Solved status type or being added to a different queue.
- **Initial Response to Initial Resolved**—Measures the interval between the incident first being responded to and first being set to the Solved status type.
- **Queue Initial Response to Initial Resolved**—Measures the interval between the time an incident that is assigned to a queue is responded to and the time the incident is set to the Solved status type, while in the same queue.
- **Final Waiting to Final Resolved**—Measures the interval between the last time an incident is set to the Waiting status type and the last time the incident is set to the Solved status type.

The following graphic shows the incident performance intervals.



First Contact Resolution Rate

The First Contact Resolution Rate (FCRR) is used in several standard Service reports and can be included in custom reports. This calculation can be used to search by or display the percentage of incidents that were resolved after only one response. To use the FCRR correctly, it is important that you understand how the result is derived.

The FCRR is calculated by taking the number of incidents solved after one response by the agent and dividing this number by the number of incidents that were solved after one or more responses. To ensure your agents' performance is reflected in the FCRR, some incidents and responses are not included in the calculation. If an incident is solved without any responses sent, the incident is not included. In addition, responses automatically appended by rules are not included. If an incident is responded to by a staff member and is then reassigned, only the responses sent by the agent who solved the incident are included.

Using cached data

Some standard reports return data compiled during previous time periods, and you can create custom reports that use data from tables that store this cached information. Reports that use cached data can query a large amount of information in a short amount of time since cached data is stored in only a few database tables. Reports that use cached data are often designed to compare data from one time period to another, such as comparing sales figures from one quarter to another. Before you analyze data returned in reports, it is beneficial to understand how using cached data can affect your reports.

Agedatabase caching

Most cached data is compiled by the **Agedatabase** utility. This utility runs nightly to cache data to prepare for the following day's reporting needs. Cached data remains constant throughout the day and is not updated until the next day, after Agedatabase has compiled the information. For this reason, reports using cached data do not include data for the current day. Understanding which reports use cached data will help you accurately interpret your reports' results. If you view the report definition for the report you want to run and see that the report includes a database table that stores cached data, you know the report uses cached information and may not include data from the current day. Refer to Viewing and exporting report definitions. Information about specific tables that store data compiled by the Agedatabase utility can be found on our support site.

Dataminer caching

Some cached data is compiled by the Dataminer utility instead of the Agedatabase utility. By default, the Dataminer utility runs every four hours or as specified in the VISIT_MAX_TIME configuration setting. Refer to Customizing configuration settings.

Important We do not recommend changing configuration settings unless necessary. Changes made to configuration settings can greatly impact the performance and functionality of your entire site. Before you change any configuration setting, it is important that your organization understands the impact of changing the setting.

The data in the following fields is compiled by the Dataminer utility.

- Answers.Score (*answers.solved_count*)
- All fields in Answer Stats (*ans_stats*) table
- All fields in the Links (*links*) table
- Stats.# Answers Viewed (*stats.ans_viewed*)

- Stats.# Answer Searches (*stats.searches*)
- Stats.Visitor Actions (*stats.hits*)

Information in reports that use these tables or fields is only as current as the last time the Dataminer utility ran.

Finding content in reports

You can search for specific text, numeric values, or special characters in the content displayed in a report using the Find feature. Cells on the report page currently being viewed that contain the values you searched for are highlighted. Content on other pages or drill-down levels in the report must be searched separately.

To find content in a report

1 Open the report you want to find content in.

2 Click the Home tab.

3 Click the Find button on the ribbon to open the Find window.

4 Type the search value you want to find in the report in the Find Text field.

5 To highlight cells in the report only if the content matches the case you use in the search value, select the Match Case check box.

6 To highlight cells in the report only if the cell content exactly matches the search value you enter in the Find Text field, select the Match Entire Cell Contents check box.

7 Click the Find Next button to close the Find window and highlight the first cell in the report that matches the search value you entered.

Or

Click the Find All button to close the window and highlight all the cells in the report that match the search value you entered.

8 To find the next instance of the search value without opening the Find window, click the Find button on the ribbon's Home tab.

9 To clear the search value you entered without opening the Find window, click the Clear button on the ribbon's Home tab.

Queuing reports

Reports, whether opened individually or in dashboards, can take a long time to run if their database queries attempt to query a large amount of information. However, you can queue reports with intense queries so you can continue to work on the **administration interface** while the reports run in the background. When the queued reports have been run, you can open them and immediately view their data.

You can manually queue reports that you think may take a long while to run or that you want to view at a later time. If the application determines that a report will take an excessive amount of time to run, which can result in unnecessary load on your database, you are given the option to queue the report using the report's current search parameters. If you choose not to queue the report, you can select more restrictive search parameters for your report and try to run it again.

Important Reports that attempt to query too many rows in the database will not run. If you queue such a report, the server will still not be able to process it. We recommend using more restrictive filters, removing unnecessary tables, and using inner table joins to allow such reports to run.

If you need a report to return a large amount of information, we recommend that you queue it using the Download Queued Report Results as a CSV File option. This lets you send up to 100MB of data to a comma-separated values (CSV) file. You can then open the file using an external application.

If your site is configured to use a **report database** (also referred to as a replication database) for reporting purposes, queuing works somewhat differently than it does on sites without a report database. Refer to Queuing and report databases.

Manual queuing

You can queue reports or dashboards that you think may query or return large amounts of data. This is also helpful if you want to view a number of reports but do not want to wait for each to generate.

To manually queue a report or dashboard

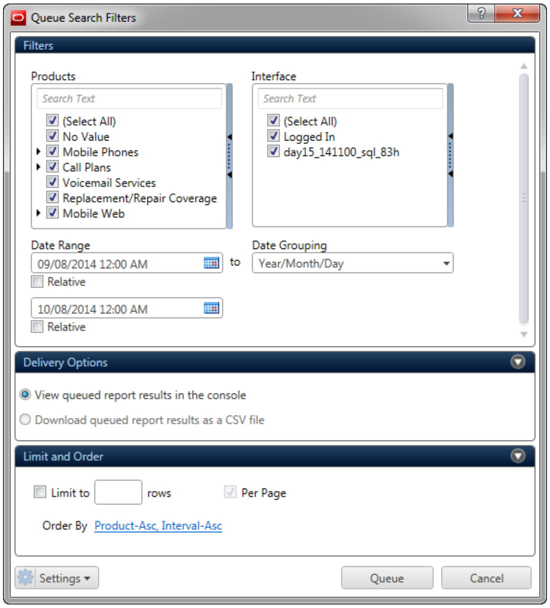
1 Select the report or dashboard on the Reports explorer and click the ribbon's Queue button.

Or

Right-click the report or dashboard, either on the Reports explorer or the navigation list, and select Queue.

Note You can also require dashboards and reports to be queued when they are run by enabling the Set Report to Deferred Execution option. Refer to [Changing report properties](#).

The Queue Search Filters window opens where you specify the search parameters you want to use for the queued report.



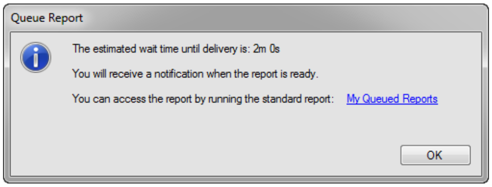
2 Enter the search parameters you want to use. For information about specifying search parameters, refer to [Searching in reports](#).

3 To send the report output to a CSV file instead of to the console, select the Download Queued Report Results as a CSV File radio button. This lets you send up to 100MB of data to a CSV file. Without this option, reports can return up to 10,000 rows of data. After the queued report is generated, you can select a location to save the file to and then open it using an external application. This option is not available when queueing dashboards.

Note This option is not available for all reports since not all reports are appropriate for CSV output. The following restrictions apply.

- The report cannot contain custom scripts.
- The report cannot contain comparison columns.
- The report cannot contain date grouping columns.
- The report's rows must return unique records, such as information about specific incidents, answers, or contacts.
- The first column in the report must be sorted in ascending order and must output data stored in a primary key database column. For instance, the first column could output incident ID numbers or contact ID numbers, and be sorted in ascending order. This restriction helps the data queries more quickly process reports since they use primary keys.

4 Click the Queue button. A message displays an approximation of when the report or dashboard will be generated.



Note The time displayed is an approximation of how long it will take to process the queued report or dashboard. However, if there are other reports or dashboards in the queue, it can take longer than the displayed time to process your queued report or dashboard.

5 Click the OK button to close the window.

For information about viewing reports in the queue and opening queued reports that have processed, refer to Viewing queued reports.

Automatic queuing

When you attempt to open a report, the database query for the report is checked. If the system determines that the query will likely take too long to process, the Unable to Process Report window displays, asking if you want to queue the report. If you want to attempt to run the report using different search parameters, click the Cancel button and the report's Search window will open. If you want to queue the report using the search parameters you selected when you attempted to run the report, click the OK button. If you do so, a message displays an estimate of how long it should take to process the report, just as if you had manually queued the report.

Note Reports that are displayed on workspaces or previewed on the report designer are never queued. If it is determined such a report will take too long to generate, the report is not displayed.

Preventing automatic queuing

Once a report is automatically queued, it is queued every time it is run thereafter, since it is assumed the report's filters and data set result in long run times.

Tip To view reports that will be automatically queued when they are next run, you can run the Deferred Reports standard report. This report is located in the Reports explorer's Common > Site Administration > Reports folder.

If you have a report that is set to be queued, you can prevent it from being automatically queued when it is next run. However, you will still be asked to queue the report when you next run it if the report meets queuing criteria. Refer to To change queuing and data source options for a standard report for information about preventing automatic queuing for a standard report or Changing report properties for information about changing queuing options for a custom report.

Tip When you change queuing options for a custom report, we recommend that you also review the report's fixed filters and table joins to determine if the amount of data the report examines can be reduced to allow it to run more quickly.

Queuing failures

It is possible that a report you queue will not run successfully. There are several reasons why this might happen.

- You already queued the report using the same search parameters and the first queued report has not yet run.
- The original report you queued was deleted after you queued it and before the queued report could be processed.
- The report is deleted from the queue by another staff member before the report can run and you can view it. However, only the staff member who queues the report and staff members with the Analytics Administrator profile permission can remove reports from the queue.
- The queued report processes, but is not opened within the number of days specified in the PURGE_QUEUED_REPORT_DAYS configuration setting. Queued reports and dashboards that have been run but not opened within this time period are automatically removed. The default value for this configuration setting is seven days.
- You manually queue a report or dashboard that cannot run due to the query surpassing a limit on the number of database rows that can be accessed.

Notifications for queued reports that fail to run include information about the cause of the failure. If the recipient has permission to edit the report that failed, links to the report analyzer are also included. Refer to Examining reports with the report analyzer.

Viewing queued reports

After you queue a report, you can use standard reports to see what the report's status is in the queue. Once the report runs and is ready to view, you are notified and you can open it from several locations. When you view the report, you will see that most of the standard options are available on the report's ribbon, though there are some exceptions.

Viewing reports in the queue

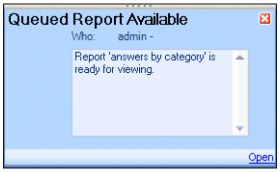
When you queue a report, it is placed in a queue where it will be processed by the server. If there are other reports in the queue that have not yet been processed, your report will be placed at the end of the queue. You can see the reports that are in the queue using the My Queued Reports and Reports Waiting in Queue standard reports, located in the Reports explorer's Public Reports > Common > Site Administration > Reports folder.

- **Reports Waiting in Queue**—This report shows you all the reports that are in the queue waiting to be processed, regardless of who queued the report. Staff members with the Analytics Administrator profile permission can remove reports from the queue using this report if necessary.
- **My Queued Reports**—This report shows you the reports you have queued and not yet viewed. When you view this report, you will see that queued reports can be in one of three states:

- **Waiting**—Reports in this state are waiting to be run on the server. You can remove reports from the queue that are in this state.
- **Processing**—Reports in this state are currently being run on the server. You cannot remove reports from the queue that are in this state.
- **Complete**—Reports in this state have been run on the server and are ready to view. You can remove reports from the queue that are in this state without viewing them.

Opening queued reports

When the database server has run a queued report and it is ready to view, you will receive a message in a toast notification and in your list of notifications. An example of a toast notification is shown here. Refer to Opening your notifications.



To view the report, click Open on the toast notification or double-click the notification in your notifications list. The report opens on the content pane. You can also open reports you queued from the My Queued Reports standard report.

When you open a queued report that was sent to a CSV file, the Save As window opens where you can select a location to save the CSV file. You can then use an external application to view the contents of the file. Refer to Manual queuing.

Important Once a queued report is processed, you have a default of seven days to view it. Reports older than the time period specified in the PURGE_QUEUED_REPORT_DAYS configuration setting are deleted from the list of processed reports by the **Agedatabase** utility. For information about this and other configuration settings that impact reports, refer to Analytics Configuration Settings.

Using queued reports

When you open a report that you queued, it displays and functions just like a report that has not been queued, letting you print the report, change display options, open records from the report, and view drill-down levels.

Note The queries used to return data in drill-down levels are not queued when you queue a report. If your report includes drill-down levels, the queries are run on the server when you open the drill-down levels.

However, some of the standard features you see in reports are not available when viewing a report that was queued. Docked filters are not displayed and the report does not include the optional Action column that shows links such as Open and Delete. In addition, you do not have access to the Search, Refresh, Reset, Definition, and Links buttons on the ribbon.

Note You can view the output from a queued report as many times as you want. However, it is important to remember that the output is static. If you need current information from the report, you need to run or queue the report again.

Report databases

Most Oracle Service Cloud sites have a copy of their database, called a report database, available for reporting purposes. (Report databases are also referred to as replication databases.) Running reports on this database is generally faster than running reports on the operational database where normal activities, such as adding and editing incidents, occur. In addition, since report databases are used only for reporting, they have higher thresholds on the amount of time reports are allowed to run and the number of database rows reports are allowed to query.

Note Reports that you attempt to run on the report database can still encounter limits on the number of database rows that can be queried, though the row limits are considerably higher than those on the operational database.

A report that does not run successfully on your operational database may run successfully on your report database. However, since the data on report databases is copied from the operational database at fixed times, the data displayed on reports run on report databases may not be as current as the data shown on reports run on operational databases.

Specifying the preferred database

By default, reports are configured to run on the operational database although they can automatically switch to the report database (also referred to as the replication database) if they cannot run on the operational database. When you attempt to run a report, the database query generated by the report is automatically reviewed. If it is determined that the query will take longer than 10 seconds to run or if it will query more than 2,000,000 database rows, the report automatically runs on the report database, where reports are allowed to query 5,000,000 rows.

Important When reports are run from editors, such as the incidents editor or the Quick Search menu, they run on the operational database regardless of the reports' configuration. In addition, reports that include the Fill Inbox record command always run on the operational database. Refer to Customizing record commands.

Once a report is modified, either manually or automatically, to run on the report database, it will continue to do so unless you edit the report and specify that it runs on the operational database. You can also specify that the report always runs on the database you select to avoid the report automatically changing to run on a different database. You can also require that the report is queued or not queued when it is next run. The following procedure describes how to change these settings on a standard report. To change these settings on a custom report, open the report's Edit Settings window on the report design center. Refer to Changing report properties.

Note The Administrator Analytics profile permission is required to modify these settings on a standard report. Refer to Analytics permissions.

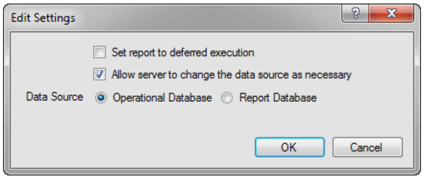
To change queuing and data source options for a standard report

1 Click the Analytics button on the navigation pane.

2 Double-click Reports Explorer.

3 Navigate to the standard report you want to modify, right-click the report, and select Edit.

4 Click the More Options button at the bottom of the console. The Edit Settings window opens.



5 To require the report to be queued when it is next run, select the Set Report to Deferred Execution check box. Refer to Automatic queuing.

Important If this option is not selected but the report is automatically queued the next time it is run due to meeting queuing criteria, the Set Report to Deferred Execution check box is selected automatically. Clear this check box to prevent the report from being automatically queued when it is next run. However, even when this check box is cleared, you will still be asked to queue the report when you next run it if the report meets queuing criteria.

6 Select the database you want the report to run on.

Note This option is available only if your site has a report database. If your site does not have a report database, contact your Oracle account manager.

a To run the report on the report database, select the Report Database radio button. This option is helpful if your report queries a large amount of data since the query size restrictions on report databases are more relaxed than those on operational databases.

b To run the report on the operational database, select the Operational Database radio button. This option is helpful if you need the report to return the most current data available.

7 Click the OK button to save your changes and close the Edit Settings window.

8 Click the Save and Close button on the ribbon to save the changes to the standard report.

Queuing and report databases

Since sites with report databases (also referred to as replication databases) have increased options available for running reports, queuing works slightly different on those sites. If your site has a report database, keep the following considerations in mind when queuing reports.

- Any reports you queue automatically run on the report database unless the report is configured to always run on the operational database. You can select this option when editing the report. Refer to Changing report properties.
- If a report is to be run on the report database and it is determined it will take longer than sixty seconds to run the report's query, you are given the option to queue the report. If you choose not to queue the report, you can attempt to run it again using different search parameters. Refer to Searching in reports.

Distributing reports and dashboards

After you open a report or dashboard, you can print it, forward it to an email address, **publish** it to your folder list, or export the data to be used in an external application. You can also schedule reports and dashboards to be published or emailed at specified times, or when specified data conditions are met. If you have another **interface** and want to create a copy of your report or dashboard on the other interface, you can also export the definition and import it on the other interface.

Important Before you can print, export, or forward reports or dashboards, the Print/Export/Forward Reports permission must be enabled in your profile. Refer to Analytics permissions.

Modifications made to distributed reports

When reports and dashboards are exported, forwarded, printed, published, or sent at a scheduled time, certain changes are made to ensure that they display correctly. Reports and dashboards you open outside Oracle Service Cloud may not display exactly as they do when viewed within the application.

- Drill-down links to other reports, dashboards, or report levels are disabled in distributed reports. Refer to Adding additional output levels for information about drilling down into report levels and Linking reports for information about drilling down into other reports or dashboards.

Important If your report includes multiple output levels, drill down to the information you want to display in the distributed report before you export, forward, or publish it.

- If the report includes the Links column, which contains links to modify the report's records, the column is not shown on the report.

- If the report's width is set to Fit in Window, the report is shown using the Best Fit width setting. Click here for descriptions of these settings.
- Reports shown in the record layout are by default converted to tabular layout when they are exported or scheduled in an Excel format. This ensures that the report's data can be easily read in a column and row format. Refer to Selecting record or tabular layouts for information about layouts.
- If the report lacks a report header or has a blank header, a header containing the report's name is added to the report.
- If the width of a report column is set to a percentage of the report's width, and the report's width is not fixed, the column's width setting is changed to Best Fit. Refer to Editing columns for information about column width settings.
- Forwarded and scheduled reports sent in an HTML format use a relative layout instead of an absolute layout. This ensures maximum compatibility with various browsers, but may impact the display of images or charts in the email.
- Paging is disabled for published reports. Refer to Adding page breaks.
- The dates and times displayed in scheduled reports are adjusted for the time zone of the interface they are sent from, but are not adjusted for staff members' time zone settings in their staff accounts. Refer to Adding and editing staff accounts and Scheduling reports.
- Externally hosted images displayed in columns are not available in scheduled reports. Refer to Displaying external images in columns.

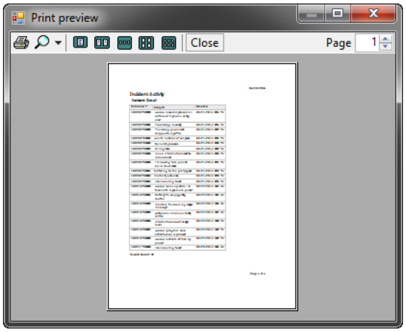
Printing reports

After you run a report, you can preview it to see how it will look on a printed page and then send it to a printer. When previewing a report, you can zoom in and out of the displayed page, view multiple pages, and specify how the pages should display in the preview window. Before you print the report, you can specify print options, including paper size, margin width, and page orientation.

To preview a report

1 Open the report you want to preview.

2 Click **File** and select Print > Print Preview. The Print Preview window opens.



3 Select from the following options.

Table 284: Print Preview Window Description

Field	Description
Print	Click this button to send the report to the printer.
Zoom	Click the down arrow to select the desired zoom percentage and preview the report with the selected zoom level. Click the magnifying glass to reset the zoom level to the default percentage.
Page Buttons	Click these buttons to view one, two, three, four, or six pages of the report on the Print Preview window. These options do not modify the final printout.
Close	Click this button to close the Print Preview window without printing the report.
Page	Select the page number to view on the Print Preview window, either by typing the page number or by scrolling through the available page numbers with the arrows.

To print a report

1 Open the report you want to print and click the Page Setup tab.

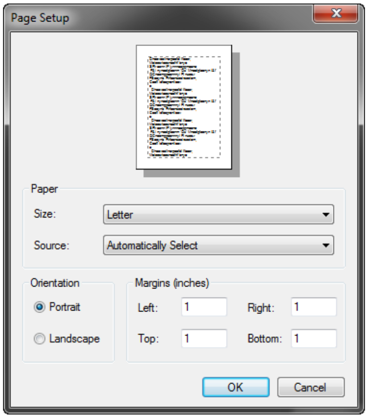
2 To automatically scale the report to your printer's default page width, select the Print to Fit check box.

3 To specify page setup options, such as page margins, click the button to the right of the Print group name to open the Page Setup window where you can set printing options.

Or

Select printing options from the Page Setup tab's Print group. Click here for option descriptions.

Tip If you know the specific options you want, it can be faster to select them from the ribbon. Opening the window gives you an overview of all the available options.



a Enter the following field information.

Table 285: Page Setup Window Description

Field	Description
Paper	This section contains options for selecting paper size and source.
Size	Click the appropriate paper size for the report from this drop-down menu. The available paper sizes depend on your selected printer.
Source	Click the paper source from this drop-down menu. The available paper sources are dependent on the printer that is currently selected.

Table 285: Page Setup Window Description (Continued)

Field	Description
Orientation	Select whether the report should be printed in landscape or portrait mode.
Margins	Define the Left, Right, Top, and Bottom margins for the report. **Note:** The measurement units used for the margin size are determined by your workstation's environment.
Printer	Click this button to select the printer you want to use.

   b Click the OK button to save your page setup settings.

4 Click **File**, select Print, and select your printing preference.

   a Select Print to open your workstation's print window where you can define printer settings and send the report to the printer.

   b Select Quick Print to send the report directly to your default printer using the printer's default settings.

Forwarding reports

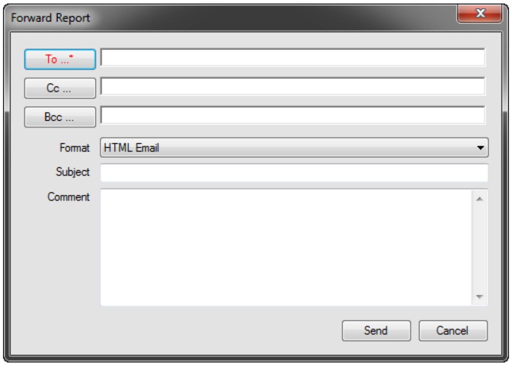
Once you view a standard or custom report, you can immediately forward the report as an HTML email to one or more recipients. You can also forward dashboards using the same procedure. Certain modifications may be apparent when viewing forwarded reports. Refer to Modifications made to distributed reports.

Important Reports can be forwarded as long as the resulting HTML email does not exceed 8 MB.

To forward a report

1 From an open report, click the Home tab.

2 Click the Forward button in the ribbon's Report group to open the Forward Report window.



3 Type one or more email addresses in the To field. Multiple addresses must be separated by semicolons. You can also enter addresses in the Cc field to send copies of the email to other addresses, or enter addresses in the Bcc field to send copies of the email to other addresses that are hidden from the other email recipients.

Or

Click the To, Cc, or Bcc buttons to open the Select Names window. From this window you can add recipient addresses by selecting from a list containing staff members, groups, and distribution lists. Refer to Selecting recipients.

4 Select a format for the forwarded email. The options are HTML Email or HTML Attachment (Images/Charts stored on the server).

Important Not all email clients show HTML emails in the same manner. If email recipients cannot view a forwarded report correctly, select the HTML Attachment (Images/Charts stored on the server) format. Email recipients can then save the image or chart to their hard disk and then open it in a browser. The images and charts used in the email are stored on the server for the number of days specified in the KEEP_EMAILED_IMAGES configuration setting. Refer to Analytics Configuration Settings for information about this and other configuration settings that impact reports.

5 Type a subject for the email.

6 Type any text you want to appear in the email in the Comment text box.

7 Click the Send button to forward the report.

Publishing reports

Publishing a report lets you modify the data and display options of an existing report and then save a copy of the report with these settings which other individuals can then access. Once a report is published, it cannot be modified and the report data remains unchanged even as the knowledge base is updated. This ensures that your audience is presented with the report as you want them to see it.

Published reports can be viewed by staff members who have permissions in their profile. You can change the permissions and published report properties by editing the published report. Refer to Specifying permissions.

Note If the report style the report used when it was published is deleted, a default report style is used when rendering the published report.

The published report appears exactly as it appeared when you published it, with the following exceptions.

- Drill-down links are disabled for report levels and linked reports.
- The report's run-time selectable filters are not available.
- Actions that can be taken on individual records in the report are disabled. Therefore, buttons on the Home tab's Record group are not available, inline editing is disabled, and action links are not displayed.
- Paging is disabled for published reports. Refer to Adding page breaks.
- The Publish option is not available.

You can also automatically publish a report at specific times using the Published format when you schedule a report. Published reports created in this manner are saved in a custom reports folder you select on your site where your audience can access them. If you specify an account or email address when you create the report schedule, a notification or email is sent when the published report is created.

The following procedure describes how to manually publish a report. For information about scheduling a report using the Published format, refer to Scheduling reports.

Tip You can view the published reports you own using the My Published Reports standard report.

To manually publish a report

1 Run the report you want to publish using the same search parameters that you want the published report to use.

2 Click **File** and select Publish to open the Publish As window.

3 Select a directory to store the published report and type the name of the report. The name must be unique.

Tip You can right-click non-standard folders and select New Folder to create a new folder.

4 Click the OK button to save the published version of the report in the location you specified.

Exporting report output

You can export your report's output to be opened in third-party applications. You can choose to export your data in HTML, PDF (Portable Document Format), Excel, XML (Extensible Markup Language), Image, or Delimited formats. You can also export the report output to the clipboard. Dashboards can be exported using the same formats.

Tip If you want to copy the contents from a few cells in your report to another application, you do not need to export the report's data. Instead, you can right-click the cell you want to copy and select Copy Cell to Clipboard. Once the data is on your clipboard, you can copy the data to other applications.

When you export a report, you can choose to export only the information shown on the current page of the report or you can export all the data in the report, up to 100,000 rows.

Note When viewing a report, a maximum of 50,000 characters can be displayed in a single field even if the field contains more characters than this. However, up to 300,000 characters in a field can be exported, though character limitations in third-party applications may still be encountered when viewing the exported report.

The following procedure describes exporting data from reports, but dashboards are exported in the same manner except where noted.

To export report data

1 Run the report to display the data you want to export.

2 Click the Home tab.

3 Click the Export button to display a menu containing export options.

4 Select from the options described in the following table.

Important Reports that are exported and opened in third-party applications are subject to the functionality of those applications. We recommend that you review the version of your application to ensure it supports current functionality. Refer to your software's user manual for information about configuring your application.

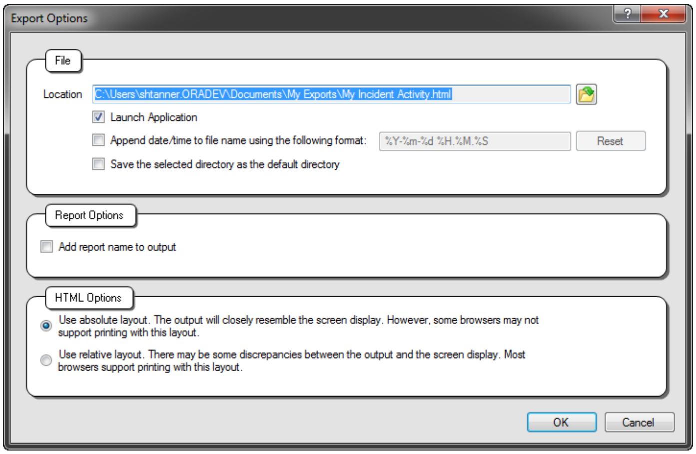
Table 286: Export Format Options

Field	Description
HTML	This option exports the data to an HTML-encoded document, which is compatible with exporting images and charts. Reports can be exported using absolute or relative HTML layouts. Click here for descriptions of export options.
PDF	This option exports the report data as a PDF file, which is compatible with exporting images and charts. When you select this option, you can choose to set the file's page width automatically or use the options on the Page Setup window.
Excel	This option exports the report data in Microsoft Excel format. **Note:** When exporting in this format, the version of Microsoft Excel installed on your workstation is automatically checked and the report is exported as an *.xls* or *.xlsx* file depending on the version.
XML	This option exports the report data in XML format.
Image	This option exports the report data to a *.jpg* image file, which is compatible with exporting images and charts.

Table 286: Export Format Options (Continued)

Field	Description
Clipboard	This option exports the report data to the workstation's clipboard. The data can be exported to the clipboard in HTML, Tab Delimited, or Comma Delimited formats. Once the data is on the clipboard, it can be copied to other applications.
Delimited	This option exports the data to a character-delimited file. When you select this option, the Delimiter Selection window opens, where you can specify the character you want to use as the delimiter. You can choose Comma, Space, Tab, Pipe, Caret, or a custom delimiter you select. The delimited format is intended for use with tabular data only.

When you select a format (with the exception of the Clipboard format), the Export Options window opens where you can specify the file name and location you want for the exported report, whether to include the report name, and whether all the report's data should be returned or only data shown on the current page. The HTML, PDF, and custom delimiter export options include additional export options. The Export Options window for an HTML export is shown in the following figure.



5 Select from the options described in the following table.

Table 287: Export Options Window Description

Field	Description
Location	This field displays the location and file name the exported report is saved to. When the Export Options window is initially opened, a default directory location and file name is displayed.
Save to Folder	Click this button to open the Save As window if you want to specify an alternate location or file name for the exported report.
Launch Application	Select this check box to automatically launch the application associated with the exported report's file type when you close the Export Options window. **Note:** If you are exporting a large amount of data, you may want to clear this check box to prevent the application from attempting to immediately open when you export the report.
Append Date/Time to File Name	Select this check box to append a date/time stamp to the file name that shows when the export file is generated. The date/time stamp is appended to the end of the file name before the file name extension.
Date/Time Format	Type the format you want to use for the date/time stamp you append to the export file name. The default format is `%Y-%m-%d %H.%M.%S`. This creates a date/time stamp with the year listed first, followed by the month, day, hour, minute, and second (such as `2012-02-25 09.43.30`). The format you specify is automatically saved to your personal settings so this becomes your default format the next time you export a report. Refer to Date and Time Format Tokens.
Reset	Click this button to reset the date/time format to the default format (`%Y-%m-%d %H.%M.%S`).
Save the Selected Directory as the Default Directory	Select this check box to make the folder you specify your default export directory. Selecting this check box saves the folder name to your personal settings so future exports are saved to the specified folder.

Table 287: Export Options Window Description (Continued)

Field	Description
Add Report Name to Output	Select this check box to include the report's name in the export file. **Note:** This option is not available when exporting dashboards. Report names display in exported dashboard files if their title bars are enabled in the dashboard's display options. Refer to Changing dashboard options for information about including report title bars on a dashboard.
Data Set	The radio buttons in this group let you choose to export all the data returned by the report's current search criteria or only data shown on the report when the Export button is clicked. **Note:** Data Set options display only if the report's output is restricted by record limits, page limits, slicing, or auto-filters when the Export button is clicked. These options do not display when exporting dashboards, published reports, or queued reports.
Export Current Page	Select this radio button to include only the data currently shown on the report in the export file.
Export All Data	Select this radio button to include all the data from the report, up to 100,000 rows, regardless of the report's current record limits, page limits, slicing, or auto-filters settings. **Note:** This option is not functional for reports that were queued.
HTML Options	Select how you want the HTML file to be generated in this section. **Note:** This section displays only when you select HTML format.
Use Absolute Layout	Select this radio button to format the export file using absolute layout. The exported report will match the display of the original report very closely, though discrepancies may be noticed in some reports. **Note:** Some browsers do not support printing HTML files that use this layout.
Use Relative Layout	Select this radio button to format the export file using relative layout. The exported report will be similar to the original report, though there may be some discrepancies. **Note:** Most browsers support printing HTML files that use this layout.

Table 287: Export Options Window Description (Continued)

Field	Description
PDF Options	Select how you want to specify the width of the PDF document in this section. **Note:** This section displays only when you select PDF format.
Set Page Width to Best Fit the Report	Select this radio button to automatically set the width of the PDF file to best fit the width of the report. This method displays the report in its original width, though the size of fonts may be reduced and the file may use landscape orientation to fit wide reports.
Use Printer Page Setup to Set Page Dimensions	Select this radio button to open the Page Setup window to manually select margins, paper size, and orientation for the PDF file. Click here for information about this window.
Excel Options	Select how you want to format date/time columns for the Excel file in this section. **Note:** This section displays only when you select Excel format.
Convert All Dates into Excel Formatted Dates	Select this check box to convert all the date and time values shown in the report's columns to Excel's MM/DD/YYYY HH:MI AM/PM date format. Selecting this option ensures the date columns in exported reports are consistent with Excel's functionality.
Include Cell Images	Select this check box to include images that are displayed in the report's cells in the exported file. **Note:** This option is selected by default.
Delimiter Options	Select the custom delimiter you want to use in this section. **Note:** This section displays only when you select Delimited format with a custom delimiter.
Custom Delimiter	Type the character you want to use as the custom delimiter in this field.

6 Click the OK button to save the exported report.

Note If you selected the Launch Application check box, the application associated with the specified type on your workstation opens.

Scheduling reports

You can schedule reports to be sent by email to yourself, other staff members, email addresses, or **distribution lists**. You can also create a schedule to automatically publish a report. When you define a schedule, you define the specific times when you want the report to be sent. You can also specify the values you want for the report's filters and variables.

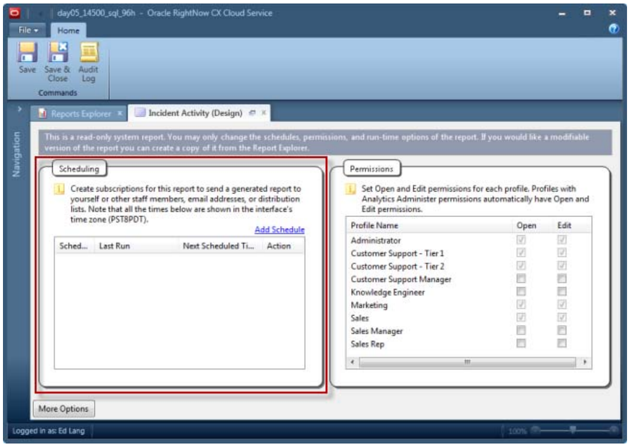
Note Certain modifications may be apparent when viewing reports or dashboards sent in emails. Refer to Modifications made to distributed reports. In addition, if scheduled reports include custom scripts, the scripts must contain initialization information to ensure they run correctly when recipients open the reports. Refer to Adding custom scripts to output levels.

If you need a report sent when certain conditions are met, you can create alerts. Alerts send the scheduled report when criteria you define in **data exceptions** are met. For example, you can create data exceptions to flag incidents that have not been responded to in 24 hours, and then create an alert to send the report when the data exceptions are met. Refer to Adding alerts to schedules.

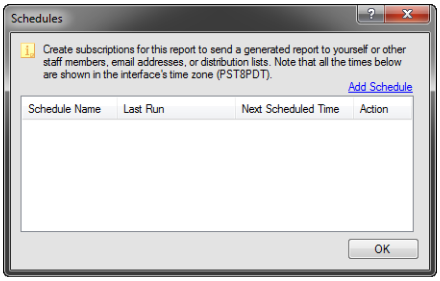
Note The Create/Edit Reports Analytics profile permission must be enabled to schedule reports. Refer to Analytics permissions. In addition, scheduled reports are available only when the option is enabled. For information about enabling scheduled reports, contact your Oracle account manager.

To schedule a report

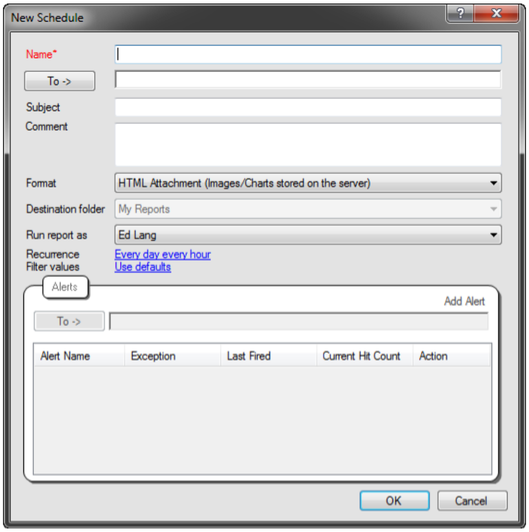
1. Open the Scheduling window (for **standard reports**) or Schedules window (for **custom reports**).
   a. To schedule a standard report, right-click the report and select Edit. The Scheduling window displays on the left side of the content pane. The window displays information about any schedules for the report that have been created.



b To schedule a custom report, open the report, click the Home tab, and then click the Scheduling button. The Schedules window opens, showing schedules that have been created for the report.



2 Click Add Schedule. The New Schedule window opens.



3 Type a name for the new schedule in the Name field. The name should clearly identify the purpose of the schedule.

Note When creating a schedule to publish a report, the report that is created in the destination folder is given the name you specify in the Name field.

4 If using the **Published format**, selected from the Format drop-down menu, skip to step 7. The Published format does not require email information.

5 Type the email addresses the scheduled report email should be sent to in the To field. Separate addresses with semicolons.

Or

Click the To button to open the Select Recipients window where you can add staff members, groups, and distribution lists to the schedule. Refer to Selecting recipients.

Note Scheduled report emails automatically hide the other recipients' email addresses in the email header.

6 Type a subject for the scheduled report email in the Subject field.

7 Type any text you want to include in the body of the scheduled report email in the Comment field.

8 Select the format of the report from the Format drop-down menu. The format options are described in the following table.

Table 288: Scheduled Report Format Options

Format	Description
HTML Attachment (Images/ Charts stored on the server)	Select this option to send the report in an HTML file attached to an email. Images and charts displayed in the report are stored on the server, letting recipients who have access to the server view them.
HTML Email (Images/ Charts stored on server)	Select this option to send the report as an HTML email. Images and charts displayed in the report are stored on the server, letting recipients who have access to the server view them.
HTML Email (Images/ Charts sent in email)	Select this option to send the report as an HTML email that includes the report's images and charts. This lets recipients who do not have access to the server view the report's graphics.
Excel Attachment (Images/ Charts unavailable)	Select this option to send the report output in an Excel file attached to an email. The file does not include the report's images or charts.
Comma Delimited Attachment (Images/Charts unavailable)	Select this option to send the report output in a comma-delimited text file attached to an email. The file does not include the report's images. or charts.
XML Attachment (Images/ Charts unavailable)	Select this option to send the report output in an XML file attached to an email. The file does not include the report's images. or charts.
Image Attachment	Select this option to send an image of the report in a file attached to an email. This lets recipients view the report as it displays in the console, but does not let them work with data.
PDF Attachment	Select this option to send the report in a PDF file attached to an email. This option includes images and charts. **Note:** Non-English characters may not display correctly when sent as a PDF attachment. We recommend instead using an HTML format for such reports.

Table 288: Scheduled Report Format Options

Format	Description
Published	Select this option to publish the report at the scheduled time. Refer to Publishing reports.
Compressed CSV File	Select this option to send the report in a compressed CSV file attached to an email. The recipient can then open the file using third-party software. Images and charts are not available when using this option. Since this option reduces the amount of processing required to run the report, you can send reports that return up to 100MB of data. Without this option, reports can return a maximum of 10,000 rows. There are restrictions on the reports that can be sent to CSV files since not all reports are appropriate for such files. • The report cannot contain custom scripts. • The report cannot contain comparison columns. • The report cannot contain date grouping columns. • The report's rows must return unique records, such as information about specific incidents, answers, or contacts. • The first column in the report must be sorted in ascending order and must output data stored in a primary key database column. For instance, the first column could output incident ID numbers or contact ID numbers, and be sorted in ascending order. This restriction helps the data queries more quickly process reports since they use primary keys. This option is not available for reports that do not meet these requirements. When sending a large CSV file in an email, the file size limits configured on the recipient's mail server may prevent delivery of the file. If you encounter this issue, you can queue the report to save it in a CSV file instead. Refer to Queuing reports. **Note:** This option is not available when scheduling dashboards.

Table 288: Scheduled Report Format Options

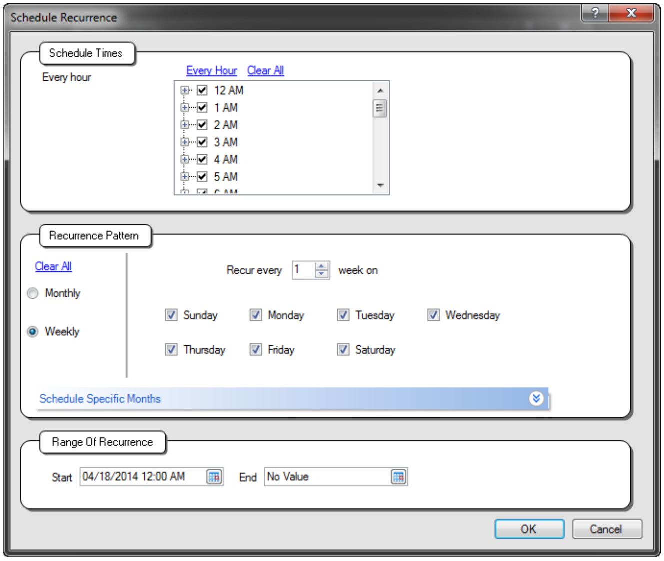
Format	Description
Send Report to Report Queue for Delivery as a CSV File	When you select this option, the report is queued at the scheduled time. However, instead of being sent as an email attachment, the CSV file is accessed in the report queue. You can access the queued report from toast notifications or the My Queued Reports standard report. Refer to Viewing queued reports.

9 To select the folder in the Reports explorer where you want published reports sent, click the Destination Folder drop-down menu and select the folder you want. This drop-down menu is available only when you select the Published format. Refer to Publishing reports.

10 From the Run Report As drop-down menu, select the staff account that would be used if the report were run manually. This lets you specify which account should be used in reports that use the “logged in” filter value.

Since the time zone used in the report depends on the account that runs the report, this impacts the times shown in the report. For example, if a staff member working in the Pacific time zone runs a report, the times shown in the report are adjusted to display in the Pacific time zone. Refer to Adding and editing staff accounts.

11 Click the schedule time next to the Recurrence field to open the Schedule Recurrence window. The underlined text displays the report’s current schedule. This is set to Every Day Every Hour by default.



12 Enter the following field information.

Table 289: Schedule Recurrence Window Description

Field	Description
Schedule Times	Select the times of the day from this menu when the scheduled report should be sent. The available times include fifteen-minute intervals, so a report could be scheduled to send at 6:15 A.M. and 4:45 P.M.
Every Hour	Click this text to automatically select all the hourly check boxes.
Clear All	Click this text to clear all selected schedule time check boxes.
Recurrence Pattern	Select the weekly or monthly interval when the report should be sent. For example, a report could be sent every two weeks on Tuesday, or every month on the 7th and 19th.
Clear All	Click this text to clear all selected recurrence pattern check boxes.
Monthly	Select this radio button to display check boxes for the days of the month. You can then select the days of the month when the report should be sent.

Table 289: Schedule Recurrence Window Description (Continued)

Field	Description
Weekly	Select this radio button to display check boxes for each day of the week. You can then select the check boxes next to the days when you want the report to be sent. When you select this radio button, a Recur drop-down menu displays where you can specify the frequency of the weekly report. For example, if you want the report sent every week on the days selected, enter 1 in the field. If you want the report to be sent every third week on the days selected, enter 3 in the field. This field accepts values from 1 to 99.
Schedule Specific Months	Click the Schedule Specific Months header to display check boxes for the months of the year. Select the months during which the scheduled report should be sent. By default, every month is selected, but if you do not want the report sent during a specific month, you can clear the check box for that month.
Clear All	Click this text to clear all check boxes for the selected months.
Range of Recurrence	Options in this section let you specify a date range during which the scheduled report is sent.
Start	Enter the start date of the schedule or click the Calendar button to open a calendar from which you can select the start date. The current day is the default start date.
End	Enter the end date of the schedule or click the Calendar button to open a calendar from which you can select the end date.

13 Click the OK button to save the recurrence settings and return to the New Schedule window.

14 To specify the values you want to use for the report's filters and variables when the scheduled report is sent, click the underlined text next to Filter Values. This opens the Search window where you can select the values for the report's run-time filters to use when the scheduled report is automatically generated. If you do not specify filter values, the report's default values are used. Refer to Specifying filters.

Note The Ordering feature is not available when selecting filter options for scheduled reports.

15 Click the OK button to save the schedule.

16 To edit an existing schedule, click Edit next to the name of the schedule on the Scheduling or Schedules windows, shown in step 1. The Edit Schedule window opens. The options in the window are identical to those in the New Schedule window, shown in step 2.

17 To delete an existing schedule, click Delete next to the name of the schedule on the Scheduling or Schedules windows, shown in step 1. Click the Yes button on the warning window to confirm the deletion.

Adding alerts to schedules

If a report includes **data exceptions**, you can create an alert to send an email when the data exception criteria is met. You can also specify how many times in a row the exception must be met before the alert is sent. The report's data exception is checked at the times specified in the report's Schedule Recurrence window.

For instance, a report's data exception could be configured to trigger when ten incidents returned in the report meet the criteria you specify, such as the incidents' response times not being met. You could then configure a schedule for the report to trigger once an hour every work day. Once the schedule is created, you could create an alert to be sent if the data exception is met twice in a row. This would result in the report's data exception being automatically checked once every hour each work day, according to the times specified on the Schedule Recurrence window. If the report's data exception is met a single time, the alert would not be sent. However, if the data exception was also met when it was next checked, the alert email would be automatically sent.

The Alerts section of the New Schedule window displays email alerts and their attributes, and lets you create new alerts. Alerts are disabled if the report does not include data exceptions, since alerts are based on data exceptions being met. Refer to Creating data exceptions.

To add an alert to a schedule

1 Open the New Schedule window, as described in To schedule a report.

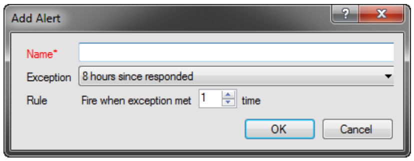
2 Type the email addresses to send the alert to, separated by semicolons.

Or

Click the To button to open the Select Names window where you can add staff members, groups, and distribution lists to the alert. Refer to Selecting recipients.

Important A report schedule needs to be created in order to add an alert. If the report should be sent as a regular scheduled report and as an alert, you must add recipients to both the schedule's To field and the alert's To field. However, if the purpose of the schedule is only to send an alert, do not add recipients in the schedule's To field.

3 Click Add Alert to open the Add Alert window.



4 Enter the following field information.

Table 290: Add Alert Window Description

Field	Description
Name*	Type a name for the alert.
Exception	Click this drop-down menu to select the data exception that is used to trigger the alert. The options that are listed in the menu are those that have been added to the report.
Rule	Enter the number of consecutive times the data exception must be met before the alert is triggered.

5 Click the OK button to save the alert.

Changing output options

When viewing a standard or custom report, you can change the report's colors, fonts, and other display options, and you can adjust the sorting, filtering, **slicing**, and other formatting options of the records returned in the report.

Important Your profile must include the Customize Reports Analytics permission to change output options in reports. Refer to Analytics permissions.

Changing report displays with styles

Styles can be applied to reports to change how the report text and background are displayed. The fonts, colors, backgrounds, spacing, padding, and borders for the different report areas can all be changed by applying a style. If the style is associated with a chart style, the appearance of charts added to reports can also be modified.

You can use one of the predefined styles, edit an existing style, or create your own style and save it to use immediately or for reports you view in the future. For procedures on editing and creating styles, refer to Styles explorer.

Styles you create or default styles can be applied to any report you view. The style you apply to the report impacts the report's appearance when you print it, export it in certain formats, and forward it to others.

To apply a style to a report

1 From an open report, click the Display tab.

2 Click the Auto Format button to open the Auto Format window.

3 To prevent the style from being applied to other levels in the report, clear the Apply Style to All Report Levels check box.

4 Click the style you want to use.

The report is updated to use the style you select.

Selecting record or tabular layouts

Reports can be displayed using a record or tabular layout. Most reports use tabular layouts with column headers across the top of the report and data listed in rows beneath the column headers. However, you can use a record layout to reformat the report to remove the column headers and instead display the field names **inline** with the field's values from each record returned in the report. An incidents report is displayed here with the record layout.

Note When a report total is included in a report with a record layout, the total is shifted to the left of the column that it totals. In addition, since reports displayed in a record layout do not have columns, some options that apply to columns, such as column width, do not apply.

To select a layout

1. From an open report, click the Display tab.
2. Click the Data button.
3. To display the report with a record layout, select Display Data in a Record Layout.
4. To display the report with a tabular layout, select Display Data in a Tabular Layout.

Modifying report display options

Report styles let you change the display options for specific areas of a report, such as the title or data areas. However, if you want to change the margins, width, background, and borders of the entire report, or change how the report output is displayed, you do so by changing the report's display options. These are modified using buttons on the ribbon or by using the tabs on the Display Options window.

Note For descriptions of ribbon buttons, refer to [Ribbon options when viewing reports].

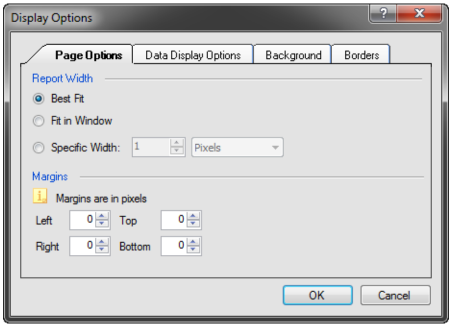
Changing page options settings

The Page Options tab on the Display Options window contains settings which control report width and the margins surrounding the report content.

To change page options

1 From an open report, click the Page Setup tab.

2 Click the button to the right of the Display group name. The Display Options window opens with the Page Options tab selected.



3 Enter the following field information.

Table 291: Page Options Tab Description

Field	Description
Report Width	Define the width of the entire report using the available radio buttons.
Best Fit	Select this radio button to display the report columns within the width of the window if possible. If data would otherwise be truncated, the width of the report spans beyond the open window and a scroll bar is added to the bottom of the page, allowing you to view the entire width of the report.
Fit in Window	Select this radio button to display the report columns within the width of the window. This can result in column names and data being truncated.
Specific Width	Select this radio button to manually specify the report width in pixels, inches, or centimeters.
Margins	Define the left, right, top, and bottom margins for the report.

4 Click the OK button to save the display options.

Changing data display options

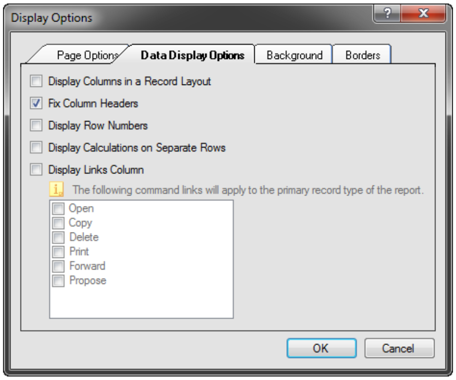
Data display options control a number of features which give you more flexibility in determining how data in your report displays. For example, you can add or remove row numbers and add links to the report, which allow staff members with appropriate permissions to modify records returned in the report. You can also output report data in a record format.

To change data display options

1 From an open report, click the Page Setup tab.

2 Click the button to the right of the Display group name.

3 Click the Data Display Options tab.



4 To format the report in record layout, select the Display Columns in a Record Layout check box. Refer to Selecting record or tabular layouts.

5 To fix the report's column headers at the top of the report so they are always visible when scrolling the report, select the Fix Column Headers check box.

6 To add row numbers to each row of the report, select the Display Row Numbers check box.

7 To display multiple calculations in the report on separate lines, select the Display Calculations on Separate Rows check box. If this check box is not selected and the report displays more than one calculation, the calculations display on the same line.

8 To add a column to your report which displays actions you can take on records in the report, select the Display Links Column check box and select the commands you want to include in the column.

Note If the rows do not refer to unique records, such as a specific incident or contact, the Display Links Column check box is disabled.

9 Click the OK button to save your display options.

Changing report backgrounds

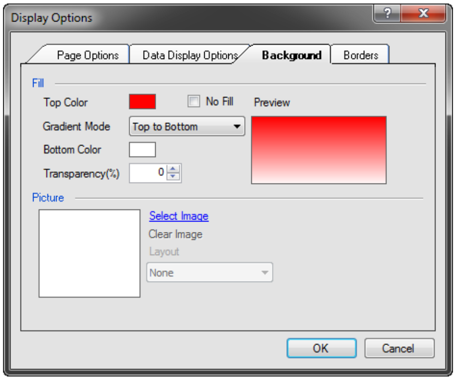
Adding colors or images to a report's background can make it more suitable for presentations or other formal purposes. You can add colors and images from the Background tab of the Display Options window.

To change a report's background

1 From an open report, click the Page Setup tab.

2 Click the button to the right of the Background group name.

3 Click the Background tab.



4 Enter the following field information.

Table 292: Background Tab Description

Field	Description
Fill	This section lets you define the colors to be used for the report's background.
Color/Top Color/Left Color	The text description for this option varies depending on the Gradient Mode you select. Click this box to select a primary color as the background. Refer to [Choosing colors]().
No Fill	Select this check box to clear any fill colors previously selected. If this box is selected, the other options on the Fill window are disabled except Color. Selecting a color automatically clears the No Fill check box, enabling the other options.

Table 292: Background Tab Description (Continued)

Field	Description
Gradient Mode	Select the positioning of the primary and secondary colors for the background from the Gradient Mode drop-down menu. Using gradient coloring lets you merge two colors. The following options are available. • **None**—Select this option to use only the primary color as the fill color. If you select None, the Gradient Color field is disabled. • **Top to Bottom**—Select this option to merge the colors from the top of the background to the bottom. • **Left to Right**—Select this option to merge the colors from the left of the background to the right.
Gradient Color/Bottom Color/Right Color	The text description for this option varies depending on the Gradient Mode you select. Click this box to select a secondary color to merge with the primary color. The fill colors then merge using the method defined in the Gradient Mode menu. Refer to Choosing colors.
Transparency(%)	Select a percentage to define how intense the fill colors are. A setting of 100% is completely transparent and prevents the fill colors from displaying. A setting of 0% has no transparency, resulting in intense background colors. The selected percentage is immediately reflected in the Preview field, so you can scroll through the transparency percentages to find a value that best suits your needs.
Preview	This area provides a sample of how the fill colors you select will appear on the report background.
Picture	In addition to adding background colors for a report, you can add a background or watermark image to the report.
Select Image	Click Select Image to select the image to use with the report. Images are added using the Images explorer. Refer to Images explorer.
Clear Image	Click Clear Image to remove a previously selected image from the report.
Layout	Click this drop-down menu to define the placement of the image on the background. Available options are None, Title, Center, and Stretch.

5 Click the OK button to save the background.

Adding borders to a report

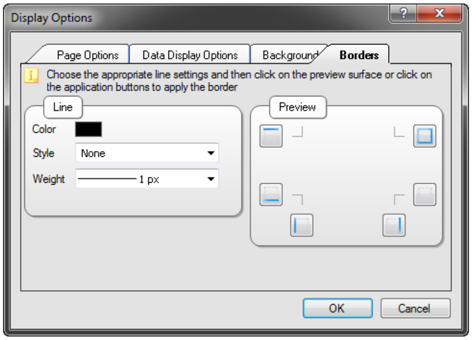
You can also add borders to a report from the Display Options window. Each border can have different colors, styles, and weights applied.

To add a border to a report

1 From an open report, click the Page Setup tab.

2 Click the button to the right of the Display group name.

3 Click the Borders tab.



4 Enter the following field information.

Table 293: Borders Tab Description

Field	Description
Color	Click this box to select a color for the border. Refer to Choosing colors.
Style	Click this drop-down menu to select one of the following border styles: Solid, Dashed, Dotted, Inset, Outset, Double, Groove, Ridge, or Rounded.
Weight	Click this drop-down menu to select the width of the border in pixels. You can choose between 1 and 10 pixels.

Table 293: Borders Tab Description (Continued)

Field	Description
Preview	This area defines the placement of the borders you define. Click any button to place a border or click the area in the Preview white space where you want the border.
 Borders	Click a button to add the selected border attributes to the top, bottom, left, right, or all sides of the component. You can also add or remove borders from all sides of the component.

5 Click the OK button to save the borders.

Showing and hiding report sections

Reports can display a large amount of information in a number of report sections. For example, a report's data area contains the tabular data returned by the report. Other report sections include **docked filters**, headers, descriptions, charts, footers, and **data exceptions**. However, there may be times when you do not want to display all sections in a report, so you are given the option to choose what sections you see in a report.

To show or hide report sections

1 From an open report, click the Display tab.

2 To remove a section from the report, clear its check box in the Sections tab group. The available check boxes are Docked Filters, Charts, Exceptions, Report Header, and Report Footer.

3 To add a section to the report, select the check box next to the section name.

Note If a section is disabled, it cannot be added to the report since it was not included when the report was created.

4 To remove the data section from the report, click the Data button and select Do Not Display Data.

Showing and hiding data exceptions

When you run a report that includes multiple **data exceptions**, you may not want to always display every exception in the report. You can hide any exception included in a report or show hidden exceptions from the Exception Visibility window.

To show and hide data exceptions

1. From an open report, click the Display tab.
2. Click the Exceptions button.
3. To hide an exception, clear the check box next to the exception.
4. To display a hidden exception, select the check box next to the exception.
5. Click the OK button to apply the exception visibility to the report.

Modifying report magnification

To better view report data, you can zoom in and out of reports. You can select magnification levels ranging from 10 percent to 200 percent to shrink or expand the report. You can alter a report's zoom level using the slider on the bottom right of the content pane. The slider is always displayed on the content pane, but is enabled only when a report is shown.

To change report magnification

Drag the slider to the left or right to decrease or increase magnification.

Or

Click the plus or minus sign on either end of the slider.

The current magnification level is shown to the left of the slider.

Changing data options

You can change the way data is shown in your report to present it more clearly. For example, you can sort the data differently, hide certain columns in the report, add page breaks to the report, or filter the data to display only a subset of the records the report returns. The other available features are **slicing**, **cross tabs**, and **rollups**. An option to display **guided assistance** response data in a tree format is also available.

Selecting columns to display

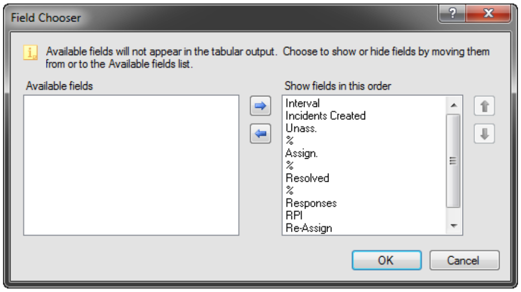
You can hide columns in your report to simplify a report's output without editing the original report. You can then show the hidden columns when you want to view them again.

You can show and hide columns using the Field Chooser or you can select from options available when right-clicking a column in the report.

To show or hide fields with the Field Chooser

1 From an open report, click the Display tab.

2 Click the Field Chooser button to open the Field Chooser window.



3 To hide a column in a report, drag the field from the Show Fields in This Order section to the Available Fields section, or select the field to hide and click the left arrow.

4 To display a column that is currently hidden, drag the field from the Available Fields section to the Show Fields in This Order section, or select the field to display and click the right arrow.

5 Click the OK button to save your changes.

To show and hide columns using the right-click menu

1 To hide a column, right-click the column you want to hide and select Hide Column.

2 To show a hidden column, right-click a visible column, select Insert Hidden Column, and select the column you want shown in the report. The column displays in the report in the column's last location.

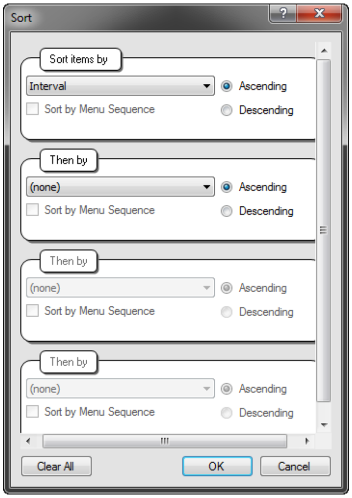
Changing sort options

A report's default sort options are determined by the report's parameters and output. After generating a report, you can change your sort options to sort by any column in the report. You can sort columns from the report's Data tab or, if your report is shown using the report view, by clicking column headers.

To change sort order from the ribbon

1 From an open report, click the Home tab.

2 Click the Sort button to open the Sort window. This button is also on the Design tab, which is available when using the layout view.



3 Select the primary field you want to sort by from the Sort Items By drop-down menu.

4 To sort by the selected field in ascending order, select the Ascending radio button. To sort in descending order, select the Descending radio button. For example, to sort a report's output by date created, with the newest dates at the top of the list, you would sort the output in descending order.

5 To sort menu fields by the sequence of the field's entries, select the Sort by Menu Sequence check box.

Important This option is available only when editing a custom report.

By default, when sorting information in a report using a menu field, the information is sorted by the menu field's entries in alphabetic order. For example, sorting a report by the Incidents Severity field with entries of Severe, Mid-Range, and Unimportant in ascending order lists records with Mid-Range, then Severe, and then Unimportant severities.

However, when editing a custom report and defining the report's default sort order, you can select the Sort by Menu Sequence check box to sort by the order or the menu field's entries. Therefore, sorting the Severity field by sequence in ascending order would result in records with Severe, then Mid-Range, and then Unimportant severities. In this example, this sort order would likely be more helpful for those using the report.

6 To sort on additional fields, select the fields to sort on from the Then By drop-down menus.

When you define multiple sort fields, the records are initially sorted by the first sort field. If any of the records have the same value for the first sort field, those records are then sorted by the subsequent sort fields.

7 To remove all sort options, click the Clear All button.

8 Click the OK button to view the report with the defined sort order.

To change sort order by clicking column headers

1 Click the Views button on the Display tab and verify that your report is shown using the report view.

2 Click the header of the column you want to sort by. The report is sorted by the column you select in ascending order, and an arrow displays on the column's header.

3 To change the direction of the sort, click the column's header again.

4 To add additional levels of sorting to the report, press **Shift** and click the headers of the columns in the order in which they should be added to the sort. The report is sorted by the selected columns in ascending order, and arrows display on the sort columns' headers.

5 To change a column's sort direction when sorting by multiple columns, press **Shift** and click the column's header.

Using Auto Filter

You can use Auto Filter to filter on each column in the report. This provides easy access to filtering on any field included in the report. When this feature is enabled, a down arrow appears in the specified column headings of a generated report. By clicking the down arrow, you can filter the report by a value in that column.

For example, in a column that displays incidents' associated products, you could click the down arrow to select a certain product. Only incidents associated with that product would display in the report.

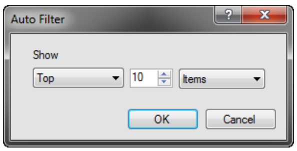
Note Auto filtering hides filtered records but does not remove them from the report output. For this reason, total record counts displayed on the report will not change when auto filtering is used.

To enable auto filters

1. From an open report, click the Home tab.
2. Click the Auto Filter button to display arrows next to each column in the report. The Auto Filter button acts as a toggle. Click the Auto Filter button again to turn off auto filtering.
3. To filter on a column, click the down arrow located in the column's header to open the drop-down menu for the column.

Note When data is filtered by a value in a particular column, the down arrow in that column's header changes from blue to red to show that filtering is active.

4. To show only those records that have a specific value for the column, select the value to filter on. Any records that do not have this value are removed from the report output.
5. To remove any filtering on values in the selected column, select All.
6. To show only those records with values at the top or bottom ranges of the selected field's values, select Top 10. When you select this option, the Top 10 window opens.



a Select Top or Bottom from the Show drop-down menu to define whether the records with the highest or lowest field values are displayed.

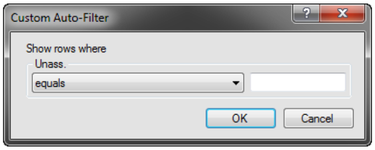
Note The definition of what a high or low value in a field is depends on the type of field. For example, in date fields, the oldest dates are at the top and the newer dates are at the bottom, whereas values in text fields are in descending alphabetical order.

b Select the number of records or the percentage of the total number of records returned in the report to include in the filtered data.

c Select whether the filtered data should include a specific number of items or a percentage of the total number of records.

d Click the OK button to save the Top 10 auto-filter settings.

7 To create a custom filter on the field, select Custom. The Custom Auto Filter window opens. Only records that match your custom filter display in the report.



a Define the custom filter you want to use. The filter options vary somewhat depending on the type of field that is being filtered on. For example, date fields include calendar options, whereas text fields do not. However, every window has a drop-down menu from which you can select the **operator**, and an area to enter the filter value. Refer to Specifying filters.

Note To specify values from menu fields, the value must be typed. When using the In List or Not In List operators, the values must be comma-separated. Text values must be enclosed in single quotation marks. For example, to enter multiple names from the Incidents.Assigned field (*incidents.assgn_acct_id*), type them as 'Bob Jones','Sarah Smith','Tom Payne'.

b Click the OK button to apply your custom filter to the report output.

Adding page breaks

You can add page breaks to your reports to make them easier to use. If page breaks are added to a report, only the specified number of rows display. A report with page breaks includes controls to navigate to other pages.

Note When page breaks are added to a report, the **slicing**, **cross tab**, and **rollups** options are disabled. In addition, page breaks are disabled in **published reports**.

Page breaks can be added from the Search window or from the Display tab when viewing a report. The following procedure describes adding page breaks from the Display tab. Refer to Searching in reports for information about using the Search window.

To add page breaks to a report

1. From an open report, click the Display tab.
2. Click the Page Report button and select the number of rows per page you want.
3. To specify a different number of rows per page, click the Page Report button and select More Options.
   a. Select the Page Report check box. If the report is already paged, this check box is automatically selected when you open the window.
   b. Type the number of rows you want on each page in the Rows per Page field.
   c. Click the OK button to save your changes and view the report.
4. To remove paging from the report, click the Page Report button and select Remove Paging.

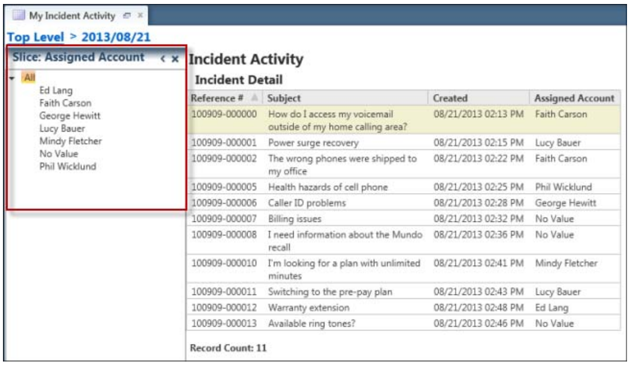
Once you select the number of rows you want, the report displays with a list of page numbers and arrows at the top of the page. Clicking |< or >| takes you to the first or last page of the report. Clicking < or > takes you to the preceding page or the next page of the report. If enough pages are present in the report, you will also see << and >> at the top of the report. Clicking these arrows displays the preceding or next set of page numbers in the report controls.

Slicing report data

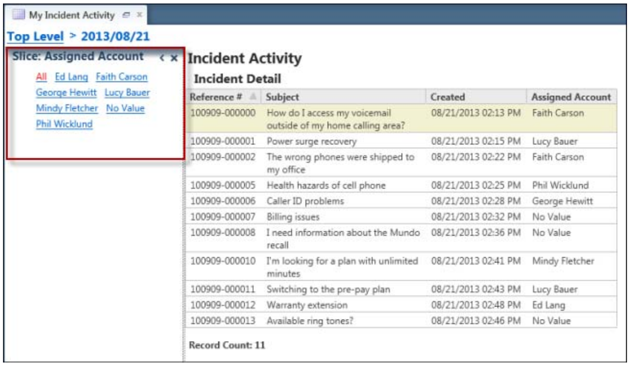
Slicing a report allows you to group tabular data sharing common values in fields included in the report. You can then select from the slice tree or links and view only the report data that matches the selected field values. For example, in an incidents report, you could slice by the assigned staff member to display incidents assigned to that person. You could then further break down the incidents assigned to the staff member by other fields such as status.

Note When slicing and cross tabs are applied to a report at the same time, the cross tab is applied first, followed by slicing.

An example of an incidents report sliced in this manner is shown in the following figure. The slice options are displayed in a tree format.



The next figure shows a report sliced on assigned account with the slice options displayed as links.



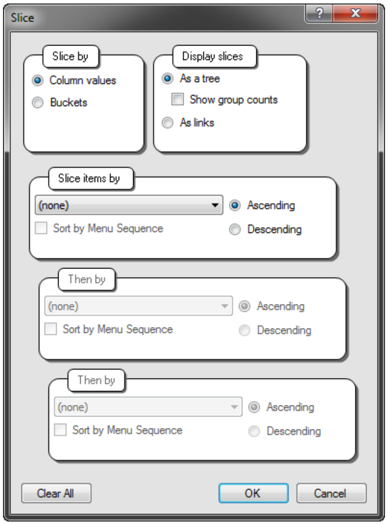
Tip You can hide the slice section in your report by clicking the section's Auto-Hide button or you can remove slicing from the report by clicking the Close button on the slice section's header.

To slice report data

1 From an open report, click the Home tab.

2 Click the Slice button. The Slice window opens.

Tip When viewing a report using the layout view, you can select a column, click the Design tab, and click the Slice button to slice the report by the selected column.



3 Enter the following field information.

Table 294: Slice Window Description

Field	Description
Slice By	Select from the following options to define the slice by column values or buckets.
Column Values	Select this radio button to define slicing by specific values in the fields included in the report. For example, if slicing on the incidents' Status Type field, you can slice on Unresolved, Waiting, or Solved.
Buckets	Select this radio button to define slicing by groupings of values in the fields included in the report, such as Solved AND Waiting incidents. When you select this option, the window changes to let you define the groupings. Refer to Defining slice buckets.
Display Slices	Select from the following options to define how the slice groups selection appears in the report.
As a Tree	Select this radio button to display slice groups in a tree that is docked to the report.

Table 294: Slice Window Description (Continued)

Field	Description
Show Group Counts	Select this check box when displaying slices as a tree to include the number of records in the slice group. The number displays next to each group name in the tree.
As Links	Select this radio button to display the slice groups as links above the data. This option is available only when a single report field is included in the slice.
Slice Items By	Select the fields to slice items by. If more than one field is selected, the first field defines the top slice group, and the subsequent fields selected define sub-groups in the top group. If there are multiple slice fields defined, and the first is set to None, the other slice fields are also cleared.
Ascending/Descending	Select these radio buttons to sort the entries in the slice tree or links in ascending or descending order.
Sort by Menu Sequence	When slicing by a menu field, such as *incidents.status*, select this check box to order the slice groups using the order of the options in the menu field. If this check box is not selected, the slice groups will be ordered alphabetically. **Note:** This option can be configured only when editing the report on the report design center. Refer to Opening the report design center.
Drag and Drop Options	Click this text to configure custom drag-and-drop options for inline editing. Refer to Customizing drag-and-drop slice options. **Note:** This option can be configured only when editing the report on the report design center. Refer to Opening the report design center.
Clear All	Click this button to reset all slice fields to None.

4 Click the OK button to save the settings and display the report with the defined slice groups.

5 To remove slicing from your report, click the Slice button and select Reset.

6 To display the number of records in each slice group displayed as a tree, click the Slice button and select Display Group Counts. The number of records in each slice group displays next to the group names in the slice tree.

7 To switch between displaying slice groups as a tree and as links, click the Slice button and select Display Slice Items > As a Tree or As Links.

Note If you are slicing by more than one column and change the display from a tree to links, only the first slice column displays.

Defining slice buckets

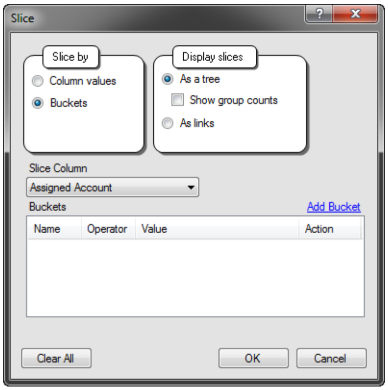
Slicing records by buckets allows you to define groupings of data to sort on that would not be allowed by slicing on specific values in a field. For example, slicing incident reports on the date created values may not be effective since the unique values in date/time fields cover a small span of time. Slicing on such a field would result in very granular slices. However, defining a slice bucket on the date created field would allow you to slice the report output by incidents created during a date range, such as the past seven days.

To define a slice bucket

1 From an open report, click the Home tab.

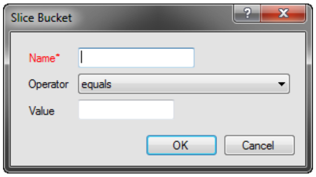
2 Click the Slice button. The Slice window opens.

3 Select the Buckets radio button in the Slice By section of the Slice window. The options on the Slice window change to let you create, edit, or delete buckets.



4 Select the field to slice on from the Slice Column drop-down menu.

5 Click Add Bucket to open the Slice Bucket window.



6 Enter the following field information.

Table 295: Slice Bucket Window Description

Field	Description
Name*	Type a name for the new bucket.
Operator	Click this drop-down menu to select the operator to use. Operator options are the same as those available when defining filter values, described in Specifying filters.
Value	Select the values from this field to add to the bucket. The available values change depending on the field selected. For example, some fields display drop-down menus with various values to select, while other fields display a calendar to select specific dates or date ranges. **Note:** To specify values from menu fields, the value must be typed. When using the In List or Not In List operators, the values must be comma-separated. Text values must be enclosed in single quotation marks. For example, to enter multiple names from the Incidents.Assigned field (*incidents.assgn_acct_id*), type them as 'Bob Jones','Sarah Smith','Tom Payne'.

7 Click the OK button to return to the main Slice window.

Customizing drag-and-drop slice options

One of the methods you can use to edit fields enabled for inline editing is to drag a record from a report to a slice node that is defined by the same field. For example, if a report is sliced by incident status, you can drag an unsolved incident to a slice node grouping solved incidents to change the incident's status to Solved. However, by default, you cannot edit any fields using drag-and-drop that are not used in the slice tree. Refer to Enabling inline editing and Editing data inline.

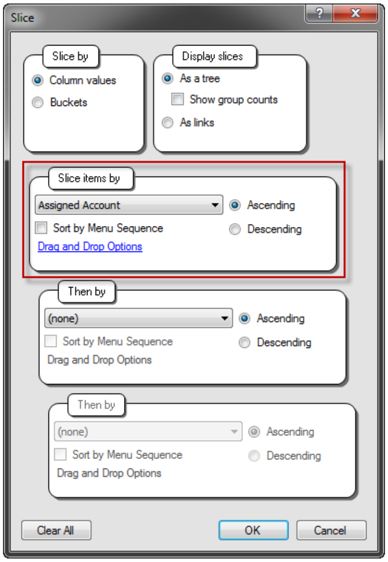
Important It is not possible to customize slice drag-and-drop options when running a report. The options must be configured when editing the report on the report design center. Refer to Opening the report design center.

By customizing slice drag-and-drop options, you change the drag-and-drop behavior to edit fields in a record that are not used in the slice tree. For example, you can associate several tasks with an incident by dragging the tasks from the report output to the slice node that includes the incident you want them associated with.

This feature is also useful when working with custom objects and attributes with record associations. For instance, if you use a custom attribute in incident workspaces to create associations with parent incidents, you can drag incidents listed on a report and drop them on a slice node that contains the parent incident you want them associated with.

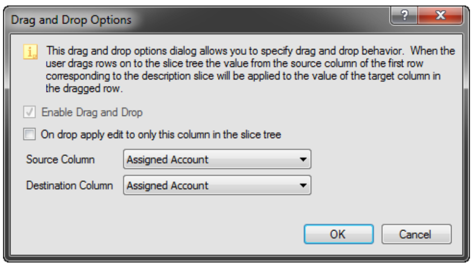
To customize slice drag-and-drop options

1. From an open report, click the Inline Editing button on the Home tab to ensure inline editing is enabled. Refer to Enabling inline editing.
2. Click the Slice button to open the Slice window.
3. Click the Slice Items By drop-down menu and select the column you want to use to slice the report output.



The column you choose to slice by is used to create groups of records. It does not necessarily store the values that are changed when dropping values from other records. The column that stores the values that are changed is selected in step 7.

4 Click Drag and Drop Options. The Drag and Drop Options window opens.



5 Select the Enable Drag and Drop check box if it is not selected. The check box is selected by default but is disabled if the slice column is enabled for inline editing.

Important If you select multiple columns to slice by on the Slice window, you can select the On Drop Apply Edit to Only this Column in the Slice Tree check box to prevent values in the dragged records from being changed automatically. This check box is cleared by default, which results in the records dragged to the slice tree having their values changed to match that in the other slice columns. For example, if you have a second slice on Status and drag an unresolved incident to a slice that groups incidents with a Solved status, the incident you drag will have its status set to Solved. This check box has no impact if only one column is used in the slice.

6 Click the Source Column drop-down menu and select the column containing the values you want to use to populate values in the destination column.

7 Click the Destination Column drop-down menu and select the column you want populated with values from the source column.

The options displayed in the drop-down menu depend on the selected source column since the columns must have the same data type (such as text, currency, or integer).

8 Click the OK button.

9 Click the OK button again to close the Slice window.

10 Save the changes to the report.

When you run the report, you will drag records you want to change to the slice tree. Those records will have their record associations changed to match that of the record included in the slice you drag them to.

Displaying data using cross tabs

The Cross Tab feature lets you display report output in a table to summarize large amounts of data. Using a cross tab table, you can select the fields to define the table's rows, columns, and output fields, essentially grouping the data by both the row and column output. The output fields are a culmination of the row and column data.

For example, if you had a report that returned the number of incidents assigned to each agent and the incidents' statuses, you could designate the assigned account column as a row field, status as a column field, and number of incidents as a data field. The output would be similar to the sample report displayed in the following figure, which shows the number of incidents categorized by assigned staff member and status.

Open Incidents
Status - Created

	Incidents		
Assigned Account	Solved	Unresolved	Waiting
Ed Lang	1	1	0
Mindy Fletcher	1	0	0
Lucy Bauer	2	1	1
Faith Carson	1	2	0
George Hewitt	0	2	0
Phil Wicklund	0	4	0
No Value	0	7	0
Total	5	17	1

Record Count: 7

Once you view your report data using the columns, rows, and output fields you define, you can select different fields to use as the columns, rows, and output fields. This lets you restructure the report to view groupings of different data, such as the number of incidents each staff member has, grouped by category instead of product. Without using cross tabs, the only way to retrieve these different summaries of data would be to use separate reports.

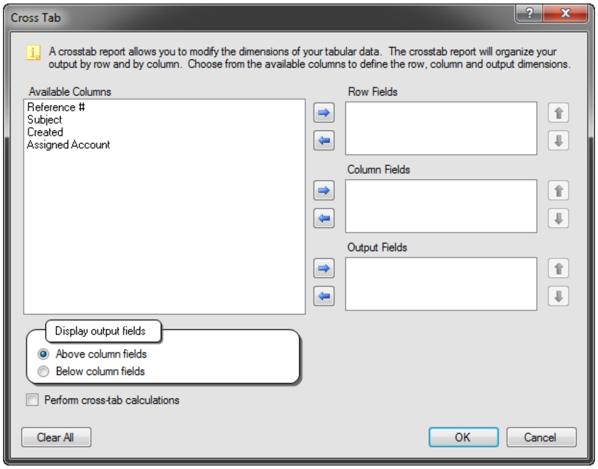
Note When cross tabs and slicing are applied to a report at the same time, the cross tab is applied first, followed by slicing.

To define cross tab reports

1 From an open report, click the Display tab.

2 Click the Cross Tab button.

3 Select Choose Columns to open the Cross Tab window.



4 Enter the following field information.

Table 296: Cross Tab Window Description

Field	Description
Available Columns	This section lists the output fields included in the report available for cross tabs. Fields from this section can be dragged to the row, column, and output fields, or a field can be moved by selecting it and clicking the right arrow.
Row Fields	Move fields to this section to define them as rows in the report.
Column Fields	Move fields to this section to define them as columns in the report.
Output Fields	Move fields to this section to define them as output fields in the report.
Display Output Fields	The options in this section let you define where the headers for the output fields should be in relation to the column fields.
Above Column Fields	Select these options to place the output field above or below the columns' values.
Below Column Fields	
Perform Cross-Tab Calculations	Select this check box to perform cross-tab calculations. An additional column displays for each cross tab calculation.

Table 296: Cross Tab Window Description (Continued)

Field	Description
Clear All	Click this button to clear all fields and reset the cross-tab definition.

5 Click the OK button to save the changes and generate the report.

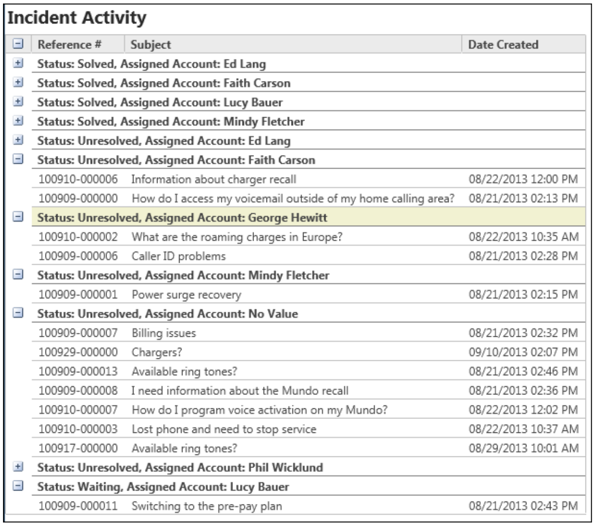
6 To remove cross tabs from your report, click the Cross Tab button and select Reset.

7 To perform cross-tab calculations on the report, click the Cross Tab button and select Perform Cross-Tab Calculations.

8 To switch between displaying output fields above or below column fields, click the Cross Tab button and select Display Output Fields > On Top or On Bottom.

Displaying rollup levels

You can define rollup levels in a report to group data beneath headings in the report. You can add additional rollup levels to further break down the data under each heading by grouping data under sub-headings. Using rollups, you can group rows in a report that share the same value in the columns you select for the rollup levels. For example, you could add rollups to an incident report to group incidents by their status, and then add an additional rollup level to group the incidents that have the same status by their assigned staff account. A sample report using these rollup levels is shown in the following figure.



Incident Activity

Reference #	Subject	Date Created
Status: Solved, Assigned Account: Ed Lang		
Status: Solved, Assigned Account: Faith Carson		
Status: Solved, Assigned Account: Lucy Bauer		
Status: Solved, Assigned Account: Mindy Fletcher		
Status: Unresolved, Assigned Account: Ed Lang		
Status: Unresolved, Assigned Account: Faith Carson		
100910-000006	Information about charger recall	08/22/2013 12:00 PM
100909-000000	How do I access my voicemail outside of my home calling area?	08/21/2013 02:13 PM
Status: Unresolved, Assigned Account: George Hewitt		
100910-000002	What are the roaming charges in Europe?	08/22/2013 10:35 AM
100909-000006	Caller ID problems	08/21/2013 02:28 PM
Status: Unresolved, Assigned Account: Mindy Fletcher		
100909-000001	Power surge recovery	08/21/2013 02:15 PM
Status: Unresolved, Assigned Account: No Value		
100909-000007	Billing issues	08/21/2013 02:32 PM
100929-000000	Chargers?	09/10/2013 02:07 PM
100909-000013	Available ring tones?	08/21/2013 02:46 PM
100909-000008	I need information about the Mundo recall	08/21/2013 02:36 PM
100910-000007	How do I program voice activation on my Mundo?	08/22/2013 12:02 PM
100910-000003	Lost phone and need to stop service	08/22/2013 10:37 AM
100917-000000	Available ring tones?	08/29/2013 10:01 AM
Status: Unresolved, Assigned Account: Phil Wicklund		
Status: Waiting, Assigned Account: Lucy Bauer		
100909-000011	Switching to the pre-pay plan	08/21/2013 02:43 PM

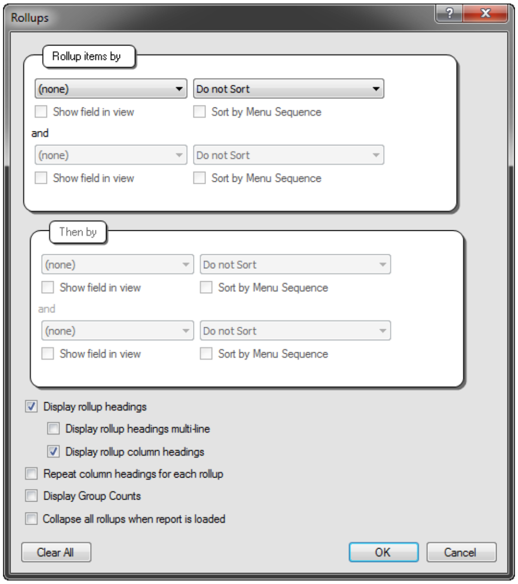
To define rollups

1 From an open report, click the Home tab.

2 Click the Rollups button.

Tip When viewing a report using the layout view, you can select a column, click the Design tab, and click the Rollup button to roll up the report by the selected column.

3 Select Choose Columns to open the Rollups window.



4 Enter the following field information.

Table 297: Rollups Window Description

Field	Description
Rollup Items By	Select output columns from the drop-down menus in this section to use as the primary rollup level. Once you select a column, you can select the sort order for the rollup column. Options include Do Not Sort, Sort Ascending, and Sort Descending. You can add additional columns to the primary rollup level in this section by selecting the columns from the other drop-down menus. When multiple columns are used in a rollup level, the data displayed together under the same rollup heading has the same values in all the columns selected for the rollup level.
Show Field in View	Select this check box to display the rollup column you selected as a column in the report. If this check box is not selected, the column name displays in the rollup heading, but is not included as a column in the report output.

Table 297: Rollups Window Description (Continued)

Field	Description
Then By	Select output columns from the drop-down menus in this section to use as the secondary rollup level. Once you select a column, you can select the sort order for the rollup column. Options include Do Not Sort, Sort Ascending, and Sort Descending. Secondary rollup levels break down the data in the primary rollup level according to the columns selected for the secondary level. Once you define a secondary rollup level, an additional Then By field displays, allowing you to define a third rollup level to further break down the data grouped under the secondary rollup level. **Note:** If records grouped under the secondary rollup have null values for the rolled-up field and if the rolled-up column is formatted to display blanks for records with null values, the header for the secondary rollup level does not display.
Display Rollup Headings	Select this check box to display the rollup headings and sub-headings. If this check box is not selected, the headings do not display, though the report data is still sorted as if the headings were present.
Display Rollup Headings Multi-Line	Select this check box to display each rollup column as a separate heading. If this check box is not selected when using multiple columns in the same rollup level, the columns for the rollup level display in the same heading. **Note:** This check box is disabled if the Display Rollup Headers option is not selected.
Display Rollup Column Headings	Clear this check box to hide the name of the rolled-up column on rollup group headings. By default, the name of the column you roll up is displayed for each rollup group.
Repeat Column Headings for Each Rollup	Select this check box to show the output column headers before each rollup heading and sub-heading. If this option is not selected, the column headers display only at the top of the report.
Display Group Counts	Select this check box to display the number of items under each rollup heading and sub-heading.
Collapse All Rollups when Report is Loaded	Select this check box to collapse all rollups in the report when it initially loads.

5 To remove the rollups you have selected on the Rollups window, click the Clear All button.

6 Click the OK button to generate the report using the rollups settings.

7 To remove rollups from your report, click the Rollups button and select Reset.

8 To display the number of records in each rollup, click the Rollups button and select Display Group Counts.

9 To show or hide headings for each rollup group, click the Rollups button and select Display Rollup Headings to enable or disable the option.

10 To show or hide the name of the rolled-up column in the heading for each rollup group, click the Rollups button and select Display Column Headings to enable or disable the option.

11 To show or hide repeating column headers, click the Rollups button and select Repeat Column Headings to enable or disable the option.

12 To collapse all the rollup headings in a report, click the Rollups button and select Collapse All.

When viewing a report with rollup headings, you can click the minus or plus button next to each heading to collapse or expand the headings to hide or display the rows under the headings.

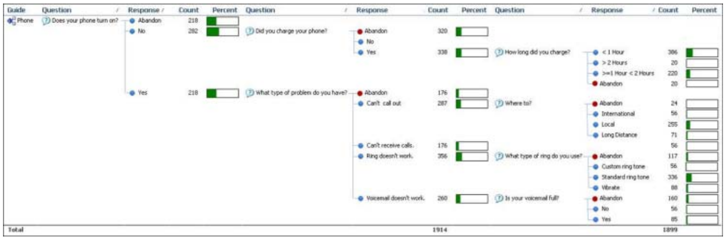
Displaying guided assistance data in trees

Guided assistance allows you to offer help to your customers using questions that then branch to other questions or answers. Refer to Configuring guided assistance.

Displaying the guided assistance questions and responses in a way that clearly shows the relationships between them can be challenging using the standard formats available for reports. However, you can configure reports that output this information to display the report columns in a tree format to clearly show the branching relationships in the data.

Note This option is available only when the report displays information from the Guided Assistance Responses (*decision_tree_responses*) table. This option is disabled when the report is configured to display data using cross tabs. Refer to Displaying data using cross tabs.

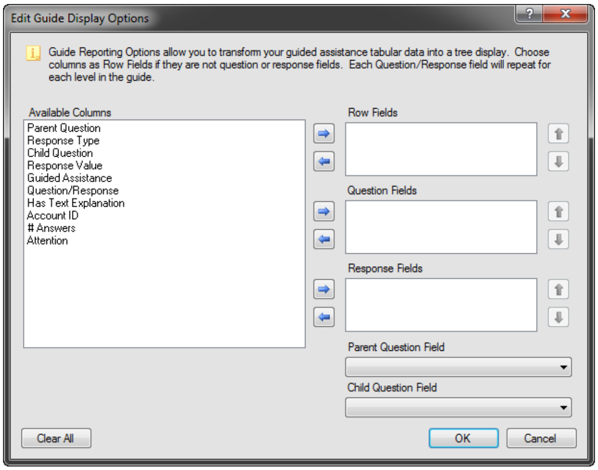
The following report is configured to display guided assistance data in a tree format.



To display guided assistance information in a tree format

1 Open the report that contains the guided assistance information.

2 Click the Display tab and then click the Guide button. The Edit Guide Display Options window opens.



3 Enter the following field information.

Table 298: Edit Guide Display Options Window Description

Field	Description
Available Columns	This section lists the output fields included in the report. Fields from this section can be dragged to the row fields, question fields, and response fields sections, or a field can be moved by selecting it and clicking the right arrow.
Row Fields	Move fields to this section to define them as rows in the report. Row fields generally do not have a parent/child relationship with other data in the report, but instead show data that applies to the entire guide tree. For example, a row field could display the name of the guided assistance guide that includes the question and response fields.
Question Fields	Move fields to this section to define them as question fields in the report. These fields generally display information pertaining to the questions, such as the question description or question type.
Response Fields	Move fields to this section to define them as response fields in the report. These fields generally display information pertaining to the responses, such as the response description or response order.
Parent Question Field	Click this drop-down menu and select the field you want to use to display the parent question in the tree. Only integer or text type fields can be selected.
Child Question Field	Click this drop-down menu and select the field you want to use to display the parent question's child questions. Only integer or text type fields can be selected. In addition, the field type must match that of the field selected for the parent question field.
Clear All	Click this button to clear all fields and reset the guide display options.

4 Click the OK button to save the changes and generate the report.

Saving and resetting report display settings

Once you edit a column or make changes to a report's output options, you can use the Save as Default and Restore options on the Home tab's Default Settings button to preserve the changes or to clear any changes you have made.

Saving display and data settings

When you change display and data settings or column formatting to modify a report's appearance, those changes are lost when you close the report. When you next view the report, it opens using the defaults defined when the report was created. However, using the Save as Default feature, you can save changes to these settings to your workstation so the report uses the display and data settings you previously defined.

If you save default settings for a report and the report's default settings are later changed, your saved settings are removed. Saved settings are user specific, so you must log in as the same staff account to have your saved settings applied to the report. Refer to Changing your personal settings.

To save display and data settings for a report

1. Open a report and change display and data settings.
2. Click the Home tab.
3. Click the Default Settings button and select Save as Default.

Resetting display and data settings

You can remove a report's display and data settings that are stored on your workstation. Once you do so, these settings return to the defaults defined in the report.

To reset display and data settings

1. Open a report which has display and data settings stored on your workstation.
2. Click the Home tab.
3. Click the Default Settings button and select Restore. A warning message asks if you are certain you want to restore the default settings.
4. Click the Yes button to delete your personalized report settings from your workstation.

Editing data inline

When a report displays unique records, such as incidents or opportunities, the Inline Editing feature lets you edit the values in columns shown on the report without opening the records. Individual values can be edited directly from the report, or you can edit values in multiple records. For example, if a report shows the staff member an incident is assigned to, you can change the assigned staff member from the report without opening the record, or you can reassign several incidents shown on the report to a selected staff member.

Important In order for staff members to edit records using inline editing, their profile must include permission to edit the type of records returned in the report. Refer to Customizing profiles. In addition, inline editing must be enabled for the report and the report must display data that can be edited. Refer to Enabling inline editing.

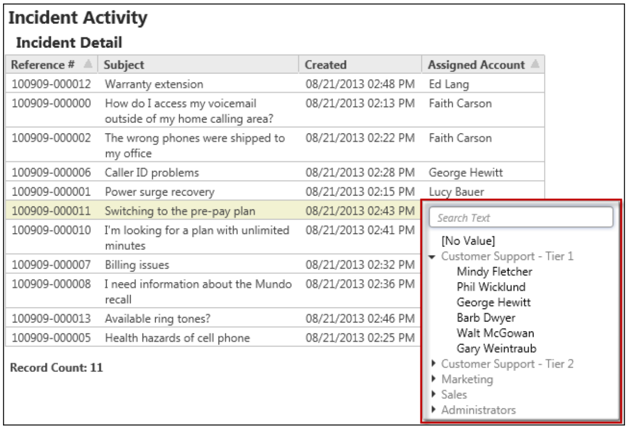
When you edit data inline on a report, the changes you make need to be saved to the server. If this is not done, the information stored in the server's database will not be updated. You can either manually save the changes or use the Auto Save feature to automatically save each change after it is made.

Editing individual values inline

When editing options are enabled in a report, the data shown on the report can be edited by selecting individual values directly on the report. Editing options vary depending on the type of field being edited. For example, a text field presents a text box and a menu field presents a drop-down menu.

Note If a required custom field is selected for inline editing, the field requires a value before the record can be saved.

An example of a menu field being edited inline on a report is shown in the following figure.



To edit an individual value inline

1 Click the row that displays the information you want to edit.

Tip You can see which fields can be edited inline by hovering over the fields on the selected row. Fields that can be edited are highlighted in blue.

2 Click the field that you want to change. Editing options specific to the field's **data type** display. For example, menu options display for menu fields and date options display for date fields.

3 Enter the new value.

4 Press **Enter** or click outside the field you are editing. Changes to some field types are applied automatically when you enter the value.

Tip You can press **Esc** to cancel the edit.

5 If inline edits are not saved to the server automatically, click the Save button on the ribbon's Home tab to save the change to the server. Refer to Saving changes to the server.

Editing values in multiple rows

If your report includes numerous rows with the same value that you want to edit, you can select the rows and change the value using the Edit Selection feature. You can also use **slicing** to group the records by the field you want to edit and then drag the records you want to change to the correct slice group.

To edit values in multiple rows using the ribbon

1. From an open report that allows inline editing, press **Ctrl** while selecting each record.
2. Click the Home tab.
3. Click the Edit Selection button. A menu displays the fields that can be edited in the rows.
4. Select the field that you want to edit. Editing options specific to the field's data type display.
5. Enter the value you want the selected records to have.
6. Click the OK button to apply the change to the selected records.
7. If inline edits are not saved to the server automatically, click the Save button on the ribbon's Home tab to save the changes to the server. Refer to Saving changes to the server.

To edit multiple values using slicing

1. Slice the report to group the records by the field you want to edit, displaying the slices as a tree rather than links.

   For example, if you want to reassign several incidents to a different staff account, slice the report by the report's Assigned Account column. Refer to Slicing report data.
2. Select the folder in the slice tree that contains the records you want to edit.
3. Press **Ctrl** while selecting each record you want to edit.
4. Drag the selected rows to the folder on the slice tree that shows the value you want. Once you drop the rows on the slice tree, the report is updated to show the new values for the selected rows.
5. If inline edits are not saved to the server automatically, click the Save button on the ribbon's Home tab to save the changes to the server. Refer to Saving changes to the server.

Saving changes to the server

When you edit data inline, the changes need to be saved to the server. If the Auto Save feature is enabled, each change is saved automatically. However, you can also disable Auto Save if you want to make several changes and then save the changes to the server. Refer to Enabling inline editing for information about enabling Auto Save.

When data has been edited on a report but the changes have not been saved to the server, a visual indicator displays on the report next to the edited value. Once the data is saved to the server, the visual indicator is removed. This report shows three incidents that have been reassigned to other agents using inline editing. The blue triangles in these fields indicate that the changes have not yet been saved to the server.

Reference #	Subject	Created	Assigned Account
100909-000012	Warranty extension	08/21/2013 02:48 PM	Mindy Fletcher
100909-000000	How do I access my voicemail outside of my home calling area?	08/21/2013 02:13 PM	Phil Wicklund
100909-000002	The wrong phones were shipped to my office	08/21/2013 02:22 PM	George Hewitt
100909-000006	Caller ID problems	08/21/2013 02:28 PM	George Hewitt

To automatically save changes

Click the Home tab and then click the Auto Save button. The button is highlighted when Auto Save is enabled. Any other inline edits made to the report's fields will then be saved to the server automatically until the report is closed again.

To manually save changes

Click the Home tab and then click the Save button.

36

Data Dictionary

The information returned in reports and dashboards is stored in your site's Oracle Service Cloud **database**, allowing you to see vital information about your customers, staff members, and interfaces. Not all the information in the database is accessible to Oracle RightNow Analytics Cloud Service (Analytics), but you have another option for viewing all the tables in the database.

Using the data dictionary, you can access all the tables in the database and view details about each tables' columns.

Viewing the data dictionary

You can access the data dictionary within the **administration interface** to view details about all the tables in the database. You can also view information about each table's columns, such as the columns' names, descriptions, and database types.

Note You can add the Data Dictionary component to any navigation list for quicker access to the data dictionary. Refer to Customizing navigation and configuration lists.

To view the data dictionary

1 Click the Configuration button on the navigation pane.

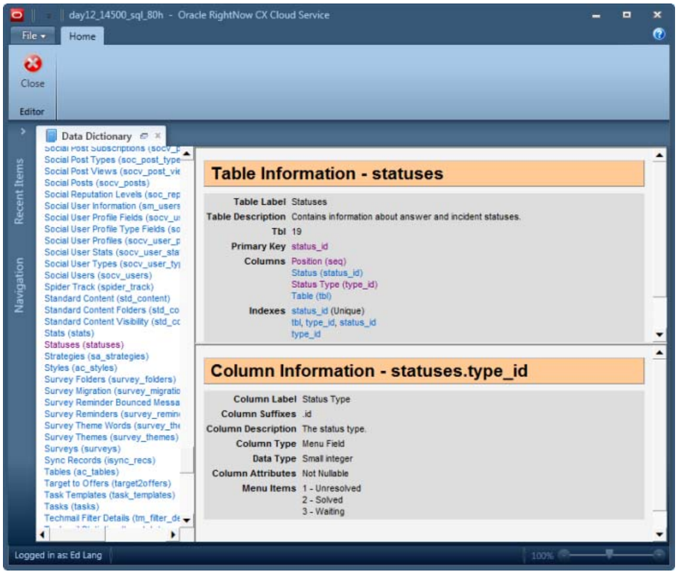
2 Double-click Data Dictionary under Database. The content pane displays a list of all the tables in the database.

3 Click a table on the left to view the table information on the right. The details that display depend on the table you have selected. The following table describes the fields you may see in the Table Information section.

Table 299: Table Information Description

Field	Description
Table Label	Lists the descriptive table name used in the data dictionary throughout Oracle Service Cloud.
Table Description	Displays a description of the table.
Tbl	Displays the table ID number.
Visibility	Indicates the products and components that use the table, such as Service, Offer Advisor, and Chat.
Custom Fields	Indicates whether custom fields are allowed in the table.
Primary Key	Lists the primary key columns. Click a column to view the column information.
Columns	Lists the columns contained in the table. Click a column to view the column information.
Indexes	Lists the indexed columns in the table. Click an indexed column to view the column information.

4 To view column details, click a column in the Table Information section. The details that display depend on the column you select. Here is a sample of the data shown in the data dictionary.



The following table describes the fields you may see in the Column Information section.

Table 300: Column Information Description

Field	Description
Column Label	Displays the descriptive column label used by the data dictionary throughout Oracle Service Cloud.
Column Suffixes	Indicates the suffixes that can be used with this column in analytics, such as *.id* or *.name*.
Column Description	Displays a description of the column.
Column Type	Displays the type of column, such as menu field or major join field.
Data Type	Lists the column data type, such as integer or varchar.
Length	Lists the number of characters allowed in the field.
Column Attributes	Lists the column attributes, such as not nullable or unique.

Table 300: Column Information Description (Continued)

Field	Description
Analytics Usage	Indicates how the column can be used in analytics. • All—Can be used anywhere in the report • Display—Can be used in a display column • Exception—Can be used in an exception • Filter—Can be used in a regular (node) filter • Group—Can be used to group • Group Filter—Can be used in a group filter • Join Filter—Can be used in a join filter • No Search—Can be used in a display column, exception, or group filter, and can be used to group or sort • Search—Can be used in a regular, group, or join filter, and exception • Sort—Can be used to sort
Menu Items	Lists the text and ID numbers of the possible menu values for the column.
Joins	Lists the columns that the selected column is joined to.

37

Analytics Configuration Settings

A number of site **configuration settings** can impact how your reports run, how certain information in them is displayed, and how much information is available for the reports to return. The settings you should be aware of are described in this section, and are organized by the folder and subfolders where they are located. For information about modifying configuration settings, refer to Customizing configuration settings.

Important Changes made to site configuration settings can greatly impact the performance and functionality of your entire site. Before you change any site configuration setting, it is important that your organization understands the impact of changing the setting.

Common settings

Only one setting in the Common category impacts reports: KF_ACTIONABLE_-DATA_PURGE_DAYS, located in the Common > Knowledge Base folder. This setting allows you to specify the number of days that daily actionable knowledge base reporting statistics are stored in the database. To prevent these statistics from being removed, set this value to 0. The default value for this setting is 45 days.

RightNow Common settings

The following settings are located in the RightNow Common folder. These settings let you adjust a number of values that impact what information is available in certain reports, the maximum size of generated reports, date and time formats, and other aspects of reporting.

Table 301: RightNow Common Analytics Settings

To…	Use this setting…
RightNow Common > Service Modules > Clustering Field	
Enable clustering and the use of clustering information by other modules. **Note:** The default value for this setting is enabled (Yes).	CLUST_ENABLED
RightNow Common > General Analytics Options > Server Options	
Specify how many days charts and other images in scheduled reports and forwarded reports are kept. Scheduled reports use the "stored on the server" formats and forwarded reports use the HTML attachment option. The maximum is 90 days. **Note:** The default value for this setting is 14.	KEEP_EMAILED_IMAGES
Specify the maximum file size, in bytes, the Web server can return to the client when generating a report. The maximum value for this setting is 2147483647 (2 GB). **Note:** The default value for this setting is 15728640 (15 MB).	MAX_ANALYTICS_FILE_SZ
Specify the number of days after which report run audit log rows are deleted. **Note:** The default value for this setting is 10.	PURGE_REPORT_RUN_AUDITS
RightNow Common > General Analytics Options > Report Options	
Specify the choice of the From address when a report is emailed as a subscription or when using the Send To feature. The accepted values are: 1 - The From address defined in the default mailbox for the interface. 2 - The email address of the staff member who owns the scheduled report and/or sends the report. **Note:** The default value for this setting is 2.	RPT_FROM_ADDR

Table 301: RightNow Common Analytics Settings (Continued)

To…	Use this setting…
RightNow Common > General Analytics Options > Custom Scripts	
Specify the size of the data buffer (in bytes) used when processing custom scripts in Analytics. **Note:** The default value for this setting is 50000.	CUSTOM_SCRIPT_DATA_SIZE
RightNow Common > General Analytics Options > Group Date Format	
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Year/Month/Day at runtime. **Note:** The default value for this setting is YYYY/MM/DD.	GRP_DT_DATE_DAY_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Year/Month/Day/Hour at runtime. **Note:** The default value for this setting is YYYY/MM/DD/HH24.	GRP_DT_DATE_HOUR_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Year/Month at runtime. **Note:** The default value for this setting is YYYY/MM.	GRP_DT_DATE_MONTH_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Year/Quarter at runtime. **Note:** The default value for this setting is YYYY/Q.	GRP_DT_DATE_QUARTER_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Year/Week at runtime. **Note:** The default value for this setting is YYYY/WW.	GRP_DT_DATE_WEEK_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Year/Week Start at runtime. **Note:** The default value for this setting is YYYY/WWW.	GRP_DT_DATE_WEEK_START_FMT

Table 301: RightNow Common Analytics Settings (Continued)

To…	Use this setting…
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Day of Month at runtime. **Note:** The default value for this setting is DD.	GRP_DT_- DAY_OF_MONTH_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Day of Week at runtime. **Note:** The default value for this setting is DAY.	GRP_DT_DAY_OF_WEEK_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Hour at runtime. **Note:** The default value for this setting is HH24.	GRP_DT_HOUR_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Month/Day at runtime. **Note:** The default value for this setting is MM/DD.	GRP_DT_MONTH_DAY_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Month at runtime. **Note:** The default value for this setting is MM.	GRP_DT_MONTH_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Quarter at runtime. **Note:** The default value for this setting is Q.	GRP_DT_QUARTER_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Week at runtime. **Note:** The default value for this setting is WW.	GRP_DT_WEEK_FMT
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Week Start at runtime. **Note:** The default value for this setting is WWW.	GRP_DT_WEEK_START_FMT

Table 301: RightNow Common Analytics Settings (Continued)

To…	Use this setting…
Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Year at runtime. **Note:** The default value for this setting is YYYY.	GRP_DT_YEAR_FMT

RightNow User Interface settings

The following settings are located in the RightNow User Interface folder.

Table 302: RightNow User Interface Analytics Settings

To…	Use this setting…
RightNow User Interface > Misc. Customization > Query	
Specifies the maximum number of rows that can be displayed in a report. Limiting the number of rows prevents inefficient reports from returning more rows than can be quickly processed and displayed. If the number of rows returned in a report exceeds this number, the remaining results are not displayed. **Note:** The default value for this setting is 10000. This setting is ignored when sending queued or scheduled reports to comma-separated values (CSV) files. Refer to Queuing reports and Scheduling reports.	VRL_HARD
RightNow User Interface > Support > General	
Specifies the number of days after which solved incidents are no longer fully searchable. Solved incidents whose closed dates are older than the number of days specified only support searching on keywords in the subject. Set this value to 0 or to a value greater than the value in ARCHIVE_INCIDENTS to disable this feature. **Note:** Sites with less than 1 million rows in the incidents table are not affected. Default is 366.	PURGE_DELETE_INCIDENT_PHRASES

Agedatabase settings

The Agedatabase utility automatically runs on the server hosting your Oracle Service Cloud site. The utility's main function is to perform automatic maintenance on your knowledge base (for example, aging incidents and answers). However, Agedatabase also caches report data into individual report tables to make report generation more efficient, and it purges old information that is no longer required for reports to help maintain the efficiency of your database.

The following settings are located in the Agedatabase folder. These settings let you set the aggressiveness of the utility's data caching and purging, and specify values used by certain opportunity tracking reports that use cached data.

Important Changes made to configuration settings can greatly impact the performance and functionality of your entire site. Before you change any configuration setting, it is important that your organization understands the impact of changing the setting.

Table 303: Agedatabase Utility Analytics Settings

To…	Use this setting…
Agedatabase > Batch Processing > Miscellaneous Purging	
Define the number of days after which incident performance statistics are removed from the database. Set this value to 0 to prevent statistics from being removed from the database. **Note:** The default value for this setting is 0.	PURGE_DELETE_INC_PERFORMANCE
Define the number of days after which keyword search statistics are removed from the database. Set this value to 0 to prevent statistics from being removed from the database. **Note:** The default value for this setting is 120.	PURGE_DELETE_KEYWORD_SEARCHES
Define the number of days after which queue statistics are removed from the database. Set this value to 0 to prevent statistics from being removed from the database. **Note:** The default value for this setting is 120.	PURGE_DELETE_QUEUE_STATS
Define the number of days after which session summary statistics are removed from the database. Set this value to 0 to prevent statistics from being removed from the database. **Note:** The default value for this setting is 0.	PURGE_DELETE_SESSION_SUMMARY

Table 303: Agedatabase Utility Analytics Settings (Continued)

To…	Use this setting…
Specifies the number of days after which **Techmail** statistics stored in the Techmail Filter Details (tm_filter_details) and Techmail Statistics (tm_stats) tables will be deleted. A value of 0 disables purging of these tables. **Note:** The default value for this setting is 30.	PURGE_DELETE_TM_STATS
Define the number of days after which login/logout sessions are removed from the user_trans table (relative to the logout time). Set this value to 0 to prevent login/logout sessions from being removed from the database. **Note:** The default value for this setting is 0.	PURGE_DELETE_USER_TRANS
Define the number of days after which voice statistics are removed from the database. Set this value to 0 to prevent statistics from being removed from the database. **Note:** The default value for this setting is 90. For sites with multiple interfaces, statistics are removed from all interfaces based on the interfaces' smallest non-zero value for this setting.	PURGE_DELETE_VOICE_STATS
Specify the number of days after which guided assistance session data will be deleted. Set this value to 0 to prevent session data from being deleted. **Note:** The default value for this setting is 30.	PURGE_GUIDE_SESSIONS
Specify the number of days after which guided assistance statistics are removed from the database. Set this value to 0 to prevent statistics from being removed from the database. **Note:** The default value for this setting is 0.	PURGE_GUIDE_STATS
Specify the number of days after which files that store the output from queued reports and dashboards are deleted. **Note:** The default value for this setting is 7 days.	PURGE_QUEUED_REPORT_DAYS
Specify the number of days after which Rule Log entries are deleted. The maximum value for this setting is 180. A value of zero results in the data being deleted after 180 days. **Note:** The default value for this setting is 30.	PURGE_RULE_LOG_FREQ

Table 303: Agedatabase Utility Analytics Settings (Continued)

To…	Use this setting…
Specify the number of days after which data in the **Social Monitor** Statistics (sm_stats) table is deleted. This setting is not interface specific, so Agedatabase will use the smallest value specified in any of your interfaces to determine how often to purge the data. A value of 0 disables purging. The maximum value for this setting is 1825. **Note:** The default value for this setting is 1095.	PURGE_SM_STATS
Agedatabase > Batch Processing > Opportunities	
Specify the day of the week that the opportunities table is cached for the current sales period(s). Values refer to the day of week, with 1 being Sunday, 2 being Monday, and so on. A value of 0 disables opportunity caching. **Note:** The default value for this setting is 6 (Friday).	OPP_SNAPSHOTS_SCHEDULE
Agedatabase > Batch Processing > Gap Analysis	
Specify how frequently (in days) the Information Gap report is generated. **Note:** The default value for this setting is 7.	GAP_FREQUENCY
Specify the time period reported on in the Information Gap report. The report will analyze incidents created during the specified number of days. **Note:** The default value for this setting is 7.	GAP_TIME_PERIOD
Agedatabase > Batch Processing > Sales Performance	
Specify the quota attainment threshold as a percentage that a given salesperson should meet to be classified as a “Top Performer.” **Note:** The default value for this setting is 95.	SALES_TOP_PERFORMER_-THRESHOLD

Table 303: Agedatabase Utility Analytics Settings (Continued)

To…	Use this setting…
Specify the relative value from 1-10 of money versus opportunity counts in reviewing a salesperson or group's current performance. A value of 5 means they are treated equally. A value of 7 means that total monetary value of opportunities is more important than the number of opportunities. A value of 3 means that the number of opportunities is more important than the total value of those opportunities. **Note:** The default value for this setting is 5.	SALES_TP_METRIC_BALANCE
Specify the relative value from 1-10 of a salesperson or group's closed revenue in reviewing current performance. This value is relative to the other SALES_TP_REL_VALUE_* configuration settings. **Note:** The default value for this setting is 5.	SALES_TP_REL_VALUE_CLOSED
Specify the relative value from 1-10 of a salesperson or group's lost revenue in reviewing current performance. This value is relative to the other SALES_TP_REL_VALUE_* configuration settings. **Note:** The default value for this setting is 5.	SALES_TP_REL_VALUE_LOST
Specify the relative value from 1-10 of a salesperson or group's closed revenue of new business in reviewing current performance. This value is relative to the other SALES_TP_REL_VALUE_* configuration settings. **Note:** The default value for this setting is 5.	SALES_TP_REL_VALUE_NEW_BUSINESS
Specify the relative value from 1-10 of a salesperson or group's pipeline in reviewing current performance. This value is relative to the other SALES_TP_REL_VALUE_* configuration settings. **Note:** The default value for this setting is 5.	SALES_TP_REL_VALUE_PIPELINE

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Transaction Descriptions

Many of the standard reports available in Oracle RightNow Analytics Cloud Service (Analytics) use data from the database's *transactions* table. The information in this table describes the actions taken on records (such as incidents, answers, and contacts) and items (such as mailings, surveys, and quotes) in your database. For example, when an incident is created and then assigned to a staff member, two entries are added to the *transactions* table. The first entry describes when the incident was created, who created it, and where it was created from. The second entry describes who the incident was assigned to and when it was assigned.

Due to the amount of information stored in the *transactions* table, it can be challenging to write custom reports that use information from the table. However, once you understand how to use the data in the table, you can create powerful custom reports to output or filter on almost all actions taken on the records and items in your database.

- Click here for brief descriptions of all the fields in the *transactions* table.
- Click here for descriptions of the types of transactions and the records and items they can apply to.
- Click here for detailed descriptions of the *transactions* table's *attribute 1*, *attribute 2*, *attribute 3*, and *description* fields.

Important You can view additional information about the *transactions* table and information about other database tables in the data dictionary. You can access the data dictionary from the Configuration button on the navigation pane under Database > Data Dictionary.

Transaction field descriptions

This table briefly describes all the fields in the *transactions* table.

Table 304: Transactions Description

Field	Description
Account ID (acct_id)	The staff member who performed the transaction. This field will be NULL for transactions not initiated by a staff member.
Attribute 1 (id1) Attribute 2 (id2) Attribute 3 (id3)	These fields contain information specific to certain types of transactions taken on certain records and items. The field values will be NULL for many transactions. • Click here for descriptions of the Attribute 1 (id1) field's contents. • Click here for descriptions of the Attribute 2 (id2) field's contents. • Click here for descriptions of the Attribute 3 (id3) field's contents.
Attribute 4 (id4)	This field contains the channel type for transactions describing Oracle RightNow Social Monitor Cloud Service (Social Monitor) activity. This field is populated only for the Response Sent (8), Message Sent Failure (15), Cloud Response Queued (37), Cloud Response Received (51), and Cloud Result Appended (53) transaction types. The available values for this field are: • 1 - CSS Email • 2 - MA Email • 3 - Phone • 4 - Fax • 5 - Post • 6 - CSS Web • 7 - MA Web • 8 - Chat • 9 - Email • 10 - Community • 11 - Twitter • 12 - YouTube • 13 - RSS • 14 - Facebook
Date Created (created)	The date and time the transaction occurred.

Table 304: Transactions Description (Continued)

Field	Description
Date/Time (dttm)	The scheduled date and time for a mailing. This value will be NULL for any other record or transaction type.
Description (description)	This field contains information specific to certain types of transactions taken on certain types of records and items. This field will be NULL for many transactions. Click here for descriptions of this field's contents.
Foreign Key (id)	The unique ID number of the record, such as an incident or contact, that the transaction affected.
Interface (interface_id)	The interface the transaction was performed in.
Client IP Address (ip_address)	The IP address where the transaction originated.
Source (source_lvl1—source_lvl2)	The component where the transaction occurred. Level-1 source codes are the general area of Oracle Service Cloud, and level-2 sources are the specific component. Refer to the data dictionary for descriptions of the source codes.
Source Hierarchy (source_hierarchy)	The level-1 and level-2 sources displayed in a hierarchical menu.
Table Association (tbl)	The type of record or item the transaction occurred on, such as an incident, quote, or survey. Click here for a list of record and item types and the types of transactions that can apply to them.
Type (trans_type)	The type of transaction that occurred, such as a record being created or edited. Click here for a list of all transaction types.

Transaction types

The types of transactions stored in the *transactions* table are listed in the following table. The table also shows the types of records and items that the transaction types can apply to. The numbers shown in parentheses after the transaction and record and item types are the numeric codes for the types.

Note Some transaction types listed in the table are intended for use only by Oracle Professional Services.

Transaction Types (trans_type)	Table Associations (tbl)																
	Incidents (1)	Contacts (2)	Organizations (3)	Answers (9)	Meta-answers (10)	Quotes (12)	Documents (51)	Contact Lists (52)	Mailings (53)	Mailing Messages (54)	Segments (79)	Opportunities (87)	Tasks (106)	Flows (126)	Surveys (127)	Campaigns (163)	Assets (542)
Created (2)	●	●	●	●	●	●	●	●	●		●	●	●		●	●	●
Edited (3)	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
Assigned (4)	●			●					●			●	●		●	●	
Access Level Changed (5)				●													
Status Changed (6)	●			●		●				●		●	●	●			●
Time Billed Added (7)	●																
Response Sent (8)	●																
Escalated (11)	●	●	●	●								●	●				
SmartAssistant (12)	●																
Forwarded (14)	●																●
Message Send Failure (15)	●																
Incident Proposed (16)	●																
Queue Changed (17)	●																
Stage Changed (18)											●						
Moved (20)		●															
Forwarded by a Rule (21)	●			●													
Quote Sent (22)						●											
Opt-In (23)		●															
Sent (24)	●									●							
Completed (25)	●											●					
Survey Disabled (26)															●		
Advanced Mode (27)															●		
Mailing Error (28)										●							
Mailing Scheduled (29)										●							
Audience Counted (30)								●	●		●				●		
CAN-SPAM Compliance (31)										●							
Quote Forecasted (32)						●											
Quote Price Schedule Changed (33)						●											
Quote Template Changed (34)						●											
Invalid Email Flag Changed (35)		●															

Attribute and description fields

The information contained in the *transactions* table's *attribute 1*, *attribute 2*, *attribute 3*, *attribute 4*, and *description* fields vary depending on the transaction type and the type of record or item the transaction is associated with.

Note These fields are not populated for all types of transactions or all combinations of transactions and records. For example, the *attribute 1* field contains the IP address of the source of an incident creation, but the value in this field will be NULL for an answer creation or an incident escalation.

The following table describes the contents of the *attribute 1* (id1) field for each transaction type. The number in parentheses is the type's ID number.

Table 305: Attribute 1 (id1) Field Values

Transaction Type	Attribute 1 Description
Created (2)	If the **record type** is an incident, this is the IP address of the incident's source for both the Created and Edited transaction types.
Edited (3)	
Assigned (4)	This is the assigned group.
Status Change (6)	This is the new status. **Note:** To filter reports on incident, answer, or opportunity status changes, we recommend using the Status field (*status_id*) in the Incident Statuses (*inc_statuses*), Answer Statuses (*ans_statuses*), or Opportunity Statuses (*opp_statuses*) tables. The Transactions table can be used for this purpose, but additional steps are required.
Response Sent (8)	This is the staff member who sent the response.
Forwarded (14)	This is the staff member who forwarded the record.
Message Send Failure (15)	This indicates the type of transaction that failed: 8–Response sent 14–Forwarded 21–Forwarded by a rule 22–Quote sent
Incident Proposed (16)	This is the answer that was created from the proposed incident.

Table 305: Attribute 1 (id1) Field Values (Continued)

Transaction Type	Attribute 1 Description
Queue Changed (17)	This is the queue the record is assigned to.
Stage Changed (18)	This is the stage the opportunity was moved to.
Quote Sent (22)	This is the staff account that sent the quote.
Opt In (23)	If the value in the transaction's *attribute 2* field is 1, this is the custom field.
Sent (24)	This is the survey that was sent.
Completed (25)	This is the survey that was completed.
Disabled (26)	This indicates if the survey is disabled: 0–Active 1–Disabled
Advanced Mode (27)	This indicates if the survey is in Advanced mode: 0–Not in Advanced mode 1–In Advanced mode
Mailing Error (28)	This is the code associated with the mailing error. For a descriptions of the error codes, refer to the error details (*error_code*) field in the Mailing Messages (*mailing_formats*) table in the data dictionary. You can access the data dictionary from the Configuration button on the navigation pane under Database > Data Dictionary.
Audience Counted (30)	This is the audience count at the time it was counted.
CAN-SPAM Compliance (31)	This is a bit mask that indicates the results of CAN-SPAM compliance testing.
Quote Forecasted (32)	This indicates if the quote was forecasted: 0–Not forecasted 1–Forecasted
Quote Price Schedule Changed (33)	This is the schedule for the associated price schedule.
Quote Template Changed (34)	This is the action that was performed on the template: 1–Add 2–Update 3–Delete

Table 305: Attribute 1 (id1) Field Values (Continued)

Transaction Type	Attribute 1 Description
Invalid Email Flag Changed (35)	This indicates if the primary email address was set to Invalid: 0–Not set to Invalid 1–Set to Invalid
Password (36)	This indicates if the password was manually changed or reset: 0–Changed 1–Reset
Cloud Response Queued (37)	This is the staff member who queued the cloud response.
Country Changed (42)	This is the country the contact's address was changed to.
Province Changed (44)	This is the province (or state) the contact's address was changed to.
Sub-Object Move (47)	This is the ID number of the secondary contact that was merged into the primary contact record.
Cloud Result Appended (53)	This is the ID number of the incident thread the cloud result is appended to.

The following table describes the contents of the *attribute 2* (id2) field for each transaction type. The number in parentheses is the type's ID number.

Table 306: Attribute 2 (id2) Field Values

Transaction Type	Attribute 2 Description
Created (2)	This is the queue the record is assigned to at the time of the transaction for both the Created and Edited transaction types.
Edited (3)	
Assigned (4)	This is the staff member the record is assigned to.
Status Changed (6)	This is the group the staff member who performed the status change belongs to.
Response Sent (8)	This is the group the staff member who sent the response belongs to.
Forward (14)	This is the group the staff member who forwarded the record belongs to.

Table 306: Attribute 2 (id2) Field Values (Continued)

Transaction Type	Attribute 2 Description
Message Send Failure (15)	This indicates the reason for the mailing error: 1–Unknown 2–Message disabled 3–No escalation action 4–Escalation disabled 5–Message queued 6–SMTP error 7–No valid recipients 8–Empty thread
Queue Changed (17)	This is the queue the incident was previously assigned to.
Stage Changed (18)	This is the strategy the opportunity was changed to.
Quote Sent (22)	This is the group the staff member who sent the quote belongs to.
Opt-In (23)	This indicates the type of the opt-in flag: 1–Custom field 2–Global opt-in flag
Sent (24)	This is the account that is assigned to the record when the survey was sent.
Quote Template Changed (34)	This is the template used by the quote.
Invalid Email Flag Changed (35)	This indicates if the first alternate email address was set to Invalid: 0–Not set to Invalid 1–Set to Invalid.
Cloud Result Appended (53)	This is the ID number of the cloud result.

The following table describes the contents of the *attribute 3* (id3) field for each transaction type. The number in parentheses is the type's ID number.

Table 307: Attribute 3 (id3) Field Values

<table>
<tr><th>Transaction Type</th><th>Attribute 3 Description</th></tr>
<tr><td>Created (2)</td><td rowspan="2">If the record was created from a call, this is the call the incident or opportunity was created from for both the Created and Edited transaction types.</td></tr>
<tr><td>Edited (3)</td></tr>
<tr><td>Assigned (4)</td><td rowspan="9">This is the queue the record was assigned to at the time of the transaction for all of these transaction types.</td></tr>
<tr><td>Status Changed (6)</td></tr>
<tr><td>Time Billed Added (7)</td></tr>
<tr><td>Response Sent (8)</td></tr>
<tr><td>Escalated (11)</td></tr>
<tr><td>Forwarded (14)</td></tr>
<tr><td>Message Send Failure (15)</td></tr>
<tr><td>Incident Proposed (16)</td></tr>
<tr><td>Forwarded by a Rule (21)</td></tr>
<tr><td>Opt-In (23)</td><td>This indicates if the flag was enabled or disabled:
0–Disabled
1–Enabled</td></tr>
<tr><td>Quote Template Changed (34)</td><td>This is the template that was changed.</td></tr>
<tr><td>Invalid Email Flag Changed (35)</td><td>This indicates if the second alternate email address was set to Invalid:
0–Not set to Invalid
1–Set to Invalid</td></tr>
</table>

The following table describes the contents of the *description* field for the transaction types that can have values in this field. This field is NULL for most transaction types. The number in parentheses is the type's ID number.

Table 308: Description Field Values

Transaction Type	Description
Created (2)	If the new record is a meta-answer created from a proposed incident, this is the reference number of the incident that was proposed.
Access Level Changed (5)	This is a bit mask describing the answer's new access level(s).
Response Sent (8)	This lists the email addresses (not including BCC) the response was sent to.
Escalated (11)	This is the new escalation level.
Forward (14)	This lists the email addresses the item was forwarded to.
Message Send Failure (15)	This lists the email addresses (not including BCC) that were to receive the message.
Incident Proposed (16)	This is the reference number of the incident that was proposed.
Forwarded by a Rule (21)	This lists the email addresses the record was forwarded to.
Quote Sent (22)	This lists the email addresses (not including BCC) the quote was sent to.
Email Changed (38)	This is the contact's new email address.
Email Alt1 Changed (39)	This is the contact's new Alt1 email address.
Email Alt2 Changed (40)	This is the contact's new Alt2 email address.
City Changed (41)	This is the contact's new city.
Postal Code Changed (43)	This is the contact's new postal code.
Street Changed (45)	This is the contact's new street address.
Proof Message Sent (49)	This lists the email addresses the proof message was sent to.
Document Deployed (50)	This is the name of the deployed document.

Table 308: Description Field Values

Transaction Type	Description
Cloud Response Received (51)	This is the name of the contact who sent the cloud response.
Cloud Result Appended (53)	This is the user name of the contact who posted the entry on Facebook or Twitter.

Service

The following sections are intended for Oracle RightNow Cloud Service (Service) administrators and staff members. They contain information and procedures for configuring and using areas specific to Service.

- Incidents
- Answers
- Content Library
- Service Level Agreements
- Co-Browse Configuration
- Offer Advisor Administration
- Offer Advisor
- Oracle RightNow Wireless
- Mobile Agent App

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Incidents

When you work with customers to solve their support issues, you are instrumental in creating a positive impression of your organization. As an agent, you are often the customer's first point of contact, and it is important to resolve their concerns quickly and efficiently the first time. Oracle Service Cloud helps you do this by providing comprehensive, accurate, and up-to-date information about all aspects of the customer's communication with your organization.

Besides providing you with all-encompassing information just when you need it, Oracle RightNow Cloud Service (Service) gives you the tools to craft consistent, accurate answers to customer questions. It also allows you to propose **incidents** as **answers**, present **offers** to customers, and create **opportunities** from incidents.

Incidents overview

When customers request help through email or the **Ask a Question page**, or you respond to a social networking post using the **Social Monitor component**, Service automatically creates incidents. Most of the time, these are the incidents you will respond to. At other times, however, you will add incidents. For example, when a customer contacts you by phone, fax, or mail, you will add an incident to create a record of the customer's question.

When you edit or add an incident, you start by answering the customer's question. Service provides help through **standard text**, **suggested answers**, and the ability to search the knowledge base. You define specific information about the incident, such as the staff member it is assigned to, the associated products and categories, and the status and disposition of the incident.

Working with incidents also gives you the ability to add or update contact information, track the amount of billable time you spend on the incident, add or edit tasks related to the incident, attach files to the incident, view all actions taken on the incident, and present promotional offers to the customer. You might also want to propose the incident as a permanent answer in the knowledge base. This allows customers to view the answer without being required to submit an incident.

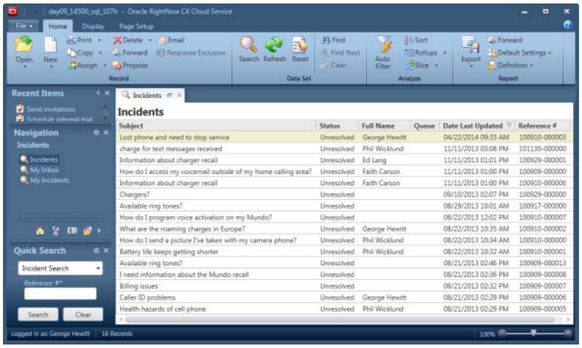
Note Service automatically handles email between separate Oracle Service Cloud sites and the site-specific incidents are accurately updated on each site even if unique reference numbers are used for the same incident. Refer to Cross-site email management.

Incidents reports

When you click the Incidents button on the **navigation pane**, the **navigation list** displays all of the reports and items added to this list by your administrator. The Incidents button, plus all the other buttons you have access to, are part of the **navigation set** defined in your **profile**.

Incidents reports can be placed in other navigation lists, not just the Incidents navigation list. And if you have permission to customize your navigation set, you can add other items, including reports you have permission to access, to your Incidents navigation list or any of your lists. Refer to Customizing navigation and configuration lists.

Double-clicking any incidents report displays the report on the **content pane**. The following figure is an example of the Incidents report.



The incident information displayed on the content pane depends on the incidents report you opened and which fields were defined when the report was created. The Incidents report, for example, displays the incident's subject, **status**, the name of the agent it is assigned to, the **queue** it is assigned to, the date it was last updated, and the associated reference number. The Home tab on the ribbon allows you to open, add, print, copy, assign, delete, forward, and propose incidents. In addition, you can send email to an incident's contact, search for an incident, refresh the report, or reset the search criteria. It also provides data analysis options and options for working with the report. Additional tabs on the report ribbon include options for controlling display and page setup.

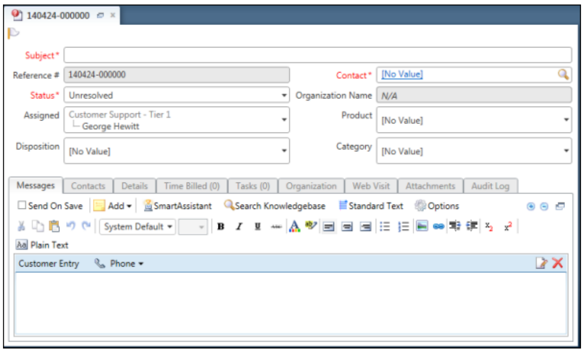
Besides selecting an incident from a report, you can search for incidents from a report or use Quick Search. Refer to Searching for records.

Tip You can right-click any incident and select the same functions that are available on the incidents report **ribbon**.

❖ Searching for records

Standard incident workspace

Service provides a standard **workspace** for working with incidents. The workspace defines which fields are available, which buttons are displayed on the **ribbon**, and how the information is organized on the **content pane**. The following figure is an example of the standard incident workspace.



Your organization can use the standard incident workspace, or your administrator might have created one or more customized workspaces. Your **profile** defines the workspace you see when you work with incidents, whether it is the standard workspace or a customized workspace. If you are using a customized workspace, keep in mind that the workspace your profile uses may display a different combination of fields, or it may display them in a different location on the content pane. Refer to Custom workspaces.

Ribbon

The following table describes the buttons on the **ribbon** of the standard incident workspace.

Table 309: Incident Ribbon Description

Group/Button	Description
Editor	
Undock	Click this button to undock the incident editor from the console and display it in a separate window.
Save	
Save	Click this button to save the incident you are working on. The incident remains open. **Note:** When you save an incident, the rules engine evaluates it. If incident rules exist and the incident matches one or more rules, the record may be modified when you save it. For example, a rule can change an incident's **disposition** or add **suggested answers** to the Response field of the Messages tab. Refer to Choosing actions.
Save and Close	Click this button to save the incident you are working on and close the incident.
Send	Click this button to send the response you are working on to the primary contact and to anyone in the CC and BCC fields if shown.
Actions **Note:** With the exception of the New button, the buttons in this group are not enabled until after you have saved an incident you are adding.	
New	Click this button to add an incident. The procedure to add an incident is covered in Adding incidents.
Refresh	Click this button to refresh the current set of incident records.
Forward	Click this button to forward the incident to any email address, staff account, or group. Refer to Forwarding records.
Print	Click this button to print the incident. Refer to Printing records.
Copy	Click this button to copy the incident. Refer to Copying records.
Delete	Click this button to delete the incident.

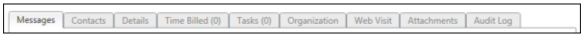
Table 309: Incident Ribbon Description (Continued)

Group/Button	Description
Proofing	
Spell Check	Click this button to check the spelling of any incident fields that have spell checking enabled. Refer to Spell checking.
Related Activities	
Guided Assistance	Click this button and either select or search for a **guide** that will ask you questions before directing you to information to help solve the incident. Refer to Finding answers using guided assistance. **Note:** This button will not display until guided assistance is enabled and you have guided assistance permission in your profile.
Propose	Click this button to propose the incident as an answer. Refer to Proposing answers. **Note:** This button is not enabled until after you have saved an incident you are adding.
Offer Advisor	Click the button to open the Offer Advisor window, which allows you to present **offers** to the customer. Refer to Presenting offers. **Note:** This button is enabled when an offer is available.
New Opportunity	Click this button to create an opportunity that provides information about the incident to your sales department. Refer to Creating opportunities from incidents.
Appointment	Click this button to add an Outlook appointment that is associated with the incident.
Links and Info	
Links	Click this button to select a URL from the list of links added by your administrator.
Info	Click this button to see details about the incident, including the incident ID, when it was created and last updated, the date when the initial response was due, the date of the last response, the date of the initial response, the closed date, and the staff member who created it. If the incident has an escalation level or is in a rules state, that information also appears.

- [Working with the ribbon]
- [Displaying shortcut keys on the ribbon]

Record tabs

Using the incident record tabs, you can respond to the customer and add and edit other information relevant to the incident. You can also work on the incident in stages if you choose, letting you save the changes and then return later to complete your work.



Important If you make changes to fields on any of the incident record tabs or any of the sub-tabs or windows opened through the record tabs (for example, the contact editing sub-tab), you must save the incident in order for all changes on the record tabs to take effect. If you close the record without saving changes, those changes are lost.

- **Messages tab**—Contains fields that allow you to add a customer entry, response, or private note to the incident thread and respond to the customer using either HTML or plain text. From this tab, you can also view suggested answers from **SmartAssistant**, search the **knowledge base** for public answers, and insert **standard text** into your response. Refer to [Adding incidents].
- **Contacts tab**—Lists all contacts associated with the incident. The number of contacts associated with the incident displays in parentheses next to the tab name. You can add, open, print, copy, delete, remove, and email contacts from the incident. Refer to [Adding and editing contact information].
- **Details tab**—Contains fields for collecting additional information about the incident, which is beneficial for reporting purposes. Refer to [Adding incident information on the Details tab].
- **Time Billed tab**—Lists all time billed entries for the incident. From this tab, you can add, open, and delete time billed entries. Refer to [Tracking your time].
- **Tasks tab**—Lists all of the tasks associated with the incident. You can add, open, copy, delete, print, and forward tasks and mark tasks complete. The Tasks tab displays a number in parentheses to show how many tasks are associated with the opportunity. Refer to [Adding tasks].
- **Organization tab**—Lists the organization associated with the incident. Refer to [Adding organizations].

- **Web Visit tab**—Lists all actions the customer took before submitting the incident. Also provided are the client IP address, operating system, and browser used by the customer during their visit. Refer to Viewing web visit information.
- **Attachments tab**—Lists all files attached to the incident. For instance, if a customer forwards a document that is associated with the incident, the Attachments tab provides a convenient location where you can store the document for retrieval. You can add, open, download, delete, and view the properties of file attachments from this tab. Refer to Attaching files to records.
- **Audit Log tab**—Contains a permanent list of all actions associated with an incident, including the date of the action, who performed the action, what the action was, and a description of the action. This information is valuable for tracking interactions with customers, especially if more than one staff member works on the same incident. Refer to Audit logs.

Working with incidents

When a customer submits a question, Service automatically creates an incident that contains the subject, customer's question, and contact information. You can complete an incident response in a single editing session, or you might find it useful to work on one part of the response and then return later to complete the rest of the incident.

The standard incident **workspace** enables you to move quickly from one section to the next as you work on incidents. You can edit any part of an incident in any order. The majority of incidents are assigned to you or pulled into your **inbox**. When incidents are assigned to you, some information in the record is populated when you open the incident.

Filling your inbox

If your **profile** has incident editing permission and **queues** assigned to it, you can click the Fill Inbox button on the **ribbon** of any incidents report displayed on the **content pane**.

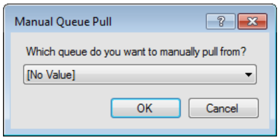
When you click the Incidents navigation button and double-click the default My Inbox report, the incidents that are assigned to you are displayed. As you respond to and solve incidents, their **status** changes to Solved or Waiting. You can continue to refill your inbox to retrieve new unresolved incidents.

To fill your inbox

Click the Fill Inbox button on the ribbon of any incidents report.

If your profile has been set to a manual pull policy, the Manual Queue Pull window opens and you can click the arrow to select the queue to pull incidents from.

Note If only one queue is configured to pull incidents from, the Manual Queue Pull window does not display.



If the displayed incidents report does not display incidents by assigned staff member, you can open the My Inbox report to view incidents that were added when you clicked the Fill Inbox button.

Unresolved incidents in any of the queues designated in your profile are available to be pulled. The order in which you work on incidents is determined by the queue priority and any processes set up by your administrator.

Editing incidents

The fields you see when adding or editing an incident are defined in a **workspace** that is assigned to your **profile**. Some of the fields are required by default, and your administrator may require that other fields also be completed. You must complete any field marked with a red label and asterisk before you can save the incident.

Note Incidents do not have to be completed in any particular order, but you must complete all required fields before you can save an incident.

The following list provides the steps involved when editing an incident.

- Complete the incident fields. Refer to Editing key incident fields.
- Compose your response to the customer. Refer to Responding to incidents.
- To add content to your response, refer to Adding content to responses.
- To add or edit contact information, refer to Adding and editing contact information.

- To track the time you spend editing the incident, refer to Tracking your time.
- To add or edit tasks associated with the incident or its contact, refer to Adding tasks.
- To add or edit organization information, refer to Adding organizations.
- To present an **offer** to a customer who is eligible for one, refer to Presenting offers to customers.
- To create an opportunity for the sales department to follow up, refer to Creating opportunities from incidents.
- Send a response to the customer. Refer to Sending responses.

You can save the incident at any stage of the process and either continue editing or close the incident and return later to complete it.

Important When you save an incident, it is evaluated by the rules engine. Your administrator may have added **business rules** to simplify and automate your work. For example, rules can change incident fields, apply an **SLA instance**, add **suggested answers** to your response, and take many other actions automatically. If you save an incident without closing it and the incident matches one or more rules, it is possible that the incident was automatically modified by the rules engine. If you notice that changes have been made to the incident, you may want to check with your administrator to verify that they are the result of rule actions. Refer to Business rules overview.

Before you start editing incidents, you will benefit from understanding what certain field properties mean in order to provide accurate responses to customers. This includes **incident statuses** and **SLAs**, as they play an important role when you interact with customers.

Incident statuses

Incidents can have one of the four default incident statuses, or they may have a custom status defined by your administrator. The default statuses are Unresolved, Solved, Updated, and Waiting.

Depending on how Service is configured in your organization, the status can change automatically when you or the customer make changes to the incident. You can also change an incident's status manually.

The following example describes how an incident's status can change automatically.

1 A customer submits a question from the Ask a Question page. The new incident has a status of Unresolved.

2 The customer updates the question before you begin working on the incident. The incident remains unresolved, but the incident status changes to Updated to reflect the customer's actions and alert you to the change.

3 You edit the incident and send a response to the customer. Your system may be configured in either of the following ways to automatically change the status, or it may be configured so that no status change occurs.

  ▷ The incident's status changes to Solved.

Important Regardless of how your system is configured, the status of an incident automatically changes to Solved when the customer selects "No, I don't need this question answered now" on the question details page or through the link in the email response. You will receive an incident notification.

  ▷ The incident's status changes to Waiting.

  The Waiting status signifies that you have sent a response and are waiting for the customer to let you know if this answers the question. If your system has this configuration and the customer does not respond within forty-eight hours (the default time), the system automatically changes the status to Solved and sends an email to the customer.

Applying SLAs

Another field you may work with is the SLA Instance field. An SLA is a service level agreement. SLAs allow your organization to assign and track customer service, such as the number of questions a customer can submit through different channels and the duration of support.

Both contacts and organizations can have SLAs, but contacts that are associated with an organization do not have individual SLAs. Instead, their incidents are credited to their organization's SLA. Only contacts that do not have an organization association can have SLAs.

Your administrator creates an SLA, which is a generic service contract that has not been applied to any specific customer. An SLA instance is a copy of the generic SLA applied to a specific customer. SLA instances can be applied manually by staff members whose profiles grant them permission to work with SLAs or automatically through **business rules** in Service. (If you have read-only permissions for contacts, organizations, and incidents, you will see View in the SLA Instance field instead of Add or Edit.)

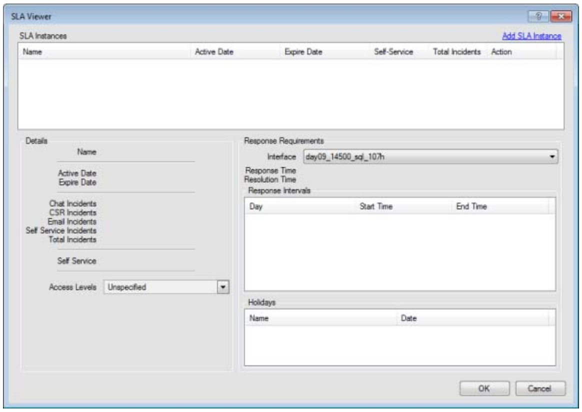
When you work on an incident for a customer who has an SLA, you can credit that incident to the SLA. If the customer does not have an SLA, you must apply an SLA instance before you can credit the incident. The following procedure describes how to apply an SLA instance when you are working on an incident.

To apply an SLA instance to a contact or organization

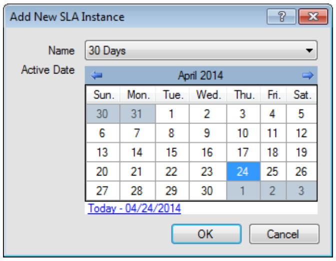
1 From an incidents report, right-click the incident and select Open > Contact or Open > Organization.

2 Click Add (if no SLAs have been applied to the customer) or Edit in the SLA field to open the SLA Viewer window. Any SLA instances that have already been applied to the customer are displayed under SLA Instances.

Note If you select Open > Contact and the contact is associated with an organization, the SLA field contains "See organization for SLA Details." Return to the incidents report on the content pane, right-click the incident, and select Open > Organization.



3 Click Add SLA Instance to open the Add New SLA Instance window.



4 Click the Name drop-down menu and select an SLA.

5 Select an active date by clicking a day on the current month's calendar (or, to change the month, click the right or left arrow in the month heading). Today's date is selected by default.

6 Click the OK button to apply the SLA instance to the customer. The Add New SLA Instance window closes and the SLA instance is added.

7 Click the OK button to close the SLA Viewer window.

Once an SLA instance has been applied to the customer, you can credit incidents submitted by that customer against the SLA instance as long as the incident occurs within the active date period.

To credit an incident to an SLA instance

1 From an incidents report, right-click the incident and select Open > Incident.

2 Click the Details tab.

3 Click the drop-down menu on the SLA Instance field and select an SLA instance. The incident is credited to the SLA instance you select.

Note Every time an incident is credited to an SLA instance, the number of available incidents is reduced. When the last incident is credited, the customer's SLA is disabled.

4 Click the Save button to save the incident.

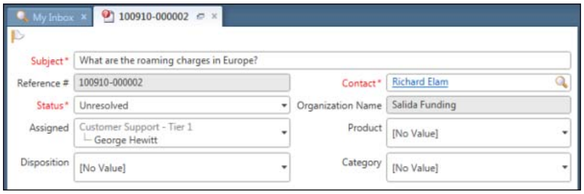
If you have enabled resolution due calculations and the SLA has a response time defined, you will be able to view the resolution due date and time after saving the incident. Refer to Configuring resolution due calculations.

Editing key incident fields

After understanding the role of **incident statuses** and **SLAs**, you can edit the key incident fields. The following procedure describes the standard incident **workspace**. Keep in mind that your workspace may contain different fields. Fields marked with a red label and asterisk are required fields and must be completed before you can save the incident.

To edit key incident fields

1 From an incidents report, right-click the incident and select Open > Incident.



2 Enter the following field information.

Table 310: Incident Fields Description

Field	Description
*Subject	Type a subject for the incident in this field. If the customer originated the incident, this field contains the customer's summary of the question, which you can edit if necessary (for example, to make the question more specific).
Reference #	The incident's reference number is a read-only field with a value assigned by Service.
*Status	Click this drop-down menu and select an incident status. The options include Solved, Unresolved, Updated, and Waiting, as well as any custom incident statuses added by your administrator. Refer to Incident statuses.
Assigned	Click this drop-down menu and select a staff member to assign the incident to. On the standard incident workspace, this field contains your name by default. Refer to Reassigning and re-queuing incidents. **Note:** Use the Find feature at the bottom of the Assigned drop-down menu to locate staff members quickly. Wildcards are supported when searching staff members and groups. You can search strings that include a space by typing `%` [space bar] [character], which is helpful when searching last names. For example, typing `%` [space bar] `b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing b in the Find field returns all items containing the letter b.

Table 310: Incident Fields Description (Continued)

Field	Description
Disposition	Click this drop-down menu and select a disposition that indicates the resolution of the incident. There may be multiple levels of dispositions for you to select. **Note:** Use the Find feature at the bottom of the Disposition drop-down menu to locate dispositions quickly. Wildcards are supported when searching dispositions. You can search strings that include a space by typing `%` [space bar] [character], which is helpful when searching last names. For example, typing `%` [space bar] `b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing b in the Find field returns all items containing the letter b.
*Contact	Click the Search button to the right of the Contact field to search for a contact to add to the incident. Refer to To search for a contact from an open record. To add a contact, click the New Contact button on the open Contact Search window. Refer to Adding and editing contact information. **Note:** If this field contains a name, the customer will also be listed as the primary contact on the Contacts tab. Be aware that if you add another contact using the Search button, the existing primary contact is removed from the incident and replaced with the new primary contact. To add a contact to an incident without removing the primary contact, use the Add button on the Contacts tab toolbar.
Organization Name	This read-only field contains the name of the organization for the contact associated with the incident.
Product	Click this drop-down menu and select one or more product levels to indicate the product for the incident. **Note:** Use the Find feature at the bottom of the Product drop-down menu to locate products quickly. Wildcards are supported when searching products. You can search strings that include a space by typing `%` [space bar] [character], which is helpful when searching last names. For example, typing `%` [space bar] `b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing b in the Find field returns all items containing the letter b.

Table 310: Incident Fields Description (Continued)

Field	Description
Category	Click this drop-down menu and select one or more category levels to indicate the category for the incident. **Note:** Use the Find feature at the bottom of the Category drop-down menu to locate categories quickly. Wildcards are supported when searching categories. You can search strings that include a space by typing `%` [space bar] [character], which is helpful when searching last names. For example, typing `%` [space bar] `b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing b in the Find field returns all items containing the letter b.

3 To add a **flag** to the incident, click the area next to the white flag at the top of the content pane. Refer to Flagging records.

4 To add other key incident fields, click the Details tab and refer to Adding incident information on the Details tab.

- Incident statuses
- Reassigning and re-queuing incidents
- Adding and editing contact information
- Flagging records
- Adding incident information on the Details tab

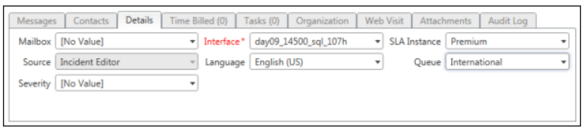
Adding incident information on the Details tab

The standard incident **workspace** contains a Details tab where you can enter additional information about the incident.

To add incident information on the Details tab

1 From an incidents report, right-click the incident and select Open > Incident.

2 Click the Details tab.



3 Enter the following field information.

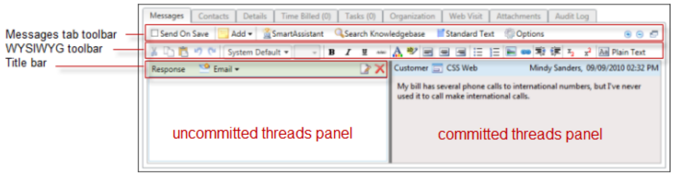
Table 311: Incident Fields on the Details Tab

Field	Description
Mailbox	Click this drop-down menu to select the mailbox to send the incident response from.
Source	This is a read-only field that identifies the source of an incident, whether it is added by a staff member or a customer.
Severity	Click this drop-down menu to select a severity level for the incident. The severity level serves as an importance indicator for any agents that work on the incident. The highest severity incidents are usually solved first. Refer to Adding and editing incident severities.
*Interface	Click this drop-down menu and select an interface. **Note:** By default, the incident's interface is set to the interface where the incident was created. The interface determines the language of the message bases used for automatic responses to the incident.
Language	Click this drop-down menu and select a language. **Note:** If your site has multiple interfaces for different languages, be sure you have also selected the interface that uses the language you want used in the response to the customer.
SLA Instance	Click this drop-down menu to credit the incident to an SLA instance that has been applied to the contact or the organization to which the contact belongs. Refer to Applying SLAs.
Queue	Click this drop-down menu and select a queue into which to move the incident from your inbox. Refer to Reassigning and re-queuing incidents.
Custom Fields	If your administrator has added incident custom fields, you can enter that information on the Details tab.

- Applying SLAs
- Reassigning and re-queuing incidents

Responding to incidents

The **incident thread**, which displays communication between the customer and agent, is located on the Messages tab. Using the Rich Text Incident Thread **control**, you can display, edit, and respond to HTML-formatted emails, resulting in richer interactions with your customers. The following figure shows the thread control on the standard incident workspace (displayed by clicking File and selecting Incident).



Note When using the Rich Text Incident Thread to respond to incidents, you are limited to using one $ at a time. If you place more than one $ consecutively in your response, when the thread is committed only one will display.

Using the Messages tab toolbar, you can choose the type of thread entry—customer entry, response, or private note—when responding to the customer. Because the thread title bars are color coded, it is easy to differentiate between them when adding or editing an incident. On a new incident, the default thread type on the standard incident **workspace** is Customer Entry (the default **channel** is Phone).

Note If the customer submitted the question through the **customer portal**, it also appears as a Customer Entry thread. You can enter the question for the customer if, for example, you are responding to a phone call. This will appear as a Customer Entry as well. Besides adding a Response thread, you can also add a Private Note thread, which can be read by other staff members but not by customers.

When editing an incident, the default is Response (the default channel is Email). To save time and make your responses accurate and consistent, you can add predefined content, including **SmartAssistant** suggested answers or **standard text**. You can also search for answers that are related to the customer's question.

Using the WYSIWYG toolbar, you can apply HTML formatting to threads while they display in the uncommitted threads panel. When you save the incident, all uncommitted (unsaved) threads are moved to the committed threads panel, where all HTML formatting is retained.

Note If the EGW_VISUAL_EMAIL configuration setting is disabled, all incoming email will display as plain text even if it was sent as HTML.

When an incident is created for a customer through the **Social Monitor** (see Social monitoring overview), social channels, such as **Community**, Twitter, and Facebook, will be available when responding. Instead of sending an email response to the customer, you can respond directly to the social networking site where the post originated. Refer to Responding through social channels.

Tip Whenever a valid incident reference number appears in any incident thread (Customer Entry, Response, or Private Note), it is displayed in green text in the thread and is a link that opens the incident in a separate **workgroup** when you click it. In order for Service to create a clickable link from an incident reference number, the number must use the format ######-#######.

The Messages tab lets you send the response to the customer when you save it. You can send the incident response to other recipients as well by adding their email addresses to the CC field. Send response functionality also lets you attach files to the incident and select secure email options.

The following table describes the toolbar buttons that appear on the Messages tab.

Table 312: Messages Tab Toolbar Description

Button	Description
Send on Save	Select this check box to send your response to the customer when you save the incident. Refer to Sending responses.
Add	Click this button and select one of the following options to add a thread to the uncommitted threads panel.
Customer Entry	Select this option to enter information about the customer. For example, select Customer Entry when the customer's question occurs during a phone call. This is the default option when you add an incident.

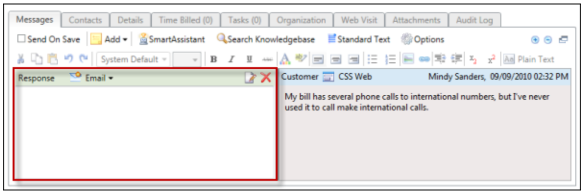
Table 312: Messages Tab Toolbar Description (Continued)

Button	Description
Response	Select this option to type your response to the customer's question. This is the default option when you edit an incident.
Private Note	Select this option to type the text that you want to be viewed only by other staff members. Customers cannot view this information.
SmartAssistant	Click this button to select one or more answers you can insert into your response as either text or a URL link. Refer to Adding SmartAssistant suggested answers.
Search Knowledgebase	Click this button to search for answers to help you respond to the customer. Refer to Searching the knowledge base.
Standard Text	Click this button to select and insert a predefined piece of information into the response. For example, you might select a greeting, closing, or response to a common question. Refer to Inserting standard text.
Options	Click this button to select thread type filters to modify your committed incident thread information display, change the date sorting order for threads on the committed threads panel, and choose message header display options for sending responses.

Note Your administrator controls the functions available on this toolbar. Click here to view the list of individual functions.

To add a response to an incident

1. From an incidents report, right-click the incident and select Open > Incident.
2. If the Message tab is not on top, click Messages. (On the standard incident workspace, this tab is displayed when an incident is opened.)
3. If the Response option is not selected automatically, click the Add button and select Response. The Response title bar displays on the uncommitted threads panel.



Tip You can add multiple threads to the uncommitted threads panel before saving the incident. To edit or delete a thread, click the Edit or Delete button located on the right side of the title bar.

4 To identify a channel for a response, click the Email drop-down menu in the Response title bar and select one of the following options: Phone, Fax, Post, CSS Web, or Email. (Email is the default channel on the Response title bar.)

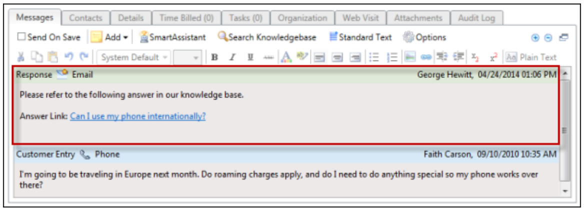
Note If an incident is created through the **Social Monitor** component, the social channel from which it arrived will display by default on the Customer Entry title bar and will be available as an option in the Phone drop-down menu. Refer to Responding through social channels.

5 Type your response to the customer's question. Use the WYSIWYG toolbar to:

- Cut, copy, paste, undo, and redo.
  - ▷ If formatted content is copied from an external source and pasted into the uncommitted threads panel, all formatting is retained. To avoid reformatting pasted content, right-click and select the Paste as Text option or press **Ctrl+Shift+v**.
- Change font style, size, and attributes (bold, italic, underline, strikethrough, text color, highlight).
  - ▷ When entering a response or customer entry thread, any changes to font style, color, or highlighting take precedence over the styling used on the **customer portal**. As a result, contacts using the customer portal to review agent responses may see unexpected font and color combinations. Refer to Editing the question details page.
- Left-justify, center, or right-justify text and images on the page.
- Format text in bulleted or numbered lists.
- Insert images by URL and upload images.

- Insert links.
- Increase and decrease indents.
- Apply specialized formatting, including sub and super script.
- View plain text, which removes all HTML formatting.

When you save the incident, the uncommitted threads panel closes and all uncommitted threads are moved to the committed threads panel. The committed threads panel expands so the incident threads are easier to read.



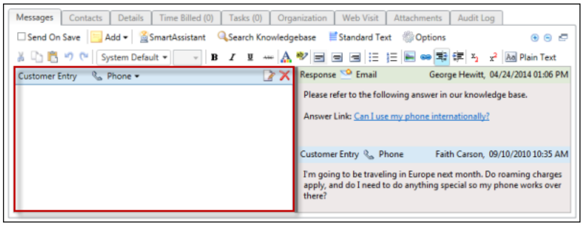
Tip You can right-click in the committed threads panel and choose options for selecting, copying, and finding text. The find feature (which can also be opened by pressing **Ctrl+f**) can be useful for finding information quickly.

The thread control remains in this state until you add another response, customer entry, or private note. At that point, the uncommitted threads panel displays again.

To add a customer entry or private note to an incident

1 From an incidents report, right-click the incident and select Open > Incident.

2 To add a customer entry, click the Add button and select Customer Entry. The Customer Entry title bar displays on the uncommitted threads panel.



Tip You can add multiple threads to the uncommitted threads panel before saving the incident. To edit or delete a thread, click the Edit or Delete button located on the right side of the title bar.

a To identify a channel for a customer entry, click the Phone drop-down menu in the Customer Entry title bar and select one of the following options: No Channel, Phone, Fax, Post, CSS Web, or Email. (Phone is the default channel on the Customer Entry title bar.)

Note If an incident is created through the **Social Monitor** component, the social channel from which it arrived will display by default on the Customer Entry title bar and will be available as an option in the Phone drop-down menu. Refer to Responding through social channels.

3 To add a private note, click the Add button and select Private Note.

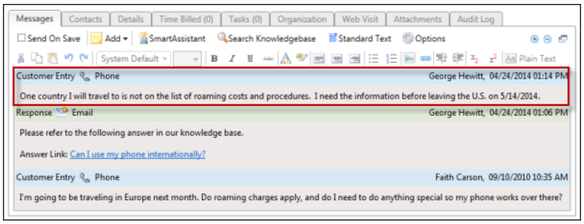
a To identify a channel for the private note, click the No Channel drop-down menu and select one of the following options: No Channel, Phone, Fax, Post, CSS Web, or Email. (No Channel is the default channel.)

4 Type the customer entry or note in the uncommitted threads panel. Use the WYSIWYG toolbar to:

- Cut, copy, paste, undo, and redo.
  - ▷ If formatted content is copied from an external source and pasted into the uncommitted threads panel, all formatting is retained. To avoid reformatting pasted content, right-click and select the Paste as Text option or press **Ctrl+Shift+v**.
- Change font style, size, and attributes (bold, italic, underline, strikethrough, text color, highlight).

- ▷ When entering a response or customer entry thread, any changes to font style, color, or highlighting take precedence over the styling used on the **customer portal**. As a result, contacts using the customer portal to review agent responses may see unexpected font and color combinations. Refer to Editing the question details page.
- Left-justify, center, or right-justify text and images on the page.
- Format text in bulleted or numbered lists.
- Insert images by URL and upload images.
- Insert links.
- Increase and decrease indents.
- Apply specialized formatting, including sub and super script.
- View plain text, which removes all HTML formatting.

When you save the incident, the uncommitted threads panel closes and all uncommitted threads are moved to the committed threads panel. The committed threads panel expands so the incident threads are easier to read.



Tip You can right-click in the committed threads panel and choose options for selecting, copying, and finding text. The find feature (which can also be opened by pressing **Ctrl+f**) can be useful for finding information quickly.

The thread control remains in this state until you add another response, customer entry, or private note. At that point, the uncommitted threads panel displays again.

- ❖ Sending responses
- ❖ Responding through social channels
- ❖ Adding SmartAssistant suggested answers
- ❖ Searching the knowledge base
- ❖ Inserting standard text

Adding content to responses

Service has tools that help you save time, eliminate mistakes, and provide consistent information to customers. These tools include the ability to attach links to answers in the knowledge base, insert the actual text of answers into the response, search the knowledge base for specific answers to include, and insert standard, predefined text.

Adding SmartAssistant suggested answers

SmartAssistant is a tool in Service that helps you find solutions to customer questions. SmartAssistant evaluates the language of a customer's question and suggests possible answers. You can then insert either a link to the answer or the actual text of the answer into your response.

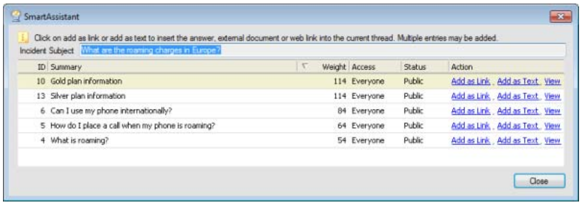
SmartAssistant contains an autotuning feature that reviews the effectiveness of your current configuration and automatically makes adjustments and suggestions to improve results. A tuned, optimized SmartAssistant can improve incident deflection rates and produce information that can be used to refine the knowledge base and provide guidance to agents. The autotuner enhances the search algorithm by closely tracking answers that have been appended to an incident thread as a link or text, or that an agent has explicitly identified as the answer that best resolved an incident. SmartAssistant will then give greater deference to these answers, as they are known to relate to or resolve issues submitted as incidents.

In addition, the autotuner reviews the many configuration settings that influence SmartAssistant results and recommends changes to ensure that they are fully optimized. And to help you understand the value of these recommendations and help you decide whether to accept them, their projected impact is also presented.

Note Before you can use autotuning, you must enable KF_SA_OPTIMIZATION_ENABLE and add the autotuner component to your list of items for the Configuration button. Refer to Editing configuration settings and Creating a navigation set for the administrator.

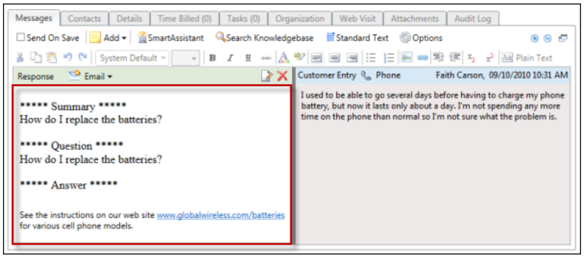
To add SmartAssistant suggested answers

1 Click the SmartAssistant button on the Messages tab toolbar. A list of possible answers displays with columns for ID, Summary, Weight, Access, and Status. You can sort by any of the columns.

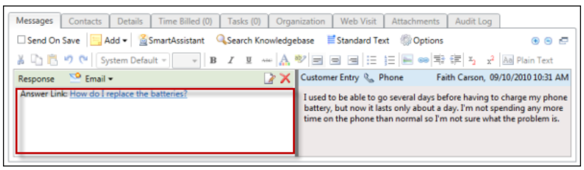


2 To include the text of an answer in the response, click Add As Text in the Action column. The answer content is added to the response.

Tip You can also enter answer text if you know an answer's ID by pressing **F9** from the incident response on the Messages tab, typing the Answer ID number in the Append Answer Text window that opens, and pressing **Enter**. You can edit the answer text before sending the response.



3 To add an answer's URL link to the response, click Add As Link in the Action column on the right.

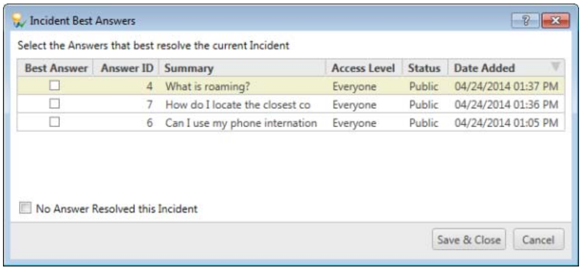


4 To view a suggested answer, click View in the Action column. The View Answer window opens, displaying the answer as it appears on the customer portal. (You can print the answer from this view by clicking the File menu item and selecting Print.)

5 Click the Close button to close the SmartAssistant window.

To mark an answer as the best answer

1 From the open incident, click the Best Answers button. A list of answers that have been added and committed to the incident thread is displayed with columns for ID, Summary, Access Level, Status, and Date Added. You can sort by any of the columns.



2 To choose the best answer (or answers) for the customer's question, select the Best Answer check box.

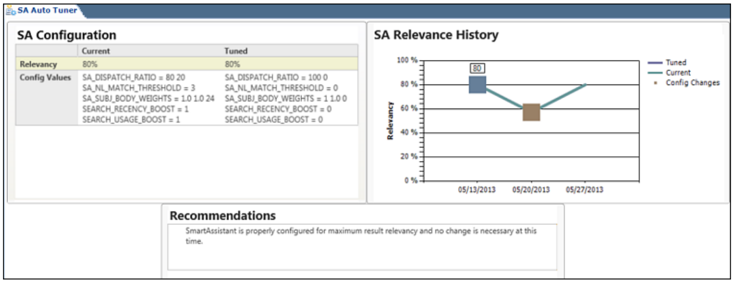
3 To clear all best answer selections, select the No Answer Resolved This Incident check box.

4 Click the Save and Close button.

To review and accept autotuner recommendations

1 Click the Configuration button on the navigation pane.

2 Double-click SA Auto Tuner component in your configuration list. The SA Auto Tuner dashboard display information regarding the current SmartAssistant configuration settings, relevance history, and recommendations.



The dashboard contains the following reports.

- **SA Configuration**—This report contains information about your current SmartAssistant configuration values (in the Current column) and the suggested values for optimizing them (in the Tuned column). The Relevancy row displays the current aggregated relevancy value of SmartAssistant results.
- **SA Relevance History**—This report displays the percentage of answers suggested by SmartAssistant that have been relevant over recent weekly intervals, also indicating when changes were made to SmartAssistant settings. This demonstrates how changes you have applied impact your site's SmartAssistant effectiveness.
- **Recommendations**—This panel displays the autotuner's current recommendation (whether to accept the suggested configuration changes) based on whether sufficient SmartAssistant coverage was available to evaluate and whether the recommendation is made with high, medium, or low confidence.

3 To accept the suggested configuration and update your settings with the recommended values, click the Accept New Configuration button on the ribbon.

Searching the knowledge base

As you respond to a customer's question, you might remember answers that address similar issues. Rather than conducting a time-consuming hunt of the knowledge base to find the relevant answers, Service lets you search for specific answers. Using any of four text searching techniques, you can quickly identify answers to resolve a customer's question. Refer to Appending answer content.

Inserting standard text

When you are busy responding to customers' questions, you will appreciate having the routine parts of your job streamlined as much as possible. For example, you would probably welcome a shortcut as an alternative to typing a standard greeting and closing for every email response you send. Your administrator can create standard text for routine situations so you can insert a text item into a response. Refer to Adding standard text.

You can insert standard text from the Standard Text window or, if you know the hot key sequence for the text item, you can type it without opening the Standard Text window.

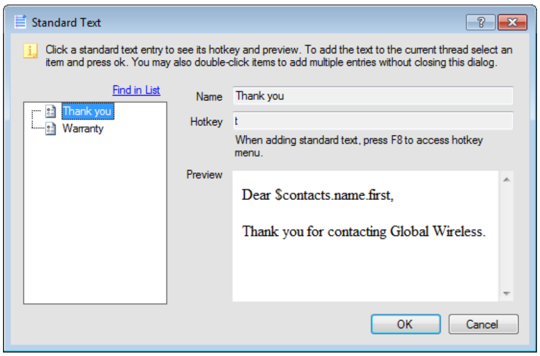
To insert standard text from the Standard Text window

1 In your response, position the cursor where you want to insert the standard text.

2 Click the Standard Text button on the Messages tab toolbar to open the Standard Text window.

3 Select the standard text item you want to insert in your response. If an HTML version of the standard text is available, it displays by default in the Preview section of the window. Otherwise, the plain text version displays.

Tip To search for standard text, click Find in List above the left column.



4 Click the OK button to close the Standard Text window and insert the text into your response.

Or

Drag the standard text item from the left column into the response.

Or

Copy the text in the Preview section and paste it into the response.

5 To add other standard text items to the response, repeat steps 1 through 4.

6 To modify the standard text, edit it as necessary in the response.

Note If the standard text includes one or more variables, the variable is displayed in your response rather than the value of the variable (the contact's first name in the example). The variable is replaced with the data only when you send your response. Then, when you reopen the incident, the data appears where the variable had been inserted. Refer to Adding variables.

To insert standard text using a hot key sequence

Tip To display the hot key sequence for a standard text item, select the standard text in the left column of the Standard Text window. The keystrokes are displayed in the Hotkey field in the right column.

At the location in the incident response where you want to insert the standard text, press **F8** to open a Standard Text field, type the hot key sequence in the field, and press **F8** or **Enter** to insert the text into your response.

- Adding standard text
- Adding variables

Finding answers using guided assistance

Guided assistance is a powerful tool designed to step you through a series of questions and direct you to answers and text responses you can offer your customers. As you work with customers on the phone or respond to incidents, you can quickly find the information that best helps your customers. Guided assistance steers you to the information based on your answers to the questions rather than you having to review SmartAssistant answers or search the knowledge base.

Before you can use guided assistance to work with incidents, your administrator must have enabled the tool on your site, created **guides** for you to use, and added the Guided Assistance control to the incident workspace you use. Refer to Guided Assistance.

The following table describes the buttons on the Guided Assistance window.

Table 313: Guided Assistance Window Description

Button	Description
Expand Navigator	Select this check box to open a panel on the left that displays all the branches used in the guide.
Navigate	Click this button after selecting a question or response on the left panel. The contents of the question or response are displayed on the right panel.
Search for a Guide	Click this button to search for a guide. Refer to To use guided assistance.
Select a Guide	Click this button to select a guide. Refer to To use guided assistance.
Add Text to Thread	Click this button to add the text of the current question and response to the incident thread.

To use guided assistance

1 Open the incident for which you want to use guided assistance.

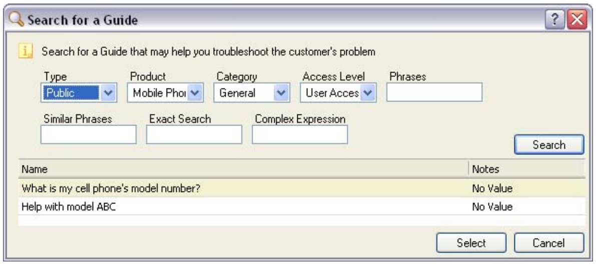
2 To select a guide from a list, click the Guided Assistance button and click Select. The Select a Guide window opens.

  a Select the guide you want from the list.

  b Click the OK button. The Guided Assistance window opens.

3 To search for a guide, click the Search for a Guide button. The Search for a Guide window opens.

Note Before searching for a guide, you should fill out the associated incident's product and category. Only guides that have been associated with an answer can be searched.

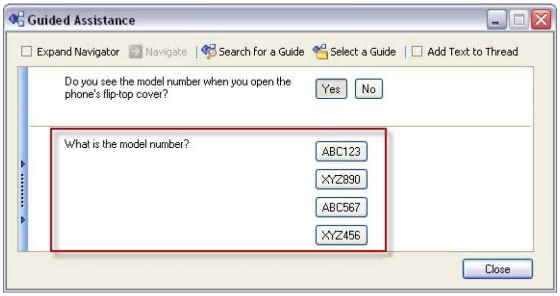


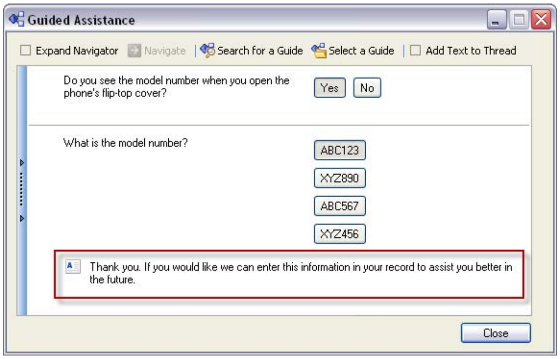
a Define search terms by selecting drop-down menu options or typing phrases in a text field.

b Click the Search button. A list of guides that match your search criteria displays.

c Select the guide you want to use and click the Select button. The window closes and the questions in the guide are displayed.

4 Answer each of the questions that are presented in the guide until you reach an end point, which is in the form of a knowledge base answer or a text explanation.





5 If the results provide answers from the knowledge base, you can add a link to an answer or the text of the answer in the incident thread, or you can view an answer.

a To add a hyperlink to the answer in the incident, click Add as Link.

b To add the text of the answer to the incident, click Add as Text.

c To view the answer, click View.

6 Click the Close button to close the Guided Assistance window.

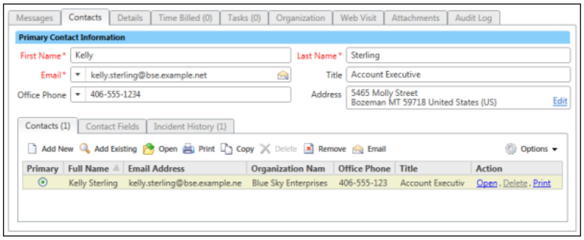
❖ Guided Assistance

Adding and editing contact information

Because Service creates incidents from customer questions, the contact information is usually present when you respond to an incident. Sometimes, however, you will need to add or edit contact information. You can add multiple contacts to an incident, but you must designate only one as the primary contact. Secondary contacts do not have to be associated with the same organization as the primary contact.

To add or edit contact information

1 From an open incident, click the Contacts tab. Information for the primary contact (which includes name, email address, phone, title, and address) displays at the top of the tab, and nested tabs contain additional information.



2 To remove a contact from the incident, select the radio button next to the contact’s name, click the Remove button, and confirm that you want to remove the contact. The contact is disassociated from the incident, but the contact’s record remains in the **knowledge base**.

3 To add a new contact to the incident, click the Add New button. A new contact opens on a sub-tab.

Important Adding a new contact from the Contacts tab does not change the primary contact for the incident. To designate a primary contact, you must manually select the Primary radio button next the contact’s name.

However, adding a new contact using the Search button next to the Contact field of the incident not only replaces the existing primary contact with the new contact, but the existing primary contact is automatically removed from the incident. Refer to Editing key incident fields.

Or

To add an existing contact to the incident, click the Add Existing button, search for the contact you want to add, and select it. To edit this contact, right-click it and select Open.

4 To edit an existing contact for the incident, right-click the contact and select Open. The contact opens on a sub-tab.

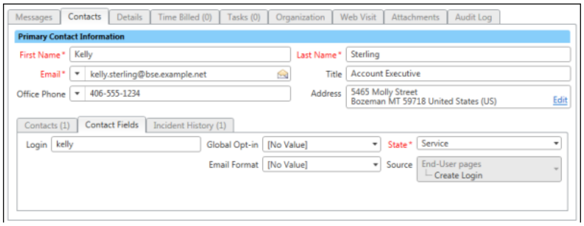
5 Add or edit contact information in the First Name and Last Name fields and make a selection in the State field.

6 To add or edit other contact information, make the changes in the fields or on the record tabs. Refer to Adding contacts.

7 Click the OK button to close the sub-tab and add the contact to the incident.

Important Clicking the OK button on the contact sub-tab closes the contact sub-tab and keeps the contact data in memory, but the contact record is not saved in the knowledge base until you save the incident.

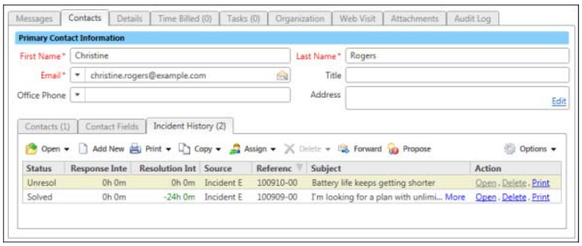
8 To add other information to the primary contact record, click the Contact Fields tab.



a To add or edit the contact's login, type it in the field.

b To select or change the contact's global opt-in choice, email format, or state, click the appropriate drop-down menu and select an option.

9 To view incident information for the primary contact, click the Incident History tab.



10 Click the Save button to save your changes on the Contacts tab.

❖ Editing key incident fields

Tracking your time

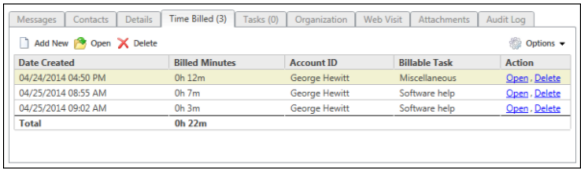
Your organization may collect statistics on the amount of time agents spend solving incidents so that management can plan for better use of staff time. These statistics can also identify products or issues that are causing similar customer questions, allowing answers to be added to the **knowledge base** to reduce the amount of time agents must spend on them.

The Time Billed tab is where you enter the amount of time you spend on an incident. It also lets you see details about the amount of time other agents spent on the incident. Depending on how your administrator has configured your application, you may be required to enter time billed every time you edit an incident or before you can set an **incident status** to Solved.

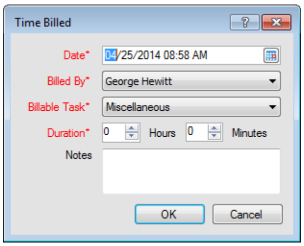
To add time billed to an incident

1 From an incidents report, right-click the incident and select Open > Incident.

2 Click the Time Billed tab. The tab contains the number of time billed entries associated with the incident in parentheses next to the tab name.



3 Click the Add New button to open the Time Billed window.



4 Enter the following field information.

Table 314: Time Billed Window Description

Field	Description
*Date	The default is today's date. Click the drop-down menu to open the current month's calendar and select a date.
*Billed By	Click this drop-down menu and select a staff member. This field defaults to your staff account since you are editing the incident.
*Billable Task	The default billable task is Miscellaneous, but your administrator may have added other billable tasks for you to select. Click this drop-down menu and select a task.
*Duration	Select the value in the Hours or Minutes field, or both, and type a new value. Or use the up and down arrows to adjust the duration.
Notes	Type a note about the time billed for the incident.

5 Click the OK button to close the Time Billed window.

6 Click the Save button to save your changes on the Time Billed tab.

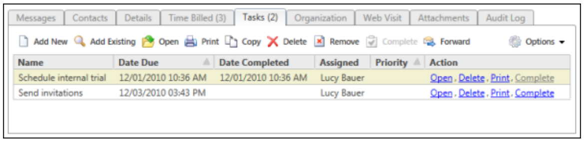
Modifying time billed entries

You can edit and delete time billed entries as necessary. To edit a time billed entry, right-click it and select Open. Make any changes and save the entry. To delete a time billed entry, right-click the entry and select Delete.

Important Deleting a time billed entry can result in inaccurate statistics in reports.

Adding tasks

You can add and edit all tasks associated with an incident by clicking the incident's Tasks tab. When you add or edit a task, you not only define its name, the staff member it is assigned to, relevant dates, and type of task, but you also associate it with new or existing incidents. The tab contains the number of tasks associated with the incident in parentheses next to the tab name.



To add or edit a task for an incident

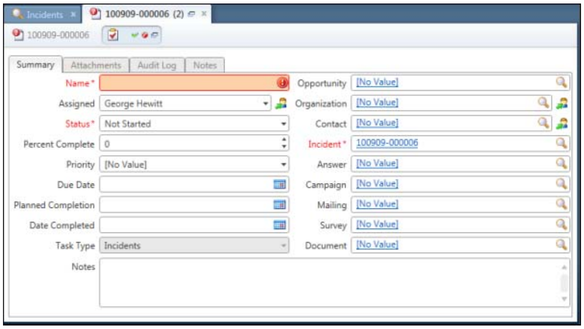
1 From an incidents report, right-click the incident and select Open > Incident.

2 Click the Tasks tab.

3 Click the Add New button to open the new task on a sub-tab. The reference number for the incident appears in the Incident field on the new task editor.

Or

Right-click a task on the Tasks tab and select Open.



4 Add or change the task name in the Name field.

5 Click the Status drop-down menu and select a status for the task. The default status is Not Started.

6 To enter additional task information, complete the fields or select menu options. Refer to Adding tasks.

7 Click the OK button to save the task and close the task sub-tab.

8 Click the Save button to save your changes on the Tasks tab.

Adding organizations

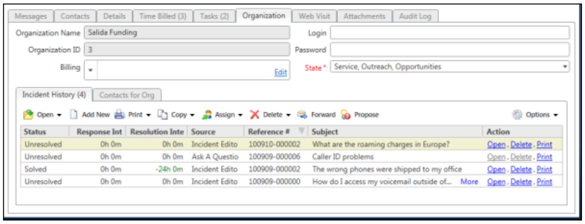
Incidents are associated with contacts. If an incident also has an organization association, it is because the incident's primary contact is associated with an organization. The Organization tab lets you view the name and ID of the organization associated with the incident's primary contact, and you can edit the address, login, password, and state for the organization. But if you want to change the organization associated with an incident, you will have to edit the contact record.

To edit an organization associated with an incident

1 From an incidents report, right-click the incident and select Open > Incident.

2 Click the Organization tab.

Note The Organization Name and Organization ID fields are read-only.



3 To enter an address, click Edit in the lower right corner of the field to display a window for entering the organization's address. Type information in the Street, City, and Postal Code fields, and make selections on the Country and State/Prov fields drop-down menus. When you select the country, the associated states or provinces appear in the State/Prov menu. Press **Enter** when you are finished to close the window and display the address you entered.

4 To enter a login or password, type the information in the appropriate field.

5 To change the organization's **state**, click the drop-down menu and select an option.

6 To view the incident history for the organization, click the Incident History tab.

7 To view the organization’s contacts, click the Contacts for Org tab. You can also open, add, print, copy, assign, delete, and email contacts using the toolbar on this tab. Refer to Contacts overview.

Caution There are usually consequences when a contact is deleted. Refer to Deleting contacts.

8 Click the Save button to save your changes on the Organization tab.

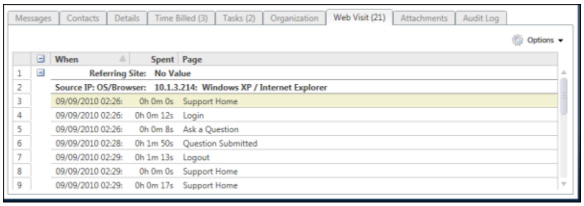
Viewing web visit information

You might find it helpful to know what information contacts viewed on the **customer portal** before they submitted their question. On the Web Visit tab of an incident, you can see what questions they viewed and any searches they performed. In addition, the customer’s referring site (the site they were visiting prior to accessing the customer portal), source IP address, operating system, and browser information are provided.

To view web visit information for an incident

1 From an incidents report, right-click the incident and select Open > Incident.

2 Click the Web Visit tab. The number of actions are listed in parentheses on the tab.



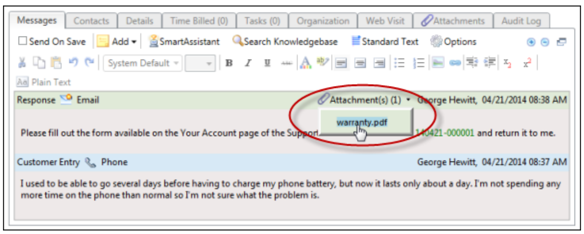
Attaching files to incidents

The Attachments tab lets you add files containing information that may not fit neatly into an incident. For example, you might want to attach a file that contains graphic elements. When you attach a file to an incident, that file becomes permanently attached to the incident. Likewise, any file the customer attaches when submitting a question also becomes permanently attached to the incident.

Note HTML email updates that are larger than the maximum description size are attached to the incident as an HTML file. Refer to Adding and editing mailboxes.

The Attachments tab lists all files attached to the incident and contains the file name, size, dates created and updated, a description, and whether the attachment is private (not visible on the **customer portal**). You and other staff members can access any attached file from the Attachments tab of the incident, while the customer can access it from the Your Account page on the customer portal.

If a file is attached in the same edit a thread is added on the Messages tab (the file attachment and the incident thread are saved at the same time), an Attachments indicator displays in the title bar of the thread on the Messages tab after the incident is saved. Click the Attachments drop-down menu to display attachments added at the time the thread entry was saved, then click a file name to view the file.



Important The Attachments indicator in a thread title bar is not an indication files were sent in your response to the customer—it only helps you identify the point in the incident thread an attachment was added to the incident. If you attach a file and save the incident when there are no uncommitted threads, the attached file will appear on the Attachments tab but not on the Messages tab.

Files that are permanently attached to an incident are not sent in your response to the customer unless you specifically mark them to be sent with the response. This lets the customer open the file directly from the email client instead of having to log in to view it. See To attach files to an incident response.

- To attach files to an incident response
- Attaching files to records

Presenting offers to customers

In your role as an agent, your organization may ask you to present special **offers** to customers because you have a strong understanding of what they need and have earned their trust through your work with them.

When you work with an incident, Service evaluates the customer's information and purchase history. Based on the results, it looks for offers the customer is eligible for. These offers can include promotions, suggestions, or both. Promotions are special offers made to specific groups of customers (called targets), while suggestions are automatically generated based on customer information. An example of a promotion is free shipping on certain products. An example of a suggestion is offering a headset to someone who has recently purchased a cell phone. When the customer is eligible for an offer, the Offer Advisor button is enabled. After you finish responding to the customer's question, you can click the Offer Advisor button to display an Offers window.

The following procedure is a brief overview of presenting an offer to a customer. For the complete procedure, refer to Presenting offers.

To present an offer

1. From an open incident, click the Offer Advisor button to open the Offer Advisor window.
2. Select the offer you want to present to the customer.
3. If you are on a phone call with the customer, read or paraphrase the guide and product information to the customer.

   Or

   If you are responding to an incident, right-click anywhere in the guide text or product information sections and select Copy. Paste the text into the response and modify as necessary before sending.
4. Click Set Response in the Action column for the offer you want to present. The associated drop-down menu in the Response column is activated.

5 Click the drop-down menu and select Yes, Interest, No, or Defer.

6 Click the OK button to return to the incident.

7 Click the Save and Close button to save the incident and record the customer's responses to the offers.

❖ Presenting offers

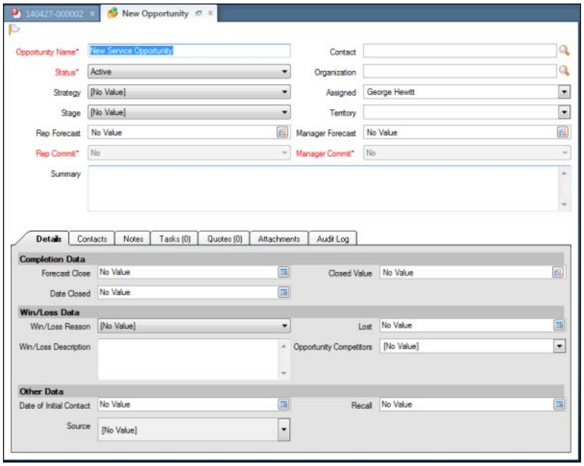
Creating opportunities from incidents

During the course of working with customers, you might discover information that makes them potential customers for other services and products your organization offers. In those cases, you can create **opportunities** and send them to the sales department for evaluation and follow-up.

The **workspace** you use to create an opportunity from an incident may be different depending on your **profile** and any custom workspaces defined by your administrator.

To create an opportunity from an incident

1 From an open incident, click the New Service Opportunity button on the **ribbon**.



2 To edit any information for the opportunity, enter the field information described in Editing key opportunity fields.

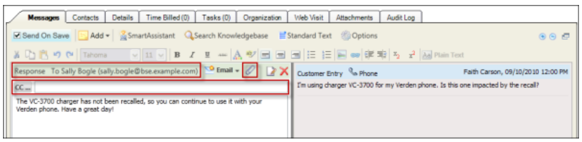
3 Click the Save and Close button to send the opportunity to the sales department.

Sending responses

When you have completed a response to an incident, you are ready to send your reply to the customer. Several options are available when you send a response, including attaching files to the response, copying other recipients, and selecting encryption options.

The behavior for sending responses depends on the settings your administrator selected when creating the incident **workspace** for your profile. The standard incident workspace behaves in the following manner when you add a Response type thread entry to the uncommitted threads panel.

- The Send on Save check box is cleared, so you must select it if you want to automatically send your response to the **primary contact** when you save the incident. For this reason, you might not want to select it until you have finalized your response so you do not send a response each time you save changes while you work on the incident.
- If an uncommitted response thread exists and the Send on Save check box is selected, the Email title bar displays an attachment icon for associating attachments and a CC field for notifying other contacts. BCC and sign/encrypt functionality can be enabled on the Options window (accessed by clicking the Options button on the thread control, which is typically found on the Messages tab toolbar).



- You can save a draft response to an incident without sending it. Click the Options button on the thread control and select the Always Show for Responses check box under Email Message Header. You will then be able to set CC, BCC, and attachments for a response, and save that data until you want to send the response. See To attach files to an incident response and To select additional recipients for an incident response.
- Customer-entered URLs are replaced with `[link removed]` in response emails. This ensures that customer-entered URLs (IP addresses) are not identified as SPAM and blocked. This functionality can be overridden by populating the EGW_ALLOWED_DOMAIN_NAMES and EGW_ALLOWED_TOP_LEVEL_DOMAINS configuration settings located at RightNow Common > Service Modules > RightNow Email. Refer to Customizing configuration settings.
- If a contact is associated with multiple email addresses, service responses are sent to *all* associated addresses by default. You can limit your responses to be sent to a single email address by enabling the site-wide configuration setting OE_SVC_SENDMAIL_SINGLE_ADDRESS (Common > General > Outgoing Email). Refer to Customizing configuration settings. Once enabled, service responses are sent only to the specified email

address and agents can select which one of the contact email addresses they want to send the response to. That email address value remains for the life of the incident. However, any new incidents for that contact will default to the primary email address.

To send a response to the primary contact

Click the Send button.

Or

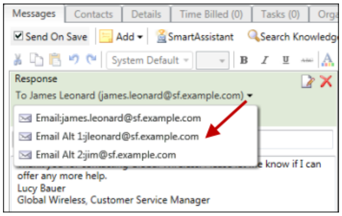
Select the Send on Save check box, then click the Save or Save and Close button to send your response.

Note If a customer does not receive your response, a Viewed Bounced Messages button appears on the Response title bar in the committed threads panel. Refer to Viewing bounced messages.

To send a single response to a contact associated with multiple addresses

Important This procedure assumes you have enabled the site-wide configuration setting OE_SVC_SENDMAIL_SINGLE_ADDRESS (Common > General > Outgoing Email). Refer to Customizing configuration settings.

1. Select the Send on Save check box. The Response title bar expands and displays the primary contact's email address, an Attach button (paperclip icon), and a CC field. See To attach files to an incident response and To select additional recipients for an incident response.
2. Click the drop-down menu to the right of the primary contact's email address and select the address to which you want to send the response.



Note This email address value remains for the life of the incident. However, any new incidents for this contact will default to the primary email address.

3 Click the Save or Save and Close button to send your response.

To attach files to an incident response

1 Click the Options button and select the Always Show for Response check box under Email Message Header. The Response title bar expands and the Attach button displays.

2 Click the Attach button to open the Attachments window.

Caution In contrast to files you permanently attach to an incident (refer to Attaching files to incidents), additional files attached to an incident response are not stored with the incident. Also, while attaching a file to an incident response lets the customer open the file directly from the email client instead of having to log in to view it, there will be no record in the knowledge base or the audit log that a file was sent to the customer.

3 To send the response with one or more files that have been attached to the incident, select the associated check boxes in the Incident Files section of the Attachments window.

4 To attach additional files to the incident response, click the Add Files button and select Browse to view the files and folders on your workstation. Or select Search to open the File Search window.

   a If you selected Browse, select the file and click the Open button to attach it to the response.

   b If you selected Search, specify a directory, all or part of a file name, and the type of file. Click the Search button. Then select one or more of the matching files and click the Add Files button.

5 Click the OK button to upload the selected files and attach them to the response.

To select additional recipients for an incident response

1 Click the Options button and select the Always Show for Response and Show CC check boxes under Email Message Header. The Response title bar expands and the CC field displays.

Note To display the BCC field, you must also select the Show BCC check box on the Options window.

2 Click the CC button. The Select Names window opens.

3 To import your contacts from the default Contacts folder in Outlook, select the Load Outlook Contacts check box. This is useful for displaying contacts that are not included in Oracle Service Cloud.

4 Select a name from the list.

Tip You can type the first few letters of the name in the field at the top of the Select Names window. The first name in the list that matches the letters you typed is highlighted. Notice that this name may be the contact’s first or last name, an email address, or a group or distribution list.

5 Click the CC button to list the name in the CC field or the BCC button to list the name in the BCC field. Names or addresses in the CC field are visible to all recipients of the response. Names in the BCC field are not visible to other recipients.

6 Click the OK button to close the Select Names window.

7 Click the Send button to send the response to the customer, as well as any other recipients you added to the CC or BCC fields.

Note Depending on how your administrator configured your application, the incident status may change to Solved when you save the incident. The incident assignment may also change to your name if the incident was previously assigned to another staff member.

To sign and encrypt an incident response

1 Click the Options button and select the Always Show for Response and Show Sign/Encrypt check boxes under Email Message Header.

Note Email signatures are appended to the thread in which you are responding to instead of to the bottom of the email, as different staff members can be working on the same incident. If your email signature does not populate the thread response, your administrator has not set up email signature information in your staff account. Although we recommend that your email signature is set up through your staff account, it is also possible that your email signature has been configured using **standard text**. Refer to Inserting standard text. Contact your administrator for more information.

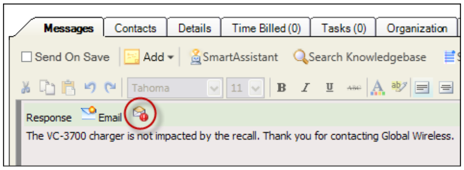
2 Select the Sign check box.

Note You cannot select the Sign check box if the Service mailbox does not have a certificate that allows sending encrypted email. Nor can you select an encryption option if the contact you are responding to does not have a certificate that allows receiving encrypted email. If you select Encrypt Always, you can select only addresses that have certificates associated with them. Refer to Configuring S/MIME security.

3 To encrypt your response to the contact, click the Do Not Encrypt drop-down menu and select Encrypt When Possible or Encrypt Always.

Viewing bounced messages

If a customer does not receive your response due to a bounced message, a View Bounced Message button displays on the Response title bar.



To view a bounced message

1 Click the View Bounced Messages button on the Response title bar. The Bounced Messages window opens, displaying full text copies of each bounced email.

2 Click the OK button to close the Bounced Messages window.

Note The audit log will also contain an entry for the bounced incident response that reads, "From Techmail–Incoming Auto-Reply Message."

Collaborating with other agents

Service Collaboration lets agents collaborate with other agents to more quickly resolve customer questions. From the incident workspace, agents can create conversations containing the details of their findings and post questions to other agents. The ability to collaborate with other agents encourages knowledge sharing among your staff and decreases response time to customers.

Note To enable and configure Service Collaboration, refer to Answer ID 6902 on our support site.

After Service Collaboration is enabled, you will need to assign staff members permission to use collaboration. Refer to Service permissions. In addition, you will need to create a custom incident workspace to include a collaboration relationship item control to start using Service Collaboration with Oracle Service Cloud incidents. Refer to Custom workspaces and Working with controls.

You can add the My Incident Conversations item to the navigation set of agents with collaboration permission. Adding this item allows agents quick access to all conversations in which they are participating.

Oracle Social Network (OSN) can be integrated with the agent desktop using Service Collaboration. Agents can customize their toast preferences for OSN notifications. For the link to the OSN documentation, refer to Oracle Social Network.

Collaborating with external users

Service Collaboration lets agents get assistance from other staff members who are not agent desktop users. These external users, such as engineers, product experts, analysts, and other subject-matter experts (SMEs), can be brought together to answer complex questions or contribute to solving an incident.

You can create a profile specifically for external users. Users with this profile will be able to log in to the collaboration service directly using a web browser or supported mobile device, but will not be able to use the Service Console. You are allowed up to 100 external users for each Service Console license.

To configure collaboration with external users

1 Create a profile that will be used only for external users. Refer to Customizing profiles.

2 On the Other tab of the Profiles editor, select the External User check box.

Note Collaboration must be enabled for the External User check box to be visible.

3 Save and close the new profile.

4 Create staff accounts for the external users, and assign the external user profile to them. Refer to Adding and editing staff accounts.

5 On the Staff Accounts editor, select Disabled from Assignment/Report Filters from the Disabled drop-down menu for each external user staff account.

Co-browsing with customers

With co-browse, you can guide a customer through a web page using your mouse or other pointing device to demonstrate actions. In effect, you take control of the customer's web browser to show the customer how to complete an action. Co-browse helps eliminate the confusion that can arise when giving verbal instructions and is effective for assisting customers in filling out forms or completing a sale.

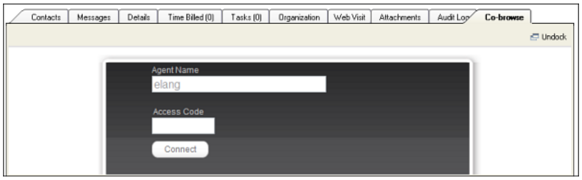
Note Co-browse must be enabled before you can begin a session with a customer. Contact your Oracle account manager. In addition, you can engage in only one co-browse session at a time.

To co-browse with a customer from an incident workspace

1 While speaking with a customer on the telephone, direct the customer to the location of the co-browse link on your **customer portal** and instruct the customer to click it. A message notification opens and provides the customer with an access code number.

2 With the customer's incident open, click the Co-browse tab. If the customer does not have an incident, click File and select Incident.

3 Click the Co-browse tab. The co-browse login page displays and your Oracle Service Cloud login name appears in the Agent Name field.



4 Ask the customer for the access code number and type it in the Access Code field.

5 Click the Connect button. The co-browse toolbar displays and the co-browse session begins. The following table describes the options on the co-browse toolbar.

Table 315: Co-Browse Toolbar Description

Button/Field	Description
Back Arrow	Click this button to view the previous URL. **Note:** This button is available only in Full Control state.
Forward Arrow	Click this button to view the next URL. **Note:** This button is available only in Full Control state.
URL	Click this drop-down menu to select a URL in the customer's history for the active window. **Note:** This button is available only in Full Control state.
CoBrowse State	Click this drop-down menu to select a co-browse state, which specifies how much control you have over the customer's active window.
View Only	Select this option to view the active window.
View + Pointer	Select this option to view the customer's active window and control the movement of the mouse or other pointing device. **Note:** With this option selected, mouse-click functionality does not work on the customer's active window. This option is selected by default.

Table 315: Co-Browse Toolbar Description (Continued)

Button/Field	Description
Full Control	Select this option to view the customer's active window, control all mouse or other pointing device functions (pointer and mouse clicks), and use your keyboard to enter information on the customer's active window (for instance, to help the customer fill out a form).
Advanced Mode	Select this option to have access the customer's entire desktop.
Mode	Click this drop-down menu to select an advanced co-browse state, which specifies how much control you have over the customer's desktop. **Note:** This button is available only in Advanced Mode.
View Only	Select this option to view the customer's desktop. This option is selected by default.
View + Pointer	Select this option to view the customer's desktop and control the movement of the mouse or other pointing device. **Note:** With this option selected, mouse-click functionality does not work on the customer's desktop.
View + True Pointer	Select this option to view the customer's desktop and control the movement of the mouse or other pointing device. **Note:** With this option selected, mouse-click functionality works on the customer's desktop.
Full Control	Select this option to view the customer's desktop, control all mouse or other pointing device functions (pointer and mouse clicks), and use your keyboard to enter information on the customer's desktop (for instance, to help the customer fill out a form).
Client Info	Displays the customer's environment information for operating system, browser version, client version, and escalation mode.
Connection Quality Information	Displays the strength of the connection in a bar graph.
Zoom In	Click this button to zoom in on the customer's desktop. **Note:** This button is available only in Advanced Mode.
Zoom Out	Click this button to zoom out on the customer's desktop. **Note:** This button is available only in Advanced Mode.

6 Click the Disconnect button to end the co-browse session. Both you and the customer are notified when the co-browse session ends. The customer can also disconnect from the co-browse session at any time.

Note Although co-browse information is not recorded to the incident transcript, it is recorded to the knowledge base and can be viewed using standard co-browse reports. Refer to Co-browse session reporting.

- Configuring co-browse on incident workspaces
- Co-browse session reporting

Adding incidents

Incidents are generally submitted by customers from the Ask a Question page or through email. As a result, the majority of your time is probably spent editing incidents. However, Service does not automatically create incidents when customers contact you by phone, mail, or fax, so you may find yourself adding incidents from time to time. When you add an incident, you create a record of both the customer's question and your response, which can help your organization track resolution of the incident.

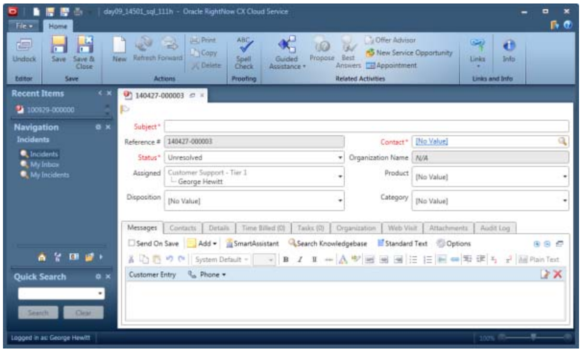
Tip You can add incidents to your **knowledge base** no matter what **navigation list** is active or what kind of record you are working on.

To add an incident

1 Click the New button on the **ribbon**.

Or

If your navigation set is configured to add incidents from the **file menu**, click File and select Incident. See To configure the file menu.



Note Notice that the Reference # and Organization Name are read-only fields. The reference number is automatically assigned by Oracle Service Cloud, and the organization name (if the field contains an entry) is the one associated with the primary contact for the incident.

2 Type the question or issue in the Subject field, to a maximum of 240 characters.

3 Complete the incident fields as described in Editing key incident fields.

4 Click the Customer Entry field and type the customer's question.

5 Click the Add button and select Response.

6 Type your response. Refer to Responding to incidents and Adding content to responses.

7 To add or edit contact information for the incident, click the Contacts tab and complete the information as described in Adding and editing contact information.

8 To enter the time you spend working on the incident, click the Time Billed tab and complete the information as described in Tracking your time.

9 To add or edit task information for the incident, click the Tasks tab and complete the information as described in Adding tasks.

10 To add or edit organization information for the incident, click the Organization tab and complete the information as described in Adding organizations.

11 To attach one or more files to the incident, click the Attachments tab. Refer to Attaching files to records.

12 To present an offer to the customer, click the Offer Advisor button. Refer to Presenting offers to customers.

13 To create an opportunity from the incident, click the New Service Opportunity button. Refer to Creating opportunities from incidents.

14 To send a response, refer to Sending responses.

15 Click the Save and Close button to save the incident.

❖ Managing incidents

❖ Working with records

Managing incidents

Besides editing and adding incidents, you may have other incident management duties as well. For example, you might want to propose that incidents be added as **answers** to the knowledge base, delete incidents, or re-queue or reassign incidents.

For other incident management tasks, including forwarding incidents and updating multiple incidents simultaneously, refer to Common Functionality.

Proposing answers

Sometimes a customer's question is common enough that you believe other customers should also have access to the answer. If you believe this information belongs in the knowledge base, you can propose the incident as a potential answer that customers can view without needing to submit an incident. This helps the knowledge base stay current with the information customers need.

When you propose an incident as an answer, a copy of the incident is submitted to a knowledge engineer, who determines whether it should become an answer. If it should, the knowledge engineer first defines an answer access level, answer status, language, and visibility, and then publishes the answer.

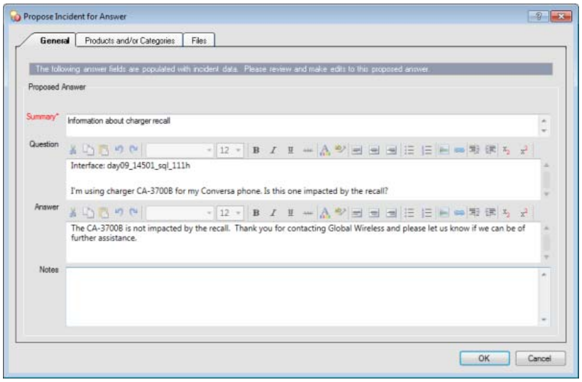
Note Incident custom fields may or may not be included when you propose an incident as an answer. If you propose an incident from an incidents report, by either right-clicking the incident and selecting Propose or by clicking the Propose button on the report's ribbon, the incident custom fields are not added to the Notes tab on the Propose Incident for Answer window. If, however, you click the Propose button from an open incident, the custom fields do appear on the Propose Incident for Answer window.

To propose an answer from an incident

1 From an incidents report, right-click the incident and select Propose Incident. The Propose Incident for Answer window opens.

Or

With the incident open, click the Propose button.



2 Review the proposed answer and make any necessary edits.

3 To add a note to the proposed answer, click in the Notes field and type your comments.

4 To add or remove any products or categories associated with the proposed answer, click the Products and/or Categories tab. Select those you want to associate with the proposed answer, and clear those you do not want to associate with the answer.

Tip The products and categories associated with the incident are selected by default.

5 To remove any files that are permanently attached to the incident from the proposed answer, click the Files tab. Clear the check box next to any file you do not want to propose with the incident.

Note All files permanently attached to the incident are selected to be proposed with the incident by default.

6 Click the OK button to submit the incident as a proposed answer. A confirmation message lets you know that an answer was proposed from the incident.

❖ Adding answers

Deleting incidents

If your **profile** gives you permission to delete incidents, the Delete button is enabled on the **ribbon**. When you delete an incident, you permanently remove it from the **knowledge base**.

To delete an incident

1 To delete an incident when the incident is open, press the Delete button. A message asks you to confirm deletion of the incident.

Or

To delete an incident from an incidents report, right-click the incident and select Delete > Incident.

2 Click the Yes button to delete the incident.

Reassigning and re-queuing incidents

You might need to assign incidents from your **inbox** to another staff member or move them back into an **incident queue**. The following situations commonly require you to move incidents, although your manager may have other guidelines as well.

- **You log out for the day**—To avoid having unresolved incidents sitting in your inbox when you leave for the day, you might want to assign them to another staff member or place them back in a queue.
- **You are assigned an incident you should not have received**—When an incident is incorrectly assigned, you can assign it to another agent or group or move it to the correct queue.

To reassign or re-queue an incident

1 From an incidents report, right-click the incident and select Open > Incident.

2 To reassign the incident, click the Assigned drop-down menu and select the appropriate group or staff member.

Or

To re-queue the incident, click the Details tab, click the Queue drop-down menu, and select the appropriate queue.

3 Click the Save and Close button to reassign or re-queue the incident. The incident is moved from your inbox to the agent inbox or selected queue.

Archiving incidents automatically

As customers submit incidents and staff members create incidents, which might have attachments and responses, your site's database can grow very large, leading to performance issues. To avoid these issues, Oracle Service Cloud archives incidents automatically past a certain period of time after they are solved. Archived incidents can also automatically be purged (deleted permanently).

The following table describes the configuration settings used for archiving incidents.

Table 316: Configuration Settings for Archiving Incidents

Configuration Setting	Path	Description
ARCHIVE_INCIDENTS	Agedatabase > Batch Processing > Incident Archiving	Determines when solved incidents are archived. The default value is 365 days (1 year). To disable automatic archiving, set ARCHIVE_INCIDENTS to 0. **Note:** If you run year-over-year reports routinely, you might want to use a larger value than 365 days.

Table 316: Configuration Settings for Archiving Incidents (Continued)

Configuration Setting	Path	Description
PURGE_ARCHIVED_ INCIDENTS	Agedatabase > Batch Processing > Incident Archiving	Determines when solved incidents are purged. The default value is 1,825 days (5 years). To disable purging, set PURGE_ARCHIVED_INCIDENTS to 0.

Note We recommend that these configuration settings remain enabled (set to values greater than zero) to make sure that data stores are cleansed of unnecessary data and to maintain optimal performance.

To change incident archiving and purging settings

1 Click the Configuration button on the navigation pane.

2 Double-click Configuration Settings under Site Configuration. The Search window opens.

3 Enter `*archive*` in the Key field and click the Search button. The ARCHIVE_INCIDENTS and PURGE_ARCHIVED_INCIDENTS configuration settings are displayed on the content pane.

4 Set ARCHIVE_INCIDENTS to the interval in days that you want. Set it to 0 to disable automatic archiving.

5 Set PURGE_ARCHIVED_INCIDENTS to the interval in days that you want. Set it to 0 to disable purging.

For more information, refer to Editing configuration settings.

Accessing archived incidents

There might be times when you need to reference outdated incidents to better serve your customers. In Oracle Service Cloud, you can search for and view incidents that have been removed from your **knowledge base** and archived.

Important Archived incident information is read-only and cannot be updated. In addition, you must perform a search to display and view archived incidents.

To open the Archived Incidents component

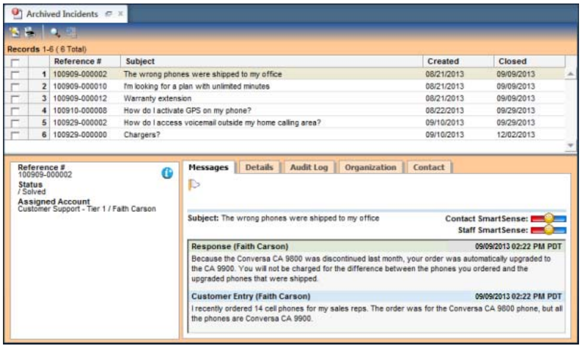
1 Click the navigation button that contains the Archived Incidents component. Contact your administrator if you are unsure of this component's location.

2 Double-click Archived Incidents. The Archived Incidents component opens on the **content pane**.

You can search for, view, print, and export incidents. No incidents display until you perform a search.

In addition to a basic search function, the Archived Incidents component features advanced searching capabilities for retrieving archived incidents based on a broad range of search fields, including the subject, threads, product, category, disposition, contact data, and organization data associated with the incident. You can search ranges for incident creation and closed dates. Custom fields of a string or date data type can also be searched using a specially formatted search value.

After you perform a search, the archived incidents that match your search criteria display on the content pane. Search results are limited to 1,000 incidents rendered in groups of 100. Pagination controls appear when search results exceed 100 incidents. Search results list the reference number, subject, creation date, and closed (solved) date for each incident. To view an incident returned in the search results, double-click an archived incident to open it, or select the incident and click the View Incident button.



Note Oracle Service Cloud **workspaces** do not apply to archived incidents. Therefore, the layout of archived incidents and the location of certain fields are different from the way incidents normally display on the **Service Console**.

If an incident includes HTML formatting when it is archived, the HTML formatting is retained and displays on the content pane.

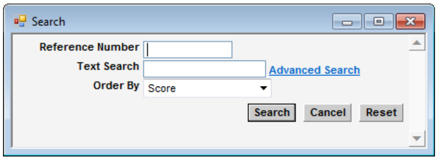
The following table describes field information for archived incidents.

Table 317: Archived Incidents Description

Sidebar/Tab	Description
Incident sidebar	Displays the incident reference number, the staff member and queue the incident was last assigned to, the interface name, and any other information that applies to the incident such as product, category, and disposition.
Messages	Displays the incident thread.
Details	Displays the source of the incident and any custom fields associated with the incident.
Audit Log	Displays the history of all actions taken on the incident by the incident originator and other staff members. Also included is the date of each action.
Organization	Displays organization information, including the organization name, total revenue currency, source level, and CX **state**.
Contact	Displays the contact's information, including name, email address, login, date created, and date updated.

To perform a basic search for an archived incident

1 Click the Search button to open the Search window.



2 Enter search terms as described in the following table.

Table 318: Search Window Description

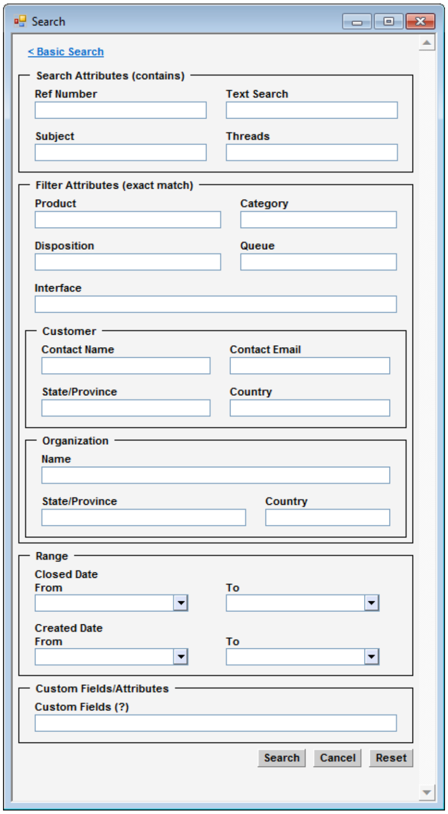
Field/Button	Description
Reference Number	Type the reference number of the incident in this text box.
Text Search	Type a word or phrase in this text box to search all archived incident fields. Because archived incidents have been removed from the knowledge base and converted to a text format, you can only search for incidents with a single text search. Searchable incident fields include Subject, Incident thread, Product (including sub-products), Category (including sub-categories), contact-related fields, organization-related fields, incident custom fields, and incident custom attributes. **Note:** A Boolean OR operator is used between words by default. In addition, there is an implicit wildcard at the end of the search string.
Advanced Search	Click this link to access Advanced Search options. Refer to To perform an advanced search for an archived incident.
Order By	Click this drop-down menu to select a sort order.

3 Click the Search button to query the knowledge base for incidents that meet your search criteria.

To perform an advanced search for an archived incident

1 Click the Search button to open the Search window.

2 Click the Advanced Search link to access advanced searching options.



Note To return to basic search options, click the Basic Search link in the top left corner of the window and refer to To perform a basic search for an archived incident.

3 Enter search terms as described in the following table.

Table 319: Archived Incidents Advanced Search Options

Field/Button	Description
Search Attributes (contains)	Search results contain all or part of the search terms.

Table 319: Archived Incidents Advanced Search Options (Continued)

Field/Button	Description
Ref Number	Type all or part of the reference number of the incident in this text box. You can use wildcards in searching.
Text Search	Type a word or phrase in this text box to search all archived incident fields. Because archived incidents have been removed from the knowledge base and converted to a text format, you can only search for incidents with a single text search. Searchable incident fields include Subject, Incident thread, Product (including sub-products), Category (including sub-categories), contact-related fields, organization-related fields, incident custom fields, and incident custom attributes. **Note:** A Boolean OR operator is used between words by default. In addition, there is an implicit wildcard at the end of the search string.
Subject	Type a word or phrase in this text box to search the Subject field of archived incidents.
Threads	Type a word or phrase in this text box to search the thread content of archived incidents.
Filter Attributes (exact match)	Search results match the search terms exactly.
Product	Use this text box to search the Product field of archived incidents.
Category	Use this text box to search the Category field of archived incidents.
Disposition	Use this text box to search the Disposition field of archived incidents.
Queue	Use this text box to search the Queue field of archived incidents.
Interface	Use this text box to search the Interface field of archived incidents.
Customer	
Contact Name	Use this text box to search contact names in archived incidents.
Contact Email	Use this text box to search contact email addresses in archived incidents.
State/Province	Use this text box to search contact states or provinces in archived incidents.
Country	Use this text box to search contact countries in archived incidents.
Organization	

Table 319: Archived Incidents Advanced Search Options (Continued)

Field/Button	Description
Name	Use this text box to search organization names in archived incidents.
State/Province	Use this text box to search organization states or provinces in archived incidents.
Country	Use this text box to search organization countries in archived incidents.
Range	
Closed Date	Click the From and To drop-down menus and select start and end dates to search archived incidents by a closed date range.
Created Date	Click the From and To drop-down menus and select start and end dates to search archived incidents by a created date range.
Custom Fields/Attributes	
Custom Fields	Type a search string to search custom fields of a string, text, or date type in archived incidents. The search string format is: <custom_field_name>_custom_<search_data_type>: <search_term> [<connector> <custom_field_name>_custom_<search_data_type>: <search_term>] Where: • custom_field_name = name of the custom field or attribute • search_data_type = text, str, or date • connector = AND or OR • search_term = data to search for Examples: c$url_custom_str:"help.example.com" c$RMA_custom_text:RMA12345 AND CO$VarCharText_custom_str:megabyte c$date_custom_date:[20130326T11:37:00Z TO NOW] **Note:** Use quotation marks when searching for a URL value in a text field. Use YYYYMMDDTHH:MM:SSZ format for datetime values. You can join multiple search strings together using the AND and OR operators.

4 To clear all field search values, click the Reset button.

5 Click the Search button to query the knowledge base for incidents that meet your search criteria.

Note Multiple search terms will be joined with AND operators. For example, searching with `14*` in the Ref number field and `Phone` in the Subject field will find only incidents that satisfy both criteria, that is, their reference numbers start with 14 and their subjects include "Phone."

To export archived incidents

1 Select the archived incidents you wish to archive. You can export up to 100 incidents at a time.

2 Click the Export button.

3 Select the location where you want to save the export file, type a name for the file, and click the Save button. The export file will be saved with a *.zip* extension, and will contain each exported incident as an individual XML file.

   You can also open the export file, in which case it will be downloaded to a temporary folder first, then opened.

Managing incident threads

In addition to the tools you have for answering customer questions and maintaining accurate records of all communications with your customers, you also have tools that can help you protect customer information contained in incident threads and, when necessary, convert information from response threads to note threads.

Masking information in incident threads

Your customers and agents may occasionally submit incidents containing sensitive customer information, such as credit card and social security numbers in incident threads. Whether the information appears in a customer entry, response, or private note thread, the security of your customers' personal assets may be compromised.

Our incident thread masking feature can protect this personal data by automatically masking content in incident threads. By default, Oracle Service Cloud contains three predefined system masks for credit card, social security, and telephone numbers. In addition, if our predefined patterns do not satisfy your organization's needs, you can define up to five custom masks to hide other personally identifiable information when new thread entries are created. As you configure incident thread masking for your application, you can test each system and custom mask before finally deploying the configurations to your site.

Caution To mask customer information in incident threads, incident thread masking must be enabled. Contact your Oracle account manager to enable this feature.

Be aware that once incident thread masking is enabled, masking is automatically performed in new thread entries, even if you make no changes to the predefined masks or define custom masks. Masking also occurs in the incident thread data itself, where the masked values are replaced and not recoverable.

Note that predefined text, such as standard text, SmartAssistant responses, and variables, is not masked. Do not include confidential information in predefined text.

For these reasons, you should use extreme caution when configuring masking for your site, and enable the profile permission for this feature only for trusted administrators.

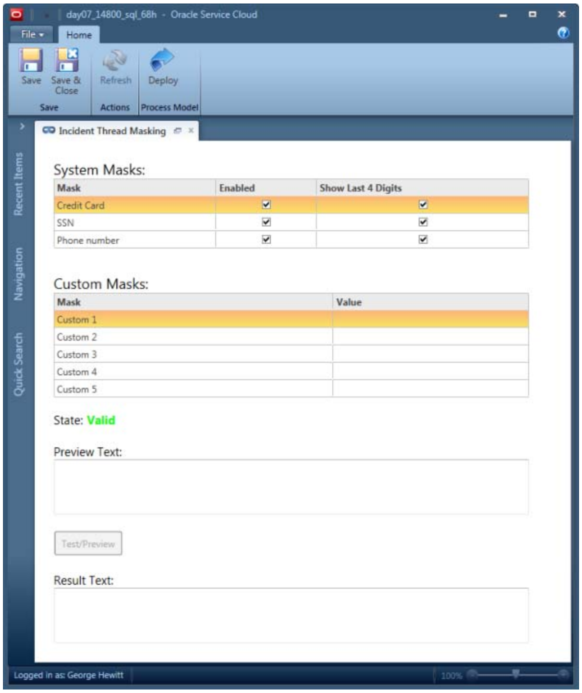
Once incident thread masking is enabled, you must perform the following tasks so you and your staff can configure incident thread masking.

- Add the Incident Thread Masking component to the Configuration button in at least one navigation set. Refer to Creating a navigation set for the administrator.
- Assign the Administration permission on the Administration tab of profiles so specific staff members can configure incident thread masking. Refer to Administration permissions.

To configure incident thread masking

1 Click the Configuration button on the **navigation pane**.

2 Double-click Incident Thread Masking in the **configuration list**. The Incident Thread Masking editor opens on the content pane.


day07_14800_sql_68h - Oracle Service Cloud
File
Home
Save
Save & Close
Refresh
Deploy
Save
Actions
Process Model
Incident Thread Masking
Recent Items
Navigation
Quick Search
System Masks:
Mask
Enabled
Show Last 4 Digits
Credit Card
SSN
Phone number
Custom Masks:
Mask
Value
Custom 1
Custom 2
Custom 3
Custom 4
Custom 5
State: Valid
Preview Text:
Test/Preview
Result Text:
Logged in as: George Hewitt
100%

3 Enter the following field information.

Table 320: Incident Thread Masking Editor Description

Field/Button	Description
System Masks	This section contains a list of three predefined system masks, which are enabled by default. In addition, the last four digits of each system mask also display by default. You can edit each system mask to hide the last four digits or disable any system mask you do not need. **Note:** Once incident thread masking is enabled, masking is automatically performed on credit card, social security, and telephone numbers entered in new incident threads with no action required on your part. You can enable or disable these options to suit your business needs.
Credit Card	Clear the Enabled check box to disable the credit card mask, or clear the Show Last 4 Digits check box to hide the last four digits of credit card numbers. This mask matches major credit card numbers including Visa, MasterCard, Discover, American Express, and Diners Club. Hyphens, periods, and spaces are accepted as dividers between number groups, as in the following examples. *Visa (13 and 16 digits):* 4215101992633023 4215 1019 9263 3023 453 939339 6455 *MasterCard:* 5406209167573761 5406-2091-6757-3761 5406.2091.6757.3761 540.620916.757.3761 *American Express:* 373518140296377 3735 181402 96377 *Discover:* 6011891400863425 6011.8914.0086.3425 601.189.140.086.3425 *Diners Club (14 digits):* 30139201272845

Table 320: Incident Thread Masking Editor Description (Continued)

Field/Button	Description
SSN	Clear the Enabled check box to disable the social security numbers mask, or clear the Show Last 4 Digits check box to hide the last four digits of social security numbers. This mask matches the following patterns: AAA-GG-SSSS, AAA GG SSSS, AAA-GG SSSS, AAA GG-SSSS, AAAGGSSSS, AAA-GGSSSS, AAAGG-SSSS, AAAGG SSSS or AAA GGSSSS. Hyphens, periods, and spaces are accepted as dividers between number groups, as in the following examples: 534-14-3154 534.14.3154 534 14 3154
Phone number	Clear the Enabled check box to disable the phone number mask, or clear the Show Last 4 Digits check box to hide the last four digits of telephone numbers. This mask matches the common U.S. phone number format, with the optional country code 1 in the beginning. Hyphens, periods, and spaces are accepted as dividers between number groups, as in the following examples: 1(111)222-3333 1(111)2223333 1(111) 222-3333 1.111-222-3333 1.111.222.3333 1 111 222 3333 +1.111.222.3333 +1.111.2223333 +1.1112223333

Table 320: Incident Thread Masking Editor Description (Continued)

Field/Button	Description
Custom Masks	Double-click in the Value field next to the first custom mask and type the **regular expression** for the pattern you want to mask. The following examples can help you configure custom masks for new incident threads. **Example 1** Suppose you want to mask all account numbers that match the pattern `123-123456`. Type `[0-9]{3}-[0-9]{6}`. As a result, all account numbers that match this pattern will display as `XXXXXXXXXX` in new incident threads. (Notice that all characters are masked, including the hyphen.) **Example 2** In this example, we'll define a mask for Canadian postal codes that match the pattern `K8N 5W6.` Type `[A-Z]{1}[0-9]{1}[A-Z]{1} [0-9]{1}[A-Z]{1}[0-9]{1}`. As a result, all Canadian postal codes that match the pattern `K8N 5W6 will` display as `XXXXXXX.` The space is also masked.
State	This read-only field shows the status of changes you make in any custom mask Value field. Statuses include Valid, Requires Test, and Error. **Note:** The status of this field may change when you type sample text in the Preview Text field, and click the Test/Preview button.

Preview Text	Click in this field to test your mask patterns. Include samples that both match and closely match the custom pattern you configured. For example, to verify that your Canadian postal codes mask is masking only the alphanumeric pattern you configured, type the following postal code samples.
	`K8N 5W6`
	`4J3 P2P`
	`V5T 1Y9`

Test/Preview	Click this button to apply the configured system and custom masks to the sample content in the Preview Text field.

Table 320: Incident Thread Masking Editor Description (Continued)

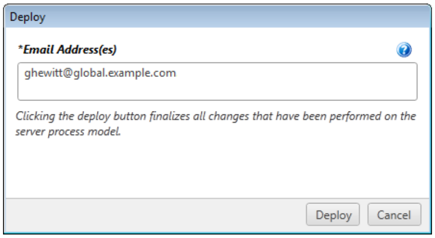
Field/Button	Description

Result Text	This field displays the masked preview text. Sample text that matches an enabled system or custom mask will display as masked. For example, the Canadian postal code samples in the Preview Text field displays the following Result Text values.
	`XXXXXXX`
	`4J3 P2P`
	`XXXXXXX`
	The masks applied to the first and third text samples because they matched the alphanumeric expression that we configured in our custom masks example. The second text sample did not match the pattern.
	Note: Be sure to test a variety of sample values and adjust custom mask values until the Result Text displays text masked as you want. Also be sure to test inexact matches to ensure that masks are not affecting content that should not be masked.

4 Click the Save button on the ribbon to save your changes to system and custom masks.

Important You must deploy mask configurations before they will be committed to the database and applied to new incident threads.

5 Click the Deploy button on the ribbon. The Deploy window opens.



6 Type the email addresses you want to send notifications to in the Email Address field. Multiple addresses must be separated by commas. The logged-in staff account's email address is automatically added. Addresses entered in this field receive emails when deployment completes or when an issue preventing deployment is encountered.

7 Click the Deploy button to deploy your changes. A Deploy message displays.

8 Click the Yes button to confirm the deployment. The Incident Thread Masking editor will be unavailable until the deployment completes.

Testing the accuracy of masking configurations in a test incident thread is an important security procedure. Though securing the customer's personal assets is the most compelling reason to test with incidents, the integrity of your incident information is also at stake. Because incident thread masks apply globally to all incident threads, we strongly recommended that you test the deployed masking configurations in a series of incident thread entries and verify that your masks apply to saved incident entries and incident emails the way you intend. The following procedure is for testing purposes only.

To verify changes to incident thread masking in a test incident

1 Create a test incident.

2 Associate a test contact with the incident.

3 Add a new customer entry, response, and private note. In each entry, type text that both matches and closely matches the mask patterns you have deployed. For example, type `123-45-6789` and `123-45-67890` to test the social security number system mask. Add other examples of text that match and closely match each of the mask patterns you have deployed.

4 Click the Save button on the ribbon.

5 Verify that only the appropriate patterns were masked in the incident thread and in the email response.

If you need to make further changes to your masks, you can return to the Incident Thread Masking editor. See To configure incident thread masking

Converting response threads

There may be times when a response contains incorrect information or was inadvertently sent to a customer. Since thread entries cannot be edited after they are sent to a customer, you can use the Incident Thread Type Correction feature to convert a response thread entry into a note thread entry so it will not be seen by customers in any future response. When using this feature, you can view all responses for a particular incident and select those you want to change to notes. Once a response is converted to a note, it cannot be converted back to a response.

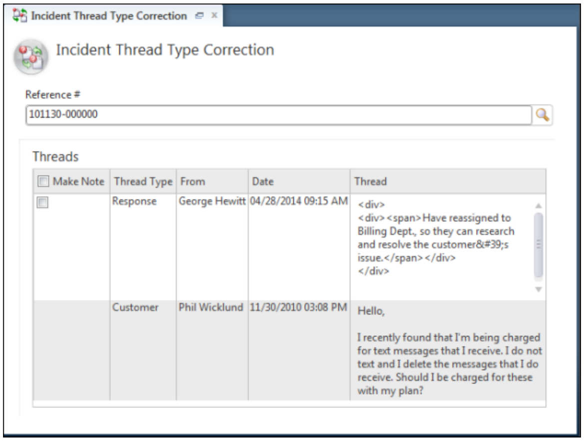
Note To access the Incident Thread Type Correction feature, you must have Administration permissions set in your profile. Refer to Customizing profiles.

To convert a response thread

1 Click the Configuration button on the **navigation pane**.

2 Double-click Incident Thread Type Correction under Database. The Incident Thread Type Correction tree displays on the **content pane**.

3 Type the reference number of the incident containing the thread entry you want to convert and click the Search button. Threads from the incident display on the content pane.



4 Select the Make Note check box next to the response you want to convert to a note and click the Save button.

The next time you open the incident, this information will display as a Note thread.

❖ Responding to incidents

Configuring incident stopwords

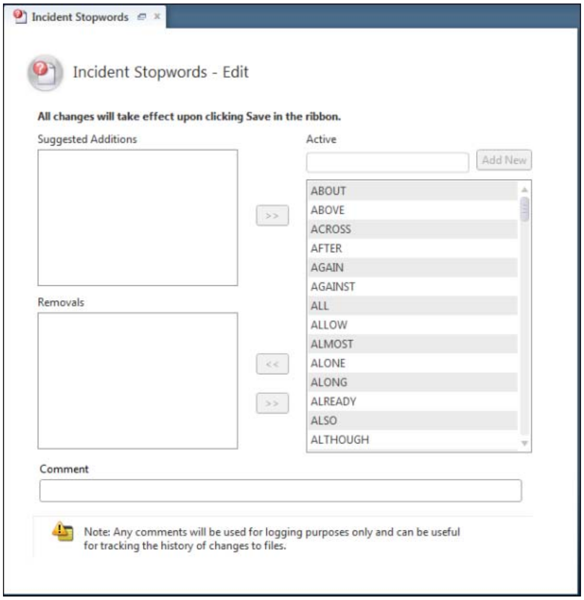
Incident stopwords are common words that are excluded from incident indexing and searching. Service can suggest incident stopwords based on an analysis of incidents. You can then look at the list of suggested stopwords on the Edit Incident Stopword list. Suggested stopwords are commented out unless you decide to include them in the incident stopword list.

Note Incident stopwords can also be managed through the **File Manager** using the *exclude_incidents.txt* file. Refer to Managing files.

To add or edit an incident stopword

1 Click the Configuration button on the **navigation pane**.

2 Double-click Incident Stopwords under Service > Knowledge Base to review incident stopwords. The Incident Stopwords editor displays on the **content pane** and suggested stopwords are listed in the Suggested Additions box.



3 Select the stopwords in the Suggested Additions box and click the top double-right arrow to add the words to the Active list. The words you select are highlighted.

4 To add an additional stopword, type the word in the text box on the Active list and click the Add New button.

5 To remove a stopword from the list, click the word in the Active list and click the double-left arrow. The word is added to the Removals box, where it is highlighted.

6 Click the Save button to add and remove the selected words from the stopword list.

Note Oracle Cloud Operations must run the **Keywordindexer** utility before your changes to the stopwords list are active. To schedule this, submit an incident on our support site.

❖ Searching for records

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Answers

Customers use your site to find answers to their questions about the services and products your organization provides. To assist your customers in finding the information they are looking for, you can create answers to common questions and post them on your **customer portal**. As a result, you are able to provide a better customer experience because your customers are able to quickly find the answers to their questions.

Oracle RightNow Cloud Service (Service) provides you with the tools for creating and publishing effective answers. You can format answers to include links, tables, graphics, and other features, making your support site more interactive and visually appealing. In addition, Service provides you with a revolutionary method of **knowledge base** management that enables you to overcome the critical problems associated with a manually constructed knowledge base. Maintenance of your knowledge base is minimized because of automated processes that learn from customers using your site, then automatically rank answers and display the most useful answers first.

To learn how to seed your knowledge base and keep it organized and up-to-date, click here. To learn more about answers and how to work with them on the Service Console, click here.

Seeding your knowledge base

Service's ability to start with only fifteen to twenty answers eliminates the need for a comprehensive initial knowledge set, which significantly speeds and simplifies the implementation. Most organizations can build their initial seed from existing online questions and answers, documents, or customer support interactions. Instead of constructing a complete set of answers up front, you can take advantage of the ongoing questions that your customers submit to capture real-world issues.

As customers submit questions and your organization's support staff solves these issues, you are supplied with content that is perfectly suited for public answers. Service's Propose Answer feature enables agents to suggest that certain incidents become public answers, allowing you to seamlessly create public answers from the real issues that your customers are facing. This method of organic growth eliminates the need for a complete initial group of answers, significantly reducing your ongoing maintenance tasks, and ensures that your knowledge base contains useful, effective content. Additionally, as you foresee that upcoming events (for example, a product release, seminar, or conference) may increase queries on your site, you can manually add answers to the knowledge base to answer questions before they are even asked.

Note Agents can propose **incidents** as answers only if they have Propose permission in their **profile**. Refer to Service permissions.

Defining a process for publishing and reviewing answers

Before you develop your **knowledge base**, it is important to understand the process for publishing answers. Frequently, the need for a new public answer will arise from a question submitted by a customer. When agents resolve an issue and recognize the need for an answer, they can propose an incident to become a publicly viewable answer.

Best Practices for Answer Content

Best practices for answer content include how to write answer content, organizing your knowledge base, laying out your content for easy scanning, using rich media, maintaining key content, and creating a style guide. Refer to *Best Practices for Developing Answer Content*.

The following process outlines the steps for efficiently capturing incident information and creating answers.

Step 1—Define a process for proposing new answers. Typically, in order to publish an incident as an answer, the incident threads will need to be summarized to cover a broader topic scope. To take advantage of agents' expertise, we have found the following approach to be successful.

1. An agent modifies the existing incident and writes the new answer as a Note thread with the public audience in mind, following established standards and guidelines. Two key items to include are the incident reference number and the staff member's name.

2. An agent proposes the incident. An answer is created, and the summary and threads from the existing incident are copied to the Question field of the new answer.

3. You then review, edit, and format the proposed answer and publish it. This method uses an agent's knowledge for writing the bulk of the answer, and then you prepare the answer for public viewing.

Step 2—Define an approval review process for new answers. Once an answer has been proposed for public use, you may want managers or staff members from other areas in your organization to review the information to ensure technical accuracy of the methods and procedures defined in the solution.

Step 3—Determine the audience of new answers. Before publishing an answer, determine which **interfaces** and customers you want to be able to view the answer. You can control this **visibility** through the visibility of **answer statuses**, **answer access levels**, **languages**, **products**, **categories**, and **conditional sections**. Refer to Controlling answer visibility.

Step 4—Determine the display position of new answers. You can set the position of a new answer relative to other answers on the Answers page on the customer portal. When adding or editing an answer, you can choose to place new answers at the top, middle, or bottom of the answers list, or fix them at the top, middle, or bottom.

If you want to give added visibility to newly published answers, place them at the top and then allow their historical usefulness to dictate their future placement. In this way, your customers are aware of new answers as you publish them.

Step 5—Notify staff of new answers. Your administrator can use standard reports to show answer notifications by answer, product, category, or subscribers. Standard reports for answer notifications can be scheduled to be sent to other staff members and are located at Public Reports\Service\Site Reports\Answer Notifications. Refer to Scheduling reports.

After following these steps to identify your process for publishing answers to your customers and notifying staff members about new answers, you can begin creating answers.

- Controlling answer visibility
- Scheduling reports

Creating effective answers

Creating useful answers is a straightforward process with a few simple guidelines. By following these guidelines, you will enhance the search process for customers, allowing them to find pertinent information quickly without needing to do multiple searches. A **knowledge base** containing well-crafted answers will also optimize the self-learning features of Service that continually index, group, link, and rank the answers in the knowledge base. These self-learning features are the backbone of self-service, enabling you to present the most historically useful answers first and to suggest answers related to the customer's current question. In addition, effective answers will make your maintenance tasks easier as information ages and changes.

Use the following guidelines to create clear, focused answers:

- **Create one-topic answers**—Think of each public answer in your knowledge base as one topic or the answer to one question. When a customer comes to your site with a question, they want quick resolution. One-topic answers improve searching and grouping, which enable customers to easily find answers. One-topic answers provide brief, pertinent information without clutter. A knowledge base of unique answers also simplifies management and maintenance.
- **Provide adequate detail**—Because Service indexes the text of the Summary, Question, and Answer fields into words and phrases for text searching and answer grouping, answers should contain an adequate amount of text that explains the issue. With limited text, there are very few indexed words for the answer, and the words that are indexed cannot fully represent the context of the answer. As a result, the answer may be difficult to find during text searching. With too much text (over two pages), you run the risk of writing about several topics and covering too broad of a context. The resulting set of indexed words may not span the entire text of the answer. In effect, the answer can be found during dissimilar searches in which that answer is not relevant.
- **Write a concise summary**—The quality of the summary, meaning how closely it summarizes the contents of an answer, is critical to the effectiveness of the answer and affects its display position, how it links to related answers, and how it is grouped with similar answers. On the Answers page, customers will choose to open and read or skip over an answer based on the summary. Without a concise summary, customers may not open the answer, which directly impacts its display position and how it is linked with other answers. The summary should state what the customer can expect to learn by reading the answer or what question will be answered.
- **Create explicit keywords**—Sometimes, you may not be able to capture the entire contents of an answer in the one-sentence summary. The Keyword field is an additional field, not viewable by customers, used during keyword indexing of an answer. You can enter supplemental keywords, phrases, or text that represent the answer's contents. Keywords should be separated by commas, with grouped words separated by spaces (for example, "cell phones, calling plans, accessories"). You should be deliberate with the words you enter because they are weighted higher than indexed words and phrases not in the Keyword field. Be sure to include a thorough, yet concise section of keywords.

After creating a knowledge base of effective answers, you will want to publish the answers to be accessed by customers. By understanding the factors that determine answer visibility, you can effectively control how and when answers are seen on the customer portal.

Controlling answer visibility

When you publish answers, you make them available to the public on your **customer portal**. Answers can be either public or private, as well as have specific **visibility** settings for each **interface** or for contacts based on access levels defined in their **SLAs**. Whether answers are visible on your customer portal is determined by what you specify in certain fields. The five key fields that determine how and where answers are presented are **Answer Status**, **Answer Access Level**, **Language**, **Products** and **Categories**, and **Conditional Sections**.

In order for answers to appear on the customer portal, the Status, Access Level, Language, Product, and Category fields must be set to a visibility that allows access by customers. If even one field does not allow visibility, the answer will not be available on the customer portal. In addition, if you have sections within an answer with restricted visibility, that section must be assigned an access level associated with the answer. The five fields that control answer visibility are described in detail below.

- **Answer status**—The primary factor that determines the visibility of answers is answer status. There can be many custom answer statuses, but all must be either a Public or Private status type, which is determined when the custom status is created. Answers set to a status that has a Private status type can never be viewed on the customer portal, regardless of their access or language assignment. Public answers may be viewable through the customer portal, depending on the other fields selected.
  Two of the default answer statuses are Review and Proposed, both of which have a Private status type. When agents propose an incident to become an answer, it is copied and set to the Proposed status with an access level of Everyone. Since the Proposed status is a Private status type, the answer will not be visible to customers.
  An answer changes to the Review status when its solved count reaches zero or when the date specified when adding or editing an answer is reached. The Review status will automatically remove the answer from the customer portal. Refer to Adding and editing answer statuses.
- **Answer access level**—Access levels determine whether customers can view answers on a per-interface basis. If an answer is set to an access level that has customer visibility on one of the interfaces, then that answer is viewable by everyone on that interface, provided the remaining fields also allow visibility. If an access level does not provide visibility to customers for a certain interface, access can still be given to specific contacts by assigning them SLAs that allow privileged access.
  One of the default access levels for answers is Everyone. This access level allows all customers to have access to the answer on all interfaces. Refer to Adding and editing answer access levels.

- **Language**—Answer visibility is also determined by the language assigned to it. If assigned to a specific language, an answer will only be visible on the interfaces using that language, as long as the answer status and access level also allow visibility.
- **Products and categories**—The visibility settings for the products and categories associated with the answer will also affect the visibility. If the answer is assigned to a product or category that is not visible to customers on a particular interface, the answer will also not be visible to customers, unless it is assigned to another product or category that is visible on the interface. In other words, if you have an answer that is assigned to two products, and one of the products is not visible on the interface, but the other product is, your answer will appear on the interface. However, if the answer is assigned to two products, and neither product is visible on the interface, your answer will not appear on the interface under any circumstances. Refer to Adding and editing products, categories, and dispositions.
- **Conditional sections**—Conditional sections help control visibility of certain sections within an answer. If a section of the answer is assigned an access level that is not visible to customers on a particular interface, but the answer is visible, then customers are able to view the answer but not the conditional section. For more information about conditional sections in answers, refer to Inserting conditional sections.

❖ Adding and editing answer statuses
❖ Adding and editing answer access levels
❖ Adding and editing products, categories, and dispositions
❖ Inserting conditional sections

Troubleshooting when answers are not visible

If an answer (or section within an answer) you want to be accessed by your customers is not appearing on the **customer portal**, answer the following questions to troubleshoot the problem.

- Is your status set to Public or a custom status with a status type of Public?
- Does the access level have visibility for the desired interface?
- Is your language for the answer appropriate? If you have more than one interface with multiple languages, is the answer set to the same language as the interface you are trying to view it on?
- Are your products and categories visible on the interface? Is your answer assigned to at least one product/category that is visible to customers?
- Are the answer sections within the answer visible as you intended?

If the answer to any of these questions is "no," make the appropriate changes and check again to see if the answer appears. If you are unsure of the answer to any of the above questions, contact your administrator.

Note You can preview an answer to view it as customers will see it on the customer portal. Refer to Previewing answers.

Organizing answers

Through click-track analysis and feedback on answers, your answers are automatically organized. Answer rankings are constantly updated using the solved count value and presented to your customers with the most useful information first. Service uses three techniques to gather useful information about answers.

- **Explicit customer feedback**—By default, the Answers page offers customers a way to rate answers through the "Was this answer helpful?" option. Their responses automatically raise or lower the solved count of answers.
- **Explicit ranking of the answers**—You can explicitly rank answers at certain levels in the knowledge base using the Display Position setting. This is often useful when new issues arise.
- **Click-track analysis**—Service analyzes the path each customer takes through the knowledge base. The use and benefits are two-fold:
  - ▷ Answer relatedness—An affinity map is built which relates answers that customers view to other answers viewed during the same visit. Through the SmartAssistant feature, Service suggests answers to them based on the historical relationships of that answer to other answers in the knowledge base. The suggested answers appear as learned links on the Relationships tab. Refer to Managing answer relationships.
  - ▷ Implicit ranking—The click-track data is also used for answer ranking. Each time an answer is viewed by a customer or suggested by an agent, its solved count is increased.

Rating answers through Solved Count

The Solved Count feature collects information about the usefulness of answers in your knowledge base and uses this data to rank your answers. Implicit data is compiled by how customers select and view answers. Explicit data is compiled by how customers rate the effectiveness of individual answers. Both long-term and short-term solved counts are used to calculate the score. Solved counts from the **customer portal** account for 75 percent of an answer's score, and agent solved counts contribute 25 percent. Using the solved count values, Service can dynamically rank the answers by their usefulness and present customers with the most effective answers first.

Note By default, the Solved Count feature is enabled.

An answer's score value is a calculated value equal to the answer's solved count combined with any "fix at" positions specified for the answer in the Display Position drop-down menu when adding or editing an answer. For more information about the options available, refer to Adding answer details.

- **Implicit ratings**—Implicit ratings are gathered as customers view answers. If a customer views an answer, the solved count of the first answer is increased, but not as much as the second viewed answer. In other words, the answer that the customer views last receives the largest solved count increase. Previously viewed answers receive a smaller increase in their solved counts. The solved count is also increased when an agent uses a SmartAssistant suggested answer when responding to a customer's question.
- **Explicit ratings**—Explicit ratings are gathered from the response to the question, "Was this answer helpful?". This question is displayed on the Answers page on the customer portal.

Aging of Solved Count

Over time, an unused answer's solved count will gradually decline or age. For example, if an answer has not been viewed for thirty days (the default setting), the solved count will automatically be reduced. The solved count of unused answers also declines at a constant rate over time. Ultimately, if an answer has not been viewed for an extended period of time, the answer's solved count can reach zero.

When you first create an answer, its rank in the knowledge base is low, thereby making it more difficult to access. Generally, you would not want aging to occur on new answers. By default, new answers will not be aged for thirty days. Your administrator can change the setting to specify an alternate aging period.

Note Your administrator can also control the frequency and aggressiveness of aging on answers depending on your organization's specific needs. Contact your administrator for more information about the Solved Count settings defined in your application.

When an answer's solved count reaches zero, this usually means that the answer has not been viewed for a long time, and it is safe to assume that the information may be outdated or not useful. By default, these aged answers are automatically set to the Review status when their solved count reaches zero. This enables you to easily sort the outdated answers and update them.

Note By default, the Review feature is disabled. Contact your administrator to enable this feature.

Now that you have thought about your processes for publishing answers and understand how the knowledge base grows and presents information, you need to know how to keep your knowledge base accurate and up-to-date.

Maintaining your knowledge base

Many of the maintenance tasks related to organizing the answers in your **knowledge base** are automated in Service. This enables you to focus on improving and maintaining the content of answers. The following list outlines these automated processes and describes the tools designed to aid with answer management.

- **Aging of answers (solved count)**—Just as frequently used answers will rise to the top of the knowledge base, lesser-used answers will move to the bottom through aging of the answers' solved count. Refer to Aging of Solved Count.
- **Answer review and publish feature**—By using the Review feature, you can easily monitor answers without needing to constantly review them. The Review feature will automatically set an answer to the Review status when the solved count reaches zero or on specifically defined dates. You can also manually set a review date, the date that you want the answer to go into review status. In addition, you can set an answer's publish date for a date in the future. In this way, you can schedule an answer to become public automatically without having to publish. Refer to Reviewing answers.
- **Data mining**—The processes of linking similar answers for the Related Answers feature is triggered automatically and occurs periodically when modifications are made to the knowledge base. These processes implement innovative technologies to cluster and link answers containing similar content.
- **Customer feedback**—Service closes the loop by providing customers with a method to submit comments and suggestions on answers. Any feedback submitted through the question, "Was this answer helpful," is turned into a Feedback for Answer incident accessible to agents. You can use this feedback to address content holes and improve answers.

- **Customer visit tracking**—Service tracks customers' actions as they move through your support site, recording where they went, what they searched for, and the answers they viewed. Using the Web Visit feature, agents can view this click-stream data to respond more appropriately to customers' questions. This information can also indicate areas of the knowledge base that need to be tuned. Refer to Viewing web visit information.
- **Knowledge base reports**—A series of standard reports record how customers are navigating the knowledge base, including the products and categories they are searching on, the search text they are entering, and the answers they are viewing. These reports provide a unique and powerful perspective into how the knowledge base is performing and enable you to pinpoint weak areas and tune the knowledge base content. Refer to Evaluating answers using service analytics.

❖ Aging of Solved Count
❖ Reviewing answers
❖ Viewing web visit information
❖ Evaluating answers using service analytics

Evaluating customer feedback

Your customers can provide feedback on answers that do not completely solve their issues (by answering the question, "Was this answer helpful?"). This feedback can be extremely valuable for understanding customer needs and updating your answers accordingly. When a customer submits comments or suggestions from the feedback form, an unresolved incident is automatically created.

Note In some instances, customer feedback can be incorporated directly into an existing answer. In other cases, new answers may need to be created.

Reviewing answers

Over time, the content of your answers can become outdated. Consequently, reviewing answers should become a central part of maintaining your **knowledge base** to ensure that the content is current, relevant, and useful. You may want to review answers at set intervals, such as every six months, or review answers in conjunction with new product releases or upgrades. If you have a group of answers for a particular product or service, you may want to review the answers in bulk. This can help you develop and prepare information in advance.

By using **custom fields**, custom **answer statuses**, and **answer access levels**, you can easily sort and work on answers in different stages of editing. For example, your administrator may have created a private answer status called Manager Review for newly crafted answers that will require manager approval before being published.

When editing an answer, you can set a specific date to review a particular answer. On the review date, the status of the answer will change from Public to Review. Also, by default, if an answer is not viewed by customers, the answer's solved count will reduce to zero, and the status of the answer will change to Review. Refer to Aging of Solved Count.

Tip To maintain information about a particular topic in one answer, use the Notes tab to store upcoming information or material you are currently editing.

Identifying content holes

You should actively investigate material for new answers by reviewing recently submitted **incidents**. Agents may become overwhelmed with assistance requests, and despite their best intentions, they may forget or not have enough time to propose new answers. By continually capturing questions submitted by your customers and crafting new answers that solve those questions, you can publish answers for the most relevant and current issues.

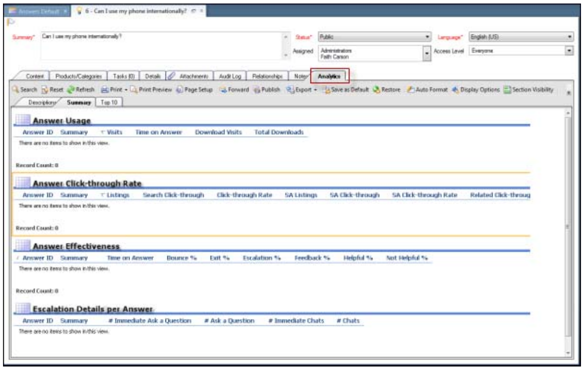
As you search the most recently solved incidents, click the Web Visit tab to see if customers searched or viewed any answers before submitting their incident. In this way, you can locate answers that are incomplete or need updating. Refer to Viewing web visit information.

Note Before creating a new answer, search for existing answers that cover the topic. You can avoid duplication by updating an existing answer, rather than creating a new one.

Evaluating answers using service analytics

Service has several standard reports that track customer activity and provide data on the effectiveness of your **knowledge base**. One of the most useful reports for identifying subject matter holes in your knowledge base is the Information Gaps report which is located at Public Reports > Service > Knowledge Base Reports. This report creates knowledge **clusters** from your existing incidents and compares them to your answers, alerting you when incidents are created that are not closely matched to any answer. By browsing the incidents and their cluster topics, you can evaluate the need for additional answers in your knowledge base.

The Analytics tab on the standard answer **workspace** displays reports about the answer currently being viewed or edited. The reports are located at Public Reports > Service > Site Reports > Actionable Knowledge Foundation. By reviewing the reports on the Analytics tab, you can fine-tune individual answers to make them more relevant for the **customer portal** and ultimately improve customer satisfaction.



The Analytics tab contains a toolbar for performing actions on the reports. Three tabs are located under the toolbar: the Descriptions tab, which provides descriptions for the reports, and the Summary and Top 10 tabs, which display the reports.

By default, the Summary tab opens and displays the following reports.

- **Answer Usage**—This report provides contact usage details on a per-answer basis.
- **Answer Click-through Rate**—This report provides a list of customer portal pages and actions and details about the visits for each.
- **Answer Effectiveness**—This report provides details about the actions performed on individual answers to provide an overall assessment of how effective each answer is.
- **Escalation Details per Answer**—This report provides information about the escalations that occurred after a particular answer was viewed.

The Top 10 tab displays the following reports.

- **Top Searches per Answer**—This report provides the top ten searches that returned an answer which was viewed by a contact.
- **Top Previous Answers by Answer**—This report provides a list of answers viewed during a selected time period, along with the top ten answers that were most often viewed previous to that time period.

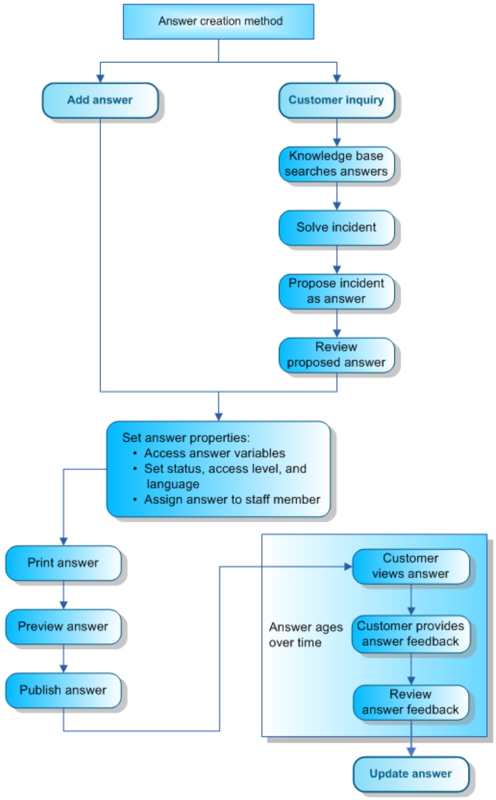
- **Answer Referrers**—This report provides the domain names (www.example.com) that visitors arrive from and the number of times (visits) a given answer was viewed by individuals from those domains.
- **Top Next Answers by Answer**—This report provides a list of answers viewed during a selected time period, along with the top ten answers that were most often viewed after that time period.

Answers overview

One of the greatest ways you can improve your customers' experience is to have answers to common questions readily available on your support site. With Service, you can create answers about your services and products and post them on your site. You can also create public answers from incidents in your **knowledge base**, or agents can propose incidents to become answers.

Once an answer is in your knowledge base, you can update it at any time, making sure your knowledge base contains only the most up-to-date information. For example, you can define specific dates to review an answer and change the answer to Private while you update the details. You can format answers with the HTML editor, which lets you create links, tables, and graphics, and use other HTML features without prior HTML knowledge. As a result, your support site is more interactive and visually appealing.

The following figure shows the actions that can be performed on an answer.

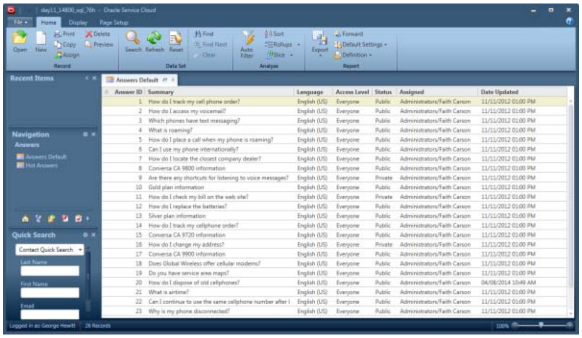


Answers reports

When you click the Answers button on the **navigation pane**, the **navigation list** displays all of the reports and items added to this button by your administrator. The Answers button, plus all the other buttons you have access to, are part of the **navigation set** defined in your profile.

Answers reports can be placed in other navigation lists, not just the Answers navigation list. And if you have permission to customize your navigation set, you can add other items, including any reports you have permission to access, to your Answers navigation list or any of your lists. Refer to Customizing navigation and configuration lists.

The following figure is an example of the Answers Default report.

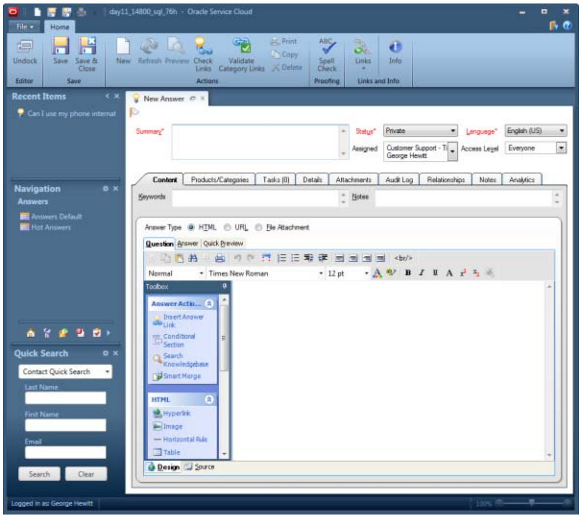


The answer information displayed on the content pane depends on the answers report you opened and which fields were defined when the report was created. The Answers Default report, for example, displays the answer’s ID, summary, language, access level, status, assigned, and date the answer was last updated. The **ribbon** allows you to manage answers and provides data analysis options for working with reports. You can right-click any answer and select the same functions that are available on the ribbon. Refer to [Ribbon](#).

Tip Besides selecting an answer from a report, you can search for answers from a report or use Quick Search. Refer to [Searching for records](#).

Standard answer workspace

Service provides a standard workspace for working with answers. The workspace defines which fields are available, what buttons display on the ribbon, and how the information is organized on the **content pane**. The following figure is an example of the standard answer workspace.



Your organization may use this standard workspace, or your administrator may have created one or more customized workspaces. Your profile defines the workspace you see when you work with answers, whether it is the standard workspace or a customized workspace. The standard workspace is used to describe how you work with answers, but keep in mind that the workspace your profile uses may display a different combination of fields, or it may display them in a different location on the content pane. Refer to Standard workspaces.

Ribbon

A standard ribbon exists for working with answers. The following table provides a description of the buttons available by default on this ribbon.

Table 321: Answer Ribbon Description

Group/Button	Description
Editor	
Undock	Click this button to undock the answer editor from the console and display it in a separate window.

Table 321: Answer Ribbon Description (Continued)

Group/Button	Description
Save	
Save	Click this button to save the answer without closing it. The answer remains open. **Note:** When you save an answer, it is evaluated by the rules engine. If your administrator added answer rules and the answer matches one or more of those rules, it is possible that the answer will be modified by rule actions when you save it. For example, a rule can change an answer's status or answer access level. Refer to Business rules overview.
Save and Close	Click this button to save and close the answer.
Actions **Note:** With the exception of the New button, the buttons in this group are not enabled until after you have saved the answer you are adding.	
New	Click this button to add an answer. Refer to Adding answers.
Refresh	Click this button to refresh the current answer.
Preview	Click this button to view the answer as it will appear to your customers. Refer to Previewing answers.
Check Links	Click this button to check the validity of hyperlinks and answer links in the answer. Refer to Validating answer links.
Validate Category Links	Click this button to check if the products and categories you selected for the answer are linked. If the categories you selected are linked to selected products, a message informs you that all selected categories are linked to at least one selected product. If you select one or more categories that are not linked to the products you selected, a message lists the categories that are not linked to any of the selected products. Refer to Product linking.
Print	Click this button to print the answer. Refer to Printing records.
Copy	Click this button to copy the answer. Refer to Copying records.
Delete	**Caution:** Deleting an answer affects all relationships associated with the answer. Click this button to delete the answer. Refer to Deleting answers.

Table 321: Answer Ribbon Description (Continued)

Group/Button	Description
Proofing	
Spell Check	Click this button to check the spelling of any answer fields that have spell check enabled. **Note:** Text on the answer's Content tab is automatically checked for correct spelling. Refer to Spell checking.
Links and Info	
Links	Click this button to select a URL from the list of links added by your administrator.
Info	Hover over this button to see details about the answer, including when it was created and last updated, the staff member who last edited it, and the date of the last answer update notification. If the answer is in a rules state or has an escalation level, that information also appears.

- ❖ Working with the ribbon
- ❖ Displaying shortcut keys on the ribbon

Record tabs

Record tabs contain fields and options for adding additional information to answers. The organization of these tabs allows you to manage and edit information and quickly move between the tabs as you work with answers. The information you can access on each tab depends on the permissions set in your **profile**.

Important If you make changes to fields on any of the answer record tabs or any of the windows opened through the record tabs, you must save the answer in order for all changes on the record tabs to take effect. If you close the record without saving changes, those changes are lost.

- **Content tab**—Contains the fields for adding and editing answers, including keywords, answer type, question, and answer. Also included is the Toolbox which contains tools for inserting hyperlinks, images, tables, buttons, answer links, and conditional sections. Refer to Adding answers.
- **Products/Categories tab**—Lists all products and categories that are associated with the answer. You can select which products and categories are associated with an answer to enhance search results for customers. Refer to Associating products and categories.
- **Tasks tab**—Lists all tasks associated with the answer. The number of tasks associated with the answer displays in parentheses next to the tab name. For each task, the tab displays the task name, due date, completion date, staff member assigned to the task, and priority. You can open, copy, delete, print, and forward any task and mark tasks complete by clicking a button on the tab's toolbar or by right-clicking the task and making your selection. Refer to Adding tasks.
- **Details tab**—Contains the fields for answer details, including Display Position, Review On, Notify Subscribers, and Publish On. Refer to Adding answer details.
- **Attachments tab**—Lists all attachments associated with the answer. The Attachments tab displays the file name, size, date created, date updated, and a description for each attachment. Refer to Attaching files to records.
- **Audit Log tab**—Lists all actions taken on the answer by all staff members. Also displayed are automatic changes initiated by Oracle Service Cloud that resulted from the application of business rules. When an action is generated by the system, the Who field contains Administrator. You can also see who worked on the answer, when it was added or updated, the actions taken, and descriptions of the actions. Refer to Audit logs.
- **Relationships tab**—Contains the fields and tools necessary to manage answer relationships, including sibling answer relationships, manually relating a new or existing answer with a current answer, and viewing, editing, printing, previewing, and promoting related answers. Refer to Managing answer relationships.
- **Notes tab**—Contains answer notes that can be sorted by date. Remember that customers never see the answer notes added by staff members. Refer to step 12 in To add an answer.
- **Analytics tab**—Contains the Actionable Knowledge Foundation reports, which display information about the answer being viewed or edited. By reviewing these reports, you can learn how your knowledge base is being used and make the necessary adjustments to improve customer satisfaction. Refer to Evaluating answers using service analytics.

- **Model Questions tab**—Lists all **Oracle RightNow Virtual Assistant Cloud Service** (Virtual Assistant) **model questions** that are associated with the open answer. Virtual Assistant must be enabled for this tab to display. Refer to Working with model questions.

Adding answers

When adding answers, you must complete key answer fields located at the top of the **content pane**. The key answer fields are used to specify the answer summary, status, language, access level, and the staff member assigned to the answer. Some of the fields are required. You must complete any field marked with a red label and asterisk before you can save the answer. For a description of the key answer fields, refer to Answer Fields Description.

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Note The key answer fields that display on the content pane will vary depending on the permissions set in your **profile**.

You can create different answer types when adding answers to the knowledge base. Answer types allow more flexibility in providing information to your customers. You can add the following types of answers.

- **HTML**—Answers that appear to customers as standard HTML on the **customer portal**. When you create an HTML answer, you can use the HTML editor to view answers as customers will see them. Refer to Adding HTML answers.
- **URL**—Answers that consist of a link to an external URL. The URL address and the content of the web page are displayed. Refer to Adding URL answers.
- **File attachment**—Answers that appear as file attachments. File attachment answers link to information contained in another document and appear to customers on the customer portal as file attachments. Refer to Adding file attachment answers.

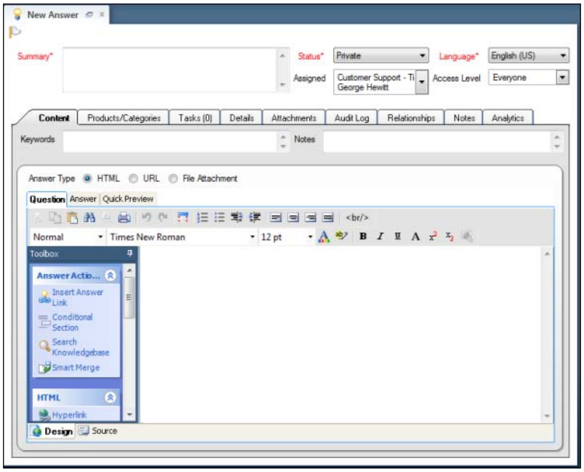
Caution When you change the answer type, certain fields are removed. For example, when you change an HTML answer type to a URL answer type, you will lose the Question, Answer, File Attachments, Manually Related Answers, and Learned Links fields. Read the Confirm Answer Type Change prompt carefully before you continue.

To add an answer

1 Click the New button on the **ribbon**.

Or

If your navigation set is configured to add answers from the **file menu**, click File and select Answer. See [To configure the file menu](#).



2 Enter field information described in the following table.

Table 322: Answer Fields Description

Field	Description
*Summary	Type the subject of the answer in this field.
*Status	Click this drop-down menu to select an answer status.
*Language	Click this drop-down menu to select a language.

Table 322: Answer Fields Description (Continued)

Field	Description
Assigned	Click this drop-down menu to select a staff member to assign to the answer. Only staff members who have permission in their profile to create answers are listed. By default, the staff member who created the answer is selected. **Note:** Use the Find feature at the bottom of the Assigned drop-down menu to locate staff members quickly. Wildcards are supported when searching staff members and groups. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing b in the Find field returns all items containing the letter b.
Access Level	Click this drop-down menu to select an access level. Refer to Associating answers with multiple access levels.

3 To add a **flag** to the answer, click the area next to the white flag above the answer fields. Refer to Flagging records.

4 Select the answer type. Refer to Adding HTML answers, Adding URL answers, or Adding file attachment answers.

5 To add keywords to associate with the answer, click the Content tab and type the words in the Keywords field.

Note Keywords should be separated by commas, with grouped words separated by spaces (for example, `phone, call plan, nationwide`). Keywords are used by the search feature. Any keywords you type are given the greatest weight when a customer is searching on the Answers page. In addition, words in products and categories and their descriptions are used as keywords for answers. Refer to Answers Page.

6 To associate products and categories with the answer, click the Products/Categories tab. Refer to Associating products and categories.

7 To add tasks to the answer, click the Tasks tab. Refer to Adding tasks.

8 To add additional details to the answer, including setting Publish On and Review On fields, click the Details tab. Refer to Adding answer details.

9 To attach files to the answer, click the Attachments tab. Refer to Attaching files to records.

Tip You can attach as many files as needed to associate with an answer or the answer's siblings. Attachments appear as clickable links when a customer views an answer. They can also be indexed as searchable text. Therefore, you can choose whether each document is indexed when managing your file attachments. Refer to Web Indexer overview.

10 To view the answer audit log, click the Audit Log tab. Refer to Audit logs.

11 To manage answer relationships, including sibling answers, manually related answers, and learned links, click the Relationships tab. Refer to Managing answer relationships.

12 To enter notes about the answer, click the Notes tab.

   a Click the Add button.

   b Type the notes in the Answer Note field. Notes will not be visible to customers on the **customer portal**.

13 Click the Save and Close button on the ribbon. The answer is added to the knowledge base.

Important If you set the answer status to Public, the End-User Visibility window opens and displays all interfaces associated with the answer, along with the answer's product and category visibilities. (A green check mark signifies that a product or category is visible on a particular interface, whereas a red X signifies it is not).

- To perform a visibility check when the answer's status is changed to Public, select Only When Status is Changed to Public Type.
- To perform a visibility check every time the answer is saved, select On Every Save.

❖ Adding HTML answers

❖ Adding URL answers

❖ Adding file attachment answers

Adding HTML answers

The default answer type is HTML. You can use the HTML editor to design creative and eye-catching answers. The Content tab contains three additional tabs (Question, Answer, and Quick Preview) that you can move between to create and preview content for answers.

You can design answer content using the design mode or the source mode. With the design mode, you can create dynamic, well-formatted answers without previous HTML experience. You can include special formatting in your text and add graphics, links, and other HTML features. You can also add links that reference other answers. The HTML editor contains many of the same options available in basic word processing applications.

Note For design mode to be available with the HTML editor, the HTML Design Mode permission must be selected in your profile. Refer to Service permissions.

Using source mode, you can create answers using HTML source code. By default, the editor displays your code in colored text to indicate structure and syntax. Regardless of which mode you use to create answers, you can preview how the content will appear to customers on the **customer portal** from the Quick Preview tab.

Important By default, the HTML editor cleans HTML code to meet XHTML compliance specifications. This results in adding XHTML doctype declarations to the resulting HTML code. If this functionality is disabled through the HTML_TIDY_ENFORCE_XHTML configuration setting, the content will not be cleaned upon saving the answer.

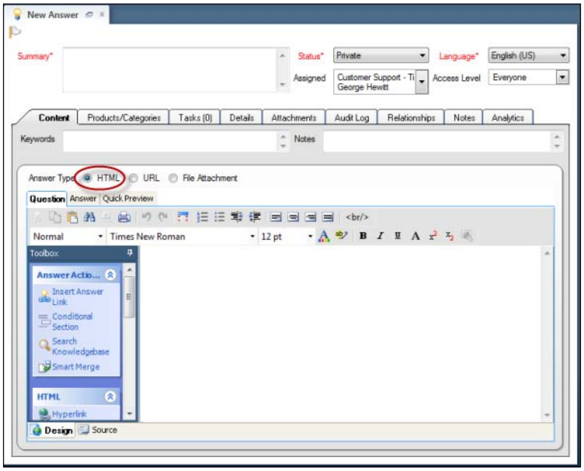
The following procedures show you how to add HTML answers in design mode and source mode.

To add an HTML answer in design mode

1 Click the New button on the **ribbon**.

Or

If your navigation set is configured to add answers from the **file menu**, click File and select Answer. See To configure the file menu. The HTML radio button is selected by default.



2 Type a one-line summary in the Summary text box. This field will display as the subject of the answer on the customer portal.

3 Use the HTML editor to add the question portion of the answer.

Or

Click the Answer tab and use the HTML editor to create the answer content. Functions available on the HTML editor include:

- Cut, copy, and paste
- Search for text
- Print
- Undo and redo changes
- Switch to a full screen
- Format text in bulleted or numbered lists
- Adjust indentation
- Center, left-justify, or right-justify text and images on the page
- Insert line breaks
- Change font style, size, and attributes (highlighting, bold, italic, underline)
- Apply specialized formatting, including super and subscripts
- Copy text formatting
- View HTML source code
- Preview the document

- Insert or clean HTML code

Special functions are accessed through the Toolbox section. The toolbox buttons are described in the following table.

Table 323: Toolbox Description

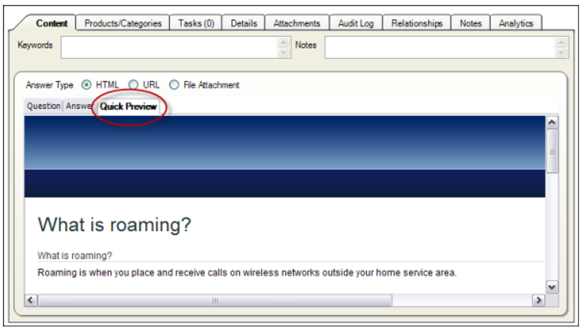
Button	Description
Answer Actions	Buttons in this section are used to insert dynamic content in your HTML.
Insert Answer Link	Click this button to insert a link to another answer. Refer to Inserting answer links.
Conditional Section	Click this button to insert a section with certain visibility restrictions within the answer. Refer to Inserting conditional sections.
Search Knowledge Base	Click this button to search for an answer in the knowledge base or a post in **Oracle RightNow Social Experience communities** and append the content with the current answer. Refer to Appending answer content.
Smart Merge	Click this button to merge answers using **Smart Merge**. Refer to Merging similar answers.
HTML	Buttons in this section are used to insert standard HTML elements in your answer content.
Hyperlink	Click this button to insert a hyperlink. Refer to Inserting hyperlinks.
Image	Click this button to insert an image. Refer to Inserting images.
Horizontal Rule	Click this button to insert a horizontal line.
Table	Click this button to insert a table. Refer to Inserting tables.
Div	Click this button to insert a DIV block, which you can use to group other elements, such as buttons. Refer to Editing style and class attributes.
Field Set	Click this button to insert a field set, which you can use to group a collection of input fields to improve document accessibility.
Button	Click this button to insert a button. Double-click the button on the canvas to edit the button text.

Table 323: Toolbox Description (Continued)

Button	Description
Insert Symbol	Click this button to open the Insert Symbol window and double-click a symbol to insert it at the current cursor position.
Manage Anchors	Click this button to insert an anchor in the answer. Refer to [Managing anchors]().

4 To preview the answer content, click the Quick Preview tab. Customer portal **themes** do not display on the Quick Preview tab.

Tip You can also preview the answer and select assigned access levels to view answer visibility by clicking the Preview button on the ribbon. Refer to [Previewing answers]().



5 Click the Save and Close button to save and close the answer.

To add an HTML answer in source mode

1 Click the New button on the **ribbon**.

Or

If your navigation set is configured to add answers from the **file menu**, click File and select Answer. See [To configure the file menu]().

2 Click the Source tab on the bottom of the Content tab.

Note When adding an HTML answer in source mode, the Syntax Highlighting button displays on the HTML editor toolbar and is active by default. When the button is active, colored text is used to define the structure and syntax of the HTML code for readability purposes. When the Syntax Highlighting button is not active, all HTML code displays in black.

3 Type the HTML code to create question content.

4 Click the Answer tab and type the HTML code to create answer content.

5 Click the Save and Close button to save and close the answer.

❖ Previewing answers

Adding URL answers

When you create a URL answer, an external URL address will display to customers on the **customer portal**. When customers click the URL, an external web page opens in a new window. URL answers are also indexed as searchable text on the customer portal. You can still define many of the same answer fields as in HTML answers. However, some fields (such as the Question and Answer fields) are unavailable when adding a URL answer. The exact fields available depend on the permissions set in your profile.

To add a URL answer

1 Click the New button on the **ribbon**.

Or

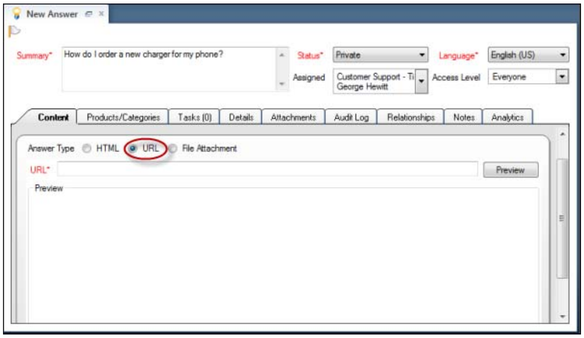
If your navigation set is configured to add answers from the **file menu**, click File and select Answer. See To configure the file menu.

2 Type a one-line summary in the Summary text box. This field will display as the subject of the answer on the customer portal.

3 Select the URL radio button. The Confirm Answer Type Change window opens.

Caution Use caution when you change the **answer type** of an existing answer. Some fields are removed and cannot be restored (for example, the Question and Answer fields when changing from an HTML answer to a URL answer).

4 Click the Yes button in response to the Confirm Answer Type Change message.



5 Type or paste a URL address in the URL field.

6 Click the Preview button to display the URL content. The Preview section displays the link as it will appear in the customer's web browser. It can also display other file types or folder content.

Note URL answers are not flagged as updated on the Answers page when the answer content changes if the URL does not change.

7 Click the Save and Close button to save and close the answer.

Adding file attachment answers

You can add file attachment answers to link to information contained in another document. File attachment answers contain many of the same answer fields as in HTML answers. However, some fields (such as the Question and Answer fields) are unavailable when adding file attachment answers. The exact fields available depend on the permissions set in your **profile**. You can attach only one file for each answer. File attachment answers are also indexed as searchable text on the **customer portal**.

Important File attachment answers appear to customers on the customer portal as file attachments, which is different than HTML answers that contain file attachments within the answer to provide additional information.

To add a file attachment answer

1 Click the New button on the **ribbon**.

Or

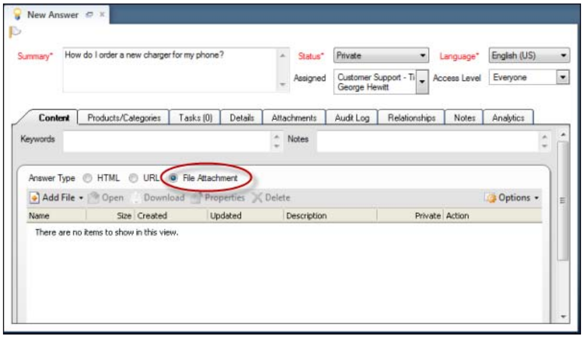
If your navigation set is configured to add answers from the **file menu**, click File and select Answer. See To configure the file menu.

2 Type a one-line summary in the Summary text box. This field will display as the subject of the answer on the customer portal.

3 Select the File Attachment radio button. The Confirm Answer Type Change window opens.

Caution Use caution when you change the **answer type** of an existing answer. Some fields are removed and cannot be restored (for example, the Question and Answer fields when changing from an HTML answer to a file attachment answer).

4 Click the Yes button in response to the Confirm Answer Type Change message.



5 Click the Add File button. Refer to Attaching files to records. Once you attach a file, information about the selected file appears on the Content tab.

The following table describes the file information displayed.

Table 324: File Attachment Answer Description

Field	Description
Name	This field displays the name of the file.

Table 324: File Attachment Answer Description (Continued)

Field	Description
Size	This field displays the size of the file.
Created	This field displays the date and time the file was created.
Updated	This field displays the date and time the file was last updated.
Description	This field displays the description of the file defined on the Properties window. **Note:** You can add or edit the file's description by selecting the file, and then clicking the Properties button and typing the description in the Description field.
Private	This field displays the visibility of the file attachment answer.
Action	After a file has been added to the list, choose one of the following actions: • **Open**—Click Open to open the file. • **Download**—Click Download to download the file. You are prompted to save the file to the location you specify. A File Download window opens displaying the download progress. • **Delete**—Click Delete to delete the file from the answer.

Tip The Content tab contains a paper clip icon when there is a file attached to the file attachment answer.

6 To open the attachment, click the Open button.

7 To download the selected file, click the Download button. You are prompted to save the file attachment to the location you specify. A File Download window opens displaying the download progress.

8 To change the display of the name and description, click the Properties button and make your changes.

9 To remove this file from the answer, click the Delete button.

10 Click the Save and Close button to save and close the answer.

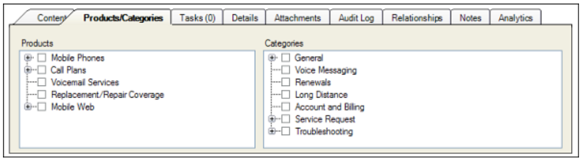
Associating products and categories

You can associate products and categories with answers. By associating products and categories with your answers, you can create rules and facilitate searching.

To associate products and categories to an answer

1 From an answers report, right-click the answer and select Open.

2 Click the Products/Categories tab.



3 Select products and categories to associate with the answer.

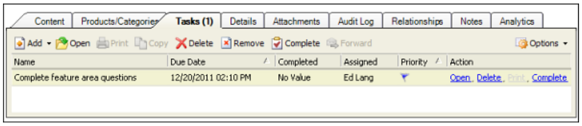
Note Regardless of whether **product linking** is enabled and regardless of what categories are linked to products, all products and all categories are available on the Products/Categories tab when you add or edit an answer. Refer to Product linking.

In addition, product and category values are shared among **sibling answers**. When a product or category is changed for an answer, it is also changed for that answer's sibling answers. Refer to Sibling answers.

4 To associate the answer exclusively with a product or category (without any dependence on sub-products or sub-categories), right click the product or category name. The associated check box displays green and any parent products or categories display a gray check mark to signify they are associated with the answer as well.

Adding tasks

You can add and edit all tasks associated with an answer by clicking the answer's Task tab. When you add or edit a task, you not only define its name, the staff member it is assigned to, relevant dates, and type of task, but you also associate it with new or existing answers.



The Tasks tab contains a toolbar for working with the tasks associated with the open answer. The following table describes the Tasks toolbar buttons.

Table 325: Tasks Tab Toolbar Description

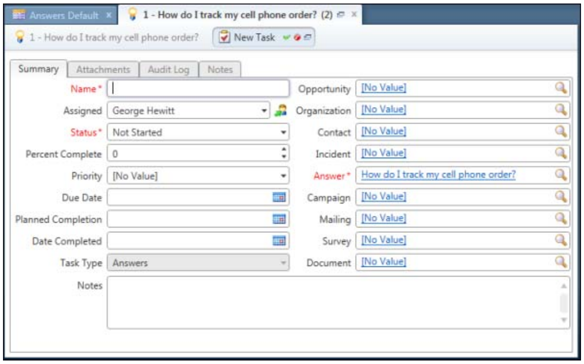
Button	Description
Add	Click this button to add a new or existing task.
Add New	Select this option to add a task.
Add Existing	Select this option to search for a task to add to the answer. Refer to Searching from open records.
Open	Click this button to open or edit the selected task. **Note:** If you have read-only access to tasks, you can open the selected task but all options to edit the task are disabled.
Print	Click this button to print the selected task.
Copy	Click this button to copy the selected task.
Delete	Click this button to delete the selected task.
Remove	Click this button to remove the task association from the answer.
Complete	Click this button to mark the task complete. **Note:** You can set multiple tasks to complete by pressing **Ctrl** while selecting each task and then click the Complete button.
Forward	Click this button to forward the task to the selected recipient.
Options	Click this button to display a drop-down menu of analytics options.

To add or edit a task for an answer

1 Right-click the answer and select Open.

2 Click the Tasks tab.

3 Click the Add button and select Add New to open a new task on a sub-tab.
Or
Right-click a task on the Tasks tab and select Open.



4 Type the task name in the Name field.

5 To enter additional task information, complete the fields or select a menu option. Refer to Adding tasks.

6 Click the OK button.

Adding answer details

The Details tab contains information associated with the selected answer. You can control the display position on the **customer portal**, notify subscribers of changes to the answer, and define the review and publish dates for the answer. The following table describes the fields on the Details tab.

Table 326: Answer Details Tab Description

Field	Description
Display Position	Click this drop-down menu to determine the answer's display position on the customer portal.
Historical Usefulness	Select this option to use customer feedback to adjust the ranking of the answer.

Table 326: Answer Details Tab Description (Continued)

Field	Description
Place at Bottom	Select this option to place the answer at the bottom of the list by changing the score to be equal to the lowest answer score. The score is then adjusted as the solved count changes over time.
Place at Middle	Select this option to place the answer at a level that is 50% of the highest answer score. The score is then adjusted as the solved count changes over time.
Place at Top	Select this option to place the answer at the top of the list on the Answers page by changing the score to be equal to the highest answer. The score is then adjusted as the solve count changes over time.
Fix at Bottom	Select this option to permanently fix the answer at the bottom of the list on the Answers page by changing the score to be equal to the lowest answer score. The answer's score will not increase or decrease over time.
Fix at Middle	Select this option to permanently fix the answer at a level that is 50% of the highest answer score. The answer's score will not increase or decrease over time.
Fix at Top	Select this option to permanently fix the answer at the top of the list on the Answers page by changing the score to equal the highest answer score. The answer's score will not increase or decrease over time.
Review On	Click this drop-down menu to access a calendar and select a date to set the answer to the Review status. Use the left and right arrows at the top of the calendar to select the month, and then click a day.
Guided Assistance	Click this button to open the Select a Guide window, which enables you to select a **guided assistance** guide to associate with the answer. Refer to Configuring guide searching. This button will not display unless your administrator has enabled guided assistance.
Notify Subscribers	Click this drop-down menu to select an option for notifying subscribers when the answer is updated. Options include Do Not Notify, This Hour, End of Today, End of this Week, End of this Month.

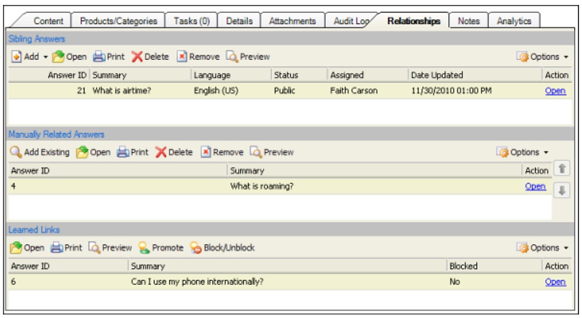
Table 326: Answer Details Tab Description (Continued)

Field	Description
Publish On	Click this drop-down menu to access a calendar and select a date to publish the answer. Use the left and right arrows at the top of the calendar to select the month, and then click a day. On the selected date, the answer status will change to Public, and the answer is available to customers. **Note:** When an answer's status is set to Private, the Publish On date is cleared.

Managing answer relationships

You can relate one answer to other answers that contain similar content. This functionality also provides a way for you to group similar answers, improving the way you keep track of and update answers in your knowledge base. Answer relationships can be managed on the answer's Relationships tab. The answer relationship types available to you depend on how the answer workspace assigned in your **profile** is customized

Tip When two or more answers are related, you can view the relationship from the Relationships tab of any of the answers.



Sibling, manually related, and automatically related answers are displayed on the Relationships tab. The tab is divided into the following sections.

- Sibling answers—Answers that can share the same product, category, or file attachments
- Manually related answers—Two or more answers manually defined by a staff member

- Learned links—Answers that have learned relationships as a result of customer activity

Manually related and learned links are disabled when the answer type is set to either URL or File Attachment. For information about answer types, refer to Adding answers.

Regardless of which types of answer relationships you work with, it is important to note that all relationships between answers are at a peer level and not at a subordinate level. For example, if you have three answers you want to relate (1, 2, and 3), you can relate 2 to 1 and 3 to 2. All three answers are peers, including answers 1 and 3.

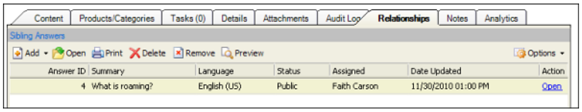
Sibling answers

Sibling answers are those that can share the same product, category, or file attachments. Sibling answers and attachments with access levels that are at or below the contact's SLA are visible to the contact.

Note To display file attachments for the answer's siblings on the Attachments tab, the Siblings Visible property for the File Attachments relationship item in the custom answer workspace must be set to True. Refer to Options properties.

The Sibling Answers section of the Relationships tab consists of a toolbar and a list of sibling answers. The toolbar is located above the sibling answer list. The following figure shows the Sibling Answers section on the Relationships tab.

Important When you add a new answer, the option to add a sibling answer is disabled. You must first save the answer to enable the toolbar buttons on the Sibling Answers section.



The following table describes the buttons on the Sibling Answers section toolbar.

Table 327: Sibling Answers Section Toolbar Description

Button	Description
Add	Click this button and select one of the following options.
Add New	Select this option to add an answer and establish a sibling relationship between the current answer and the new answer.
Add Existing	Select this option to create a sibling relationship between the current answer and an existing answer. The Answer Search window displays so you can search for an existing answer. Refer to Searching for records.
Open	Click this button to open the selected sibling answer.
Print	Click this button to print the selected sibling answer.
Delete	Click this button to delete the sibling answer.
Remove	Click this button to remove the selected sibling answer, which disables the answer relationship.
Preview	Click this button to preview the selected sibling answer.
Options	Click this button to display a drop-down menu of analytics options.

The list in the Sibling Answers section contains answers that share the same product or category as the current answer. Refer to the following table for a description of this list.

Table 328: Sibling List Description

Column	Description
Answer ID	This column displays the ID assigned to the answer.
Summary	This column displays a summary of the answer content. The summary is the answer's subject.
Language	This column displays the language of the answer.
Status	This column displays the status of the answer.
Assigned	This column displays the name of the staff member assigned to the answer.

Table 328: Sibling List Description (Continued)

Column	Description
Date Updated	This column displays the date the answer was last updated.
Action	This column displays a link for opening the sibling answer. **Note:** Right-click the Open link to display Print, Remove, and Preview functionality.

To move an answer to a sibling set

1. Click the Add button, select Add Existing, search for the answer you want to add, and select it. The Move Siblings window opens.
2. Select the appropriate radio button.
3. Click the OK button.

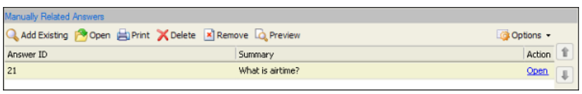
To remove an answer from a sibling set

1. Select the answer that you want to remove from the sibling set.
2. Click the Remove button. The Move Answer window opens.
3. Select the appropriate radio button.
4. Click the OK button.

Manually related answers

Manually related answers are two or more answers that may contain related information. Manually relating answers provides customers with additional options for finding accurate information.

The Manually Related Answers section of the Relationships tab consists of a toolbar and a list of manually related answers. The toolbar is located above the manually related answer list. The following figure shows the Manually Related Answers section on the Relationships tab.



The following table describes the buttons on the Manually Related Answers section toolbar.

Table 329: Manually Related Answers Section Toolbar Description

Button	Description
Add Existing	Select this option to create a relationship between the current answer and an existing answer. The Answer Search window will display so you can search for an existing answer. For more information about searching for answers, refer to Searching for records.
Open	Click this button to open the selected answer.
Print	Click this button to print the selected answer.
Delete	Click this button to delete the selected answer.
Remove	Click this button to remove the selected answer from the list, which disables the answer relationship.
Preview	Click this button to preview the selected answer.
Options	Click this button to display a drop-down menu of analytics options.

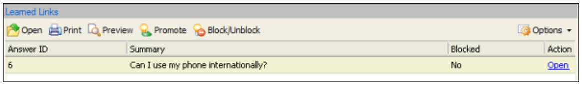
The list in the Manually Related Answers section contains answers that may contain related answer information. The following table provides a description of this list.

Table 330: Manually Related List Description

Column	Description
Answer ID	This column displays the ID assigned to the answer.
Summary	This column displays a summary of the answer content. The summary is the answer's subject.
Action	This column displays a link for opening the manually related answer. **Note:** Right-click the Open link to display Print, Remove, and Preview functionality.

Learned links

Service can automatically link answers based on customer activity. Relationships between answers are established when customers view answers during the same visit.



The Learned Links section of the Relationships tab consists of a toolbar and a list of learned link answers. The toolbar is located above the learned links answer list. The following table describes the buttons on the Learned Links section toolbar.

Table 331: Learned Links Section Toolbar Description

Button	Description
Open	Click this button to open the selected answer.
Print	Click this button to print the selected answer.
Preview	Click this button to preview the selected answer.
Promote	Click this button to promote the learned link to a manually related answer. The answer is added to the Manually Related list.
Block/Unblock	Click this button to block the answer from appearing in the Related Answers section on the **customer portal**. To block more than one answer, press **Ctrl** while selecting each answer. **Note:** Click this button again to allow a blocked answer to appear in the Related Answers section on the customer portal.
Options	Click this button to display a drop-down menu of analytics options.

The list in the Learned Links section contains answers that are related as a result of customer activity. All learned link answers are listed. The following table provides a description of this list.

Table 332: Learned Links List Description

Column	Description
Answer ID	This column displays the answer ID number.
Summary	This column displays a summary of the answer content. The summary is the answer's subject.

Table 332: Learned Links List Description (Continued)

Column	Description
Blocked	This column displays the blocked mode of the answer link on the customer portal. **Note:** If “No” displays, the answer link is not blocked on the customer portal. If “Yes” displays, the answer link is blocked on the customer portal.
Action	This column displays a link for opening the learned link answer. **Note:** Right-click the Open link to display Print, Remove, and Preview functionality.

Tip If the Related Answers feature is enabled, learned links will appear in the Related Answers section on the customer portal when a customer views the answer. The number of related answers (learned links) that display depends on how your site is configured.

Managing answers

Although you can add many answers to your **knowledge base** as your organization provides new products and services, you might also spend a lot of time managing and updating your current answers. You can add information to existing answers, including adding links to other answers, merging similar answers, and adding **conditional sections** within an answer to control visibility of certain information.

When adding and editing answers, the toolbox allows you to perform advanced actions on your answers such as inserting hyperlinks, images, and tables. As your knowledge base grows more complex, you can insert links to other answers, associate answers with multiple access levels, insert conditional sections, and merge similar answers.

- ❖ Adding answers

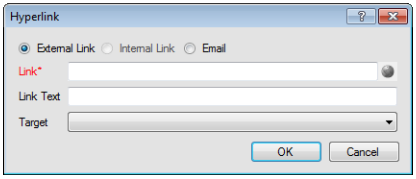
Inserting hyperlinks

You can create a hyperlink in an answer that will link to a URL. When customers view an answer on the **customer portal** that contains a hyperlink, they can click the hyperlink and be directed to either an internal or external URL.

To insert a hyperlink

1 From an answers report, right-click the answer and select Open.

2 Click the Hyperlink button on the toolbox. The Hyperlink editor opens.



3 Enter the following field information.

Table 333: Hyperlink Editor Description

Field	Description
External Link	Select this radio button to add a link to an external web page. **Note:** The External Link radio button is selected by default.
Internal Link	Select this radio button to link to an answer. **Note:** To enable this radio button, you must first add an **anchor** to the answer. Refer to Managing anchors.
Email	Select this radio button to add an email link to the answer content. **Note:** Selecting this answer link creates a message that is addressed to the specified email account.
***Link**	Type a valid URL to the page you are linking to. To verify that the URL you typed is accurate, click the View URL button (to the right of the Link field). A web browser opens to the URL you specified. If you enter an invalid URL, an error message opens. **Caution:** If the link is to a non-HTML page (for instance, a file type), a security warning opens. Verify that the link is directed to a trusted source before you click the Yes button to continue.
Link Text	Type the text you want to appear to customers. **Note:** If this field is left blank, the URL in the Link field displays to customers.

Table 333: Hyperlink Editor Description (Continued)

Field	Description
Target	Click this drop-down menu and select one of the following options.
New Window	Select this option to have the link open in a new window when the customer clicks the link.
Same Window	Select this option to have the link open in the same window when the customer clicks the link.
Parent Window	Select this option to have the link open in the parent window when the customer clicks the link.
Browser Window	Select this option to have the link open in a browser window when the customer clicks the link.

4 Click the OK button to insert the hyperlink at the cursor position in the current answer.

Inserting images

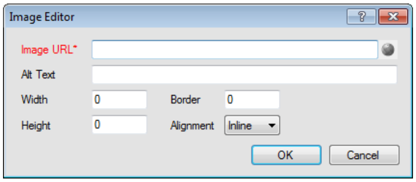
You can insert an image that is accessible through a URL in your HTML. You can also define the size of the image, its border properties, and alignment.

Note Copy and paste functionality is not available when inserting images into answers. Therefore, all answer images must be referenced by URL. As a best practice, we advise you to host your files and graphics on your own web servers and link to those files (through a HTTP address) within your answer content. For information about storing images, refer to Answer ID 4161 on our customer support site.

To insert an image

1 From an answers report, right-click the answer and select Open.

2 Click the Image button on the toolbox. The Image Editor opens.



3 Enter the following field information.

Table 334: Image Editor Description

Field	Description
***Image URL**	Type the URL where the image is located.
View URL	Click this button (globe icon) to view the URL in a web browser.
Alt Text	Type the alternate text for the image.
Width	Type the width, in pixels, you want the image to appear as.
Height	Type the height, in pixels, you want the image to appear as.
Border	Type the width, in pixels, of the image's border.
Alignment	Click this drop-down menu to select the image's alignment: Inline, Left, Middle, Right, Top, or Bottom. The default alignment is Inline.

4 Click the OK button to insert the image.

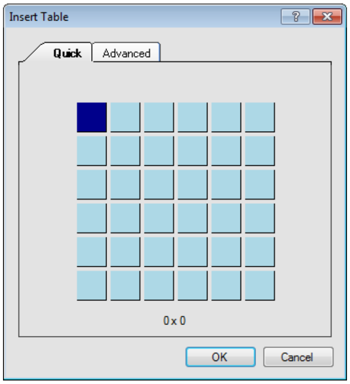
Inserting tables

You can insert a table in your HTML and define the number of rows or columns and its border properties, cell padding, and cell spacing.

To insert a table

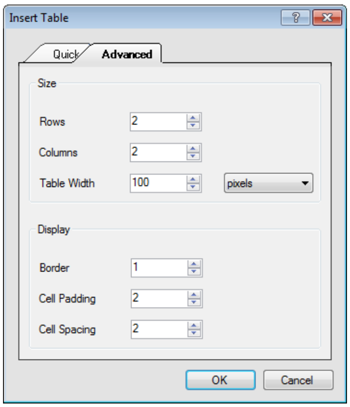
1 From an answers report, right-click the answer and select Open.

2 Click the Table button on the toolbox. The Insert Table window opens.



3 To use the Quick tab to define the number of rows and columns in the table, hover over the grid and click when the number of rows and columns is correct.

4 Click the Advanced tab.



5 Enter the following field information.

Table 335: Advanced Tab on the Insert Table Window

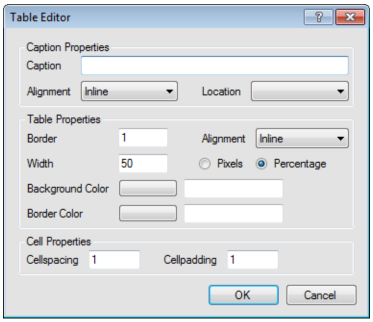
Field	Description
Size	Define the size of the table in this section.
Rows	Enter the number of rows in the table.

Table 335: Advanced Tab on the Insert Table Window (Continued)

Field	Description
Columns	Enter the number of columns in the table.
Table Width	Enter the width of the table and select the unit from the drop-down menu (for example, pixels).
Display	Define the table's attributes in this section.
Border	Enter the width, in pixels, of the table's border.
Cell Padding	Enter the padding, in pixels, of the table's cells.
Cell Spacing	Enter the spacing, in pixels, of the table's cells.

6 Click the OK button to insert the table.

7 To edit the table's properties, right-click the table and select Table Editor > Table Properties. The Table Editor opens.



a Enter the following field information.

Table 336: Table Editor Description

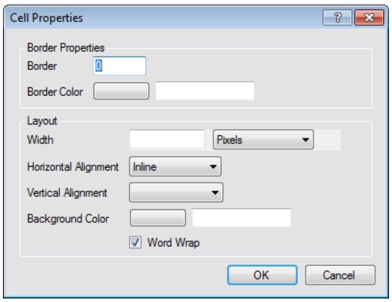
Field	Description
Caption Properties	Define the table's caption in this section.
Caption	Type the caption of the table.

Table 336: Table Editor Description (Continued)

Field	Description
Alignment	Click this drop-down menu to select the alignment of the caption. Your choices are Left, Centered, and Right.
Location	Click this drop-down menu to select the location of the caption in relation to the table. Your choices are Top and Bottom.
Table Properties	Define the table's attributes in this section.
Border	Type the width, in pixels, of the table's border.
Alignment	Click this drop-down menu to select the alignment of the table on the page. Your choices are Left, Centered, and Right.
Width	Type the width of the table and select the unit from the radio buttons (Pixels or Percentage).
Background Color	Click this box to select a color for the table's background.
Border Color	Click this box to select a color for the table's borders.
Cell Properties	Define the table's attributes in this section.
Cellspacing	Type the spacing, in pixels, of the table's cells.
Cellpadding	Type the padding, in pixels, of the table's cells.

b Click the OK button to save your changes.

8 To edit a cell's properties, right-click the table cell and select Table Editor > Cell Properties. The Cell Properties window opens.



a Enter the following field information.

Table 337: Cell Properties Window Description

Field	Description
Border Properties	Define the cell's border properties in this section.
Border	Type the width of the cell's border in pixels.
Border Color	Click this box to select a color for the cell's borders.
Layout	Fill in the following fields to specify the cell's layout properties.
Width	Type the width of the cell and select the Pixels or Percent radio button.
Horizontal Alignment	Click this drop-down menu to select the horizontal alignment of the text in the cell. Your choices are Left, Centered, Right, and Justify.
Vertical Alignment	Click this drop-down menu to select the vertical alignment of the text in the cell. Your choices are Top, Middle, Bottom, and Baseline.
Background Color	Click this box to select a color for the cell's background.
Word Wrap	Select this check box to allow text to wrap in the cell.

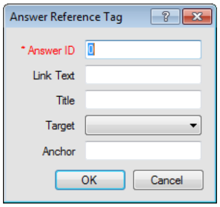
b Click the OK button to save your changes.

Inserting answer links

You can create a link in an answer that references an existing answer. Service provides you with the flexibility to easily create links to existing answers by using the answer ID number instead of typing a long URL to the answer.

To insert an answer link

1. Right-click the answer on the content pane and select Open.
2. Click the Insert Answer Link button. The Answer Reference Tag window opens.



3 Enter the following field information.

Table 338: Answer Reference Tag Window Description

Field	Description
*Answer ID	Type the answer ID of the answer you want to link to.
Link Text	Type the text you want to appear to customers. **Note:** If this field is left blank, Answer Link will display to customers.
Title	Type the text you want to appear to customers when they hover over the link title.
Target	Select the target location where you want the contents of the link to display. The choices are: • New Window • Same Window • Parent Window • Browser Window
Anchor	Type the anchor in this field to link to a specific location in a long string of text in an answer. This allows the customer to link to the exact location. Refer to Managing anchors.

4 Click the OK button to insert the answer link at the cursor position in the current answer.

Note Answers containing links to other answers will not display the link as active on the Answers page on the customer portal, but the link is active when the individual answer is displayed.

Managing anchors

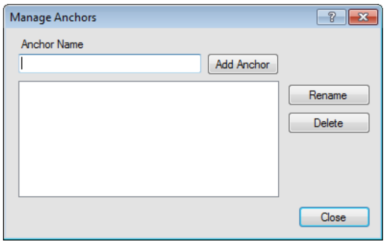
When you insert an answer link, you may also need to insert an anchor in the answer you are linking to if you want the answer link to open to a specific location within the answer. For example, you may have an answer that contains several paragraphs of text, but the first paragraph does not contain information that will answer the customer's question. Using an anchor, you can quickly link to a specific location.

To insert an anchor

1 Right-click the answer on the content pane and select Open.

2 Insert the cursor in the exact location of the answer you want to link to.

3 Click the Manage Anchors button on the toolbox. The Manage Anchors window opens.



4 Type a name for the anchor in the Anchor Name field.

5 Click the Add Anchor button to add the anchor at the cursor position in the answer.

6 To rename an anchor, select the anchor and click the Rename button.

7 To delete an anchor, select the anchor and click the Delete button.

8 Click the Close button to save the anchor and close the Manage Anchors window.

Associating answers with multiple access levels

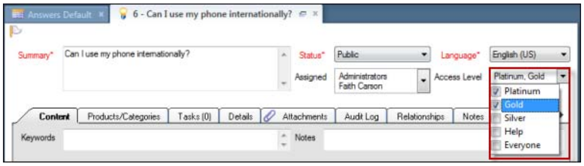
You can associate multiple access levels with an answer. If any of the access levels have customer visibility, the answer is visible on the **customer portal**. In addition, you can control the answers returned in a customer's search by assigning them **SLAs** that allow privileged access to specific answers. For example, a customer assigned an SLA with Gold access is able to view all answers with the assigned access levels of Gold, Everyone, or Gold and Everyone.

Access levels are just one way of controlling answer visibility. For information about other ways to control answer visibility, refer to Controlling answer visibility.

To associate an answer with multiple access levels

1 Right-click the answer on the **content pane** and select Open.

2 Click the Access Level drop-down menu and select the check box next to each access level you want to assign to the answer.



3 To view the answer as customers will see it on the customer portal, click the Quick Preview tab.

4 Click the Save and Close button to save your changes and close the answer.

❖ Controlling answer visibility

Inserting conditional sections

Conditional sections control the visibility of specific sections within your answers, allowing customers with only the appropriate **SLA** to view the conditional sections. One scenario for using conditional sections is when you are working on an answer and you want to add information that is not yet approved for public visibility. You can create an **access level** that has no customer portal visibility and assign it to the conditional section you do not want customers to view.

Conditional sections can also be used with **privileged access** levels assigned to specific SLAs. Those customers assigned an SLA with a privileged access level are able to view the conditional sections assigned to the privileged access level. For example, a customer assigned an SLA with Gold access is able to view conditional sections with access levels of Gold, Everyone, or Gold and Everyone. This provides more flexibility to customize and personalize answers for customers.

Note Conditional sections can also be nested. Although answers allow unlimited nesting levels, we strongly recommend that you limit the nesting levels to three inner sections.

To insert a conditional section

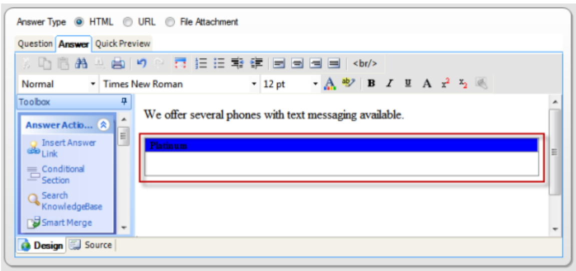
1 Right-click the answer on the content pane and select Open. By default, the Question tab is active.

2 To add your conditional section to the answer portion, click the Answer tab.

3 Click the Conditional Section button on the toolbox. The Access Levels window opens.

4 Select the access levels you want to assign to the conditional section.

5 Click the OK button. The Conditional Section text box displays on the Answer tab.



When conditioning a section of an answer with an access level not associated with the answer, the section will never be visible to customers.

6 Type the information in the Conditional Section text box.

7 Click the Save button to save the answer with the conditional section.

To modify conditional sections

1 To edit the text of a conditional section, click the conditional section and type your text in the Access Level Conditional text box.

2 To nest a conditional section in the current conditional section, click inside the answer section and then click the Conditional Section button on the toolbox. Refer to To insert a conditional section.

3 To change the access level of a conditional section, double-click the conditional section to open the Access Levels window and select the access level or multiple access levels.

a Click the OK button to assign the selected access levels and close the Access Levels window.

4 Click the Save and Close button to save your changes to the answer.

Tip If the answer contains conditional content and the customer has access to that level of privileged answer, the conditional content is visible on the Answers page. Refer to Answers Page.

You can see how the answer will appear to customers with different access levels on the customer portal using the Preview functionality. Refer to Previewing answers.

- Answers Page
- Previewing answers

Merging similar answers

You can effectively manage the answers in your knowledge base by merging similar answers or merging the content of one answer with another answer. In addition, merging answers will also merge any conditional sections. Conditional sections will display as text in the appropriate fields of the answer. Refer to Inserting conditional sections.

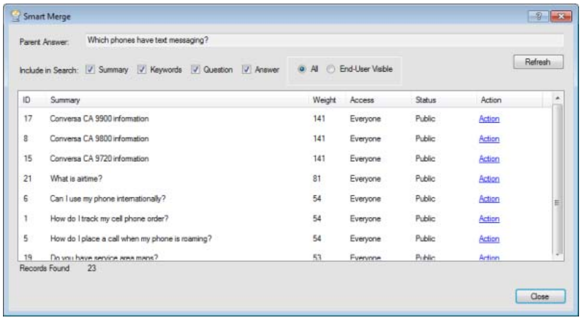
Answers can be merged with similar answers found in the knowledge base using the Smart Merge feature. Smart Merge helps you to identify similar answers and merge them. Merging answers provides your customers with more complete information and can help you eliminate duplicate answers.

Note Smart Merge relies on the configuration settings used for the SmartAssistant feature. Changing these configuration settings may change the weight given to the relevant answers displayed for both Smart Merge and SmartAssistant. Refer to Modifying SmartAssistant relevancy.

To merge similar answers

1 Right-click the answer on the content pane and select Open.

2 Click the Smart Merge button on the toolbox.



3 Enter the following field information.

Table 339: Smart Merge Window Description

Field	Description
Parent Answer	The parent answer is the current answer you are merging an answer to. This field displays the summary of the open answer. Refer to Managing answer relationships.
Include in Search	Define your search criteria with any of the following areas of the answer. **Note:** All options are selected by default.
Summary	Select this check box to search the Summary field for answers you can merge.
Keywords	Select this check box to search the Keywords field for answers you can merge.
Question	Select this check box to search the Question field for answers you can merge.
Answer	Select this check box to search the Answer field for answers you can merge.
All	Select this radio button to return all answers, regardless of status.

Table 339: Smart Merge Window Description (Continued)

Field	Description
End-User Visible	Select this radio button to return only public answers.

4 Click the Refresh button. The results display on the Smart Merge window.

Tip The results display matched answers sorted by relevance.

5 Click Action next to each answer you want to merge and select from the merge options described in the following table.

Table 340: Merge Answer Options

Option	Description
Merge	Select this option to merge the answer with the answer you are editing.
Merge and Make Private	Select this option to merge the answer with the answer you are editing and set the status to Private. A warning will prompt you to verify the action.
Merge and Delete	Select this option to merge the answer with the answer you are editing and then delete the answer once it has been merged. **Caution:** Selecting this option will permanently delete the selected answer from the knowledge base. Use caution when selecting this option.
Show	Select this option to view the answer in a separate window before you merge it with the answer you are editing.
Cancel	Select this option to cancel the current selection.

Tip Once you select an option, the underlined text next to the answer will change. For example, if you select Merge, the text will change from Action to Merged.

6 Click the Close button to close the window and return to the answer.

7 To view the merged answer as it will appear on the **customer portal**, click the Quick Preview tab. Refer to Previewing answers.

8 Click the Save and Close button to save your changes to the answer.

Appending answer content

While editing an answer, you can search for other answers in the knowledge base. If answers are returned that match your search criteria, you can append them to the answer you are editing.

If **Oracle RightNow Social Experience communities** are enabled on your site, the Community tab displays on the Search Knowledge Base window and search results are split between answers in the knowledge base and posts in the communities.

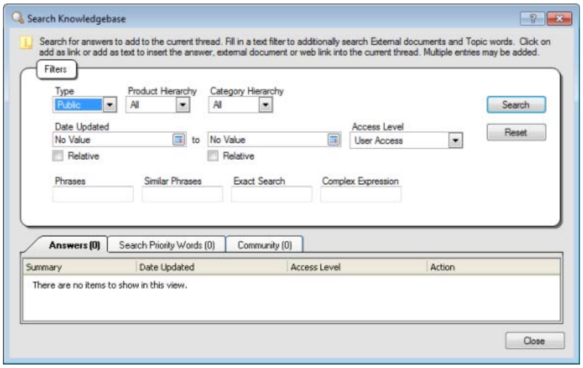
The Search Knowledge Base window contains the following tab set.

- **Answers**—Contains links to answers in the knowledge base that match your search phrases.
- **Search Priority Words**—Contains links to answers in the knowledge base that correspond to search priority words in Service. Refer to Configuring search priority words.
- **Community**—Contains links to posts in the communities that match your search phrases.

To append answer content

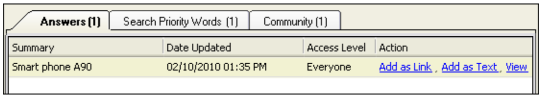
1 Right-click the answer on the **content pane** and select Open.

2 Click the Search Knowledge Base button on the toolbox. The Search Knowledge Base window opens.



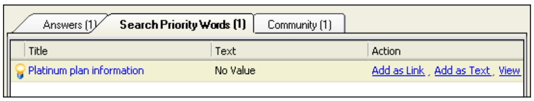
3 Enter your search criteria in the appropriate fields and click the Search button. Refer to Searching for records.

4 Click the Answers tab.



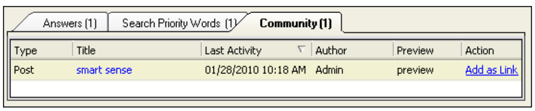
a To append an answer link to the answer you are editing, click Add as Link next to the answer. The answer title and a link to the answer are appended to the selected field of the answer at the cursor position.
b To append the answer text to the answer you are editing, click Add as Text. The text of the answer is appended to the answer at the cursor position.
c To view the answer, click View.

5 Click the Search Priority Words tab.



a To append an answer link to the answer you are editing, click Add as Link next to the answer. The answer title and a link to the answer are appended to the selected field of the answer at the cursor position.
b To append the answer text to the answer you are editing, click Add as Text. The text of the answer is appended to the answer at the cursor position.
c To view the answer, click View.

6 Click the Community tab.



a To append a post link to the answer you are editing, click Add as Link next to the post. The post title and a link to the post are appended to the selected field of the answer at the cursor position.

7 To view the answer as it will appear on the **customer portal**, close the Search Knowledge Base window and click the Quick Preview tab. Refer to Previewing answers.

8 Click the Save and Close button to save and close the answer.

❖ Searching for records

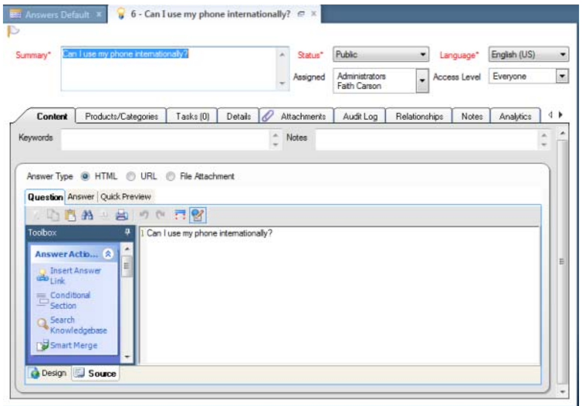
❖ Previewing answers

Editing answers and related answers

You can edit answers and **related answers**, including sibling, manually related, and learned links. When you edit an answer, you can also change the information in related answers, but keep in mind that editing answers can affect other answers associated with it. You can also edit multiple answers at one time (refer to Other answer actions).

To edit an answer

1 From an answers report, right-click the answer and select Open.



2 To change the answer type, select the radio button next to the answer type. In this case, select the HTML answer type. Refer to Adding answers.

Caution When you change the answer type in an existing answer, all answer relationships and certain answer fields are removed. Use caution when changing an answer's type.

3 Edit the answer fields. Refer to Adding answers.

4 To search the answer for a word or phrase to replace, click the Find Text button on the HTML toolbar. The Find and Replace window opens. You can search for a word or phrase using case sensitive or whole word only search criteria.

5 Edit the fields on each of the answer record tabs. Refer to Record tabs.

6 To notify answer subscribers of the change, click the Details tab and then click the Notify Subscribers drop-down menu and select from the following options: No Change, Do Not Notify, This Hour, End of Today, End of this Week, End of this Month.

7 Click the Save and Close button to save your changes and close the answer.

To edit a related answer

1 From an answers report, right-click the answer and select Open.

2 Click the Relationships tab.

3 Click Open next to the answer you want to edit. The related answer opens in a new window.

4 Make the appropriate changes.

5 Click the OK button.

6 Click the Save and Close button to save your changes and close the answer.

Note Editing a related answer will affect all answers associated with it.

Inserting variables into answers

Answer variables are predefined shortcuts for entering information into an answer instead of a long string of text. When an answer is displayed on the **customer portal**, the variable is replaced with whatever value was specified by your administrator.

Variables are also helpful to use for information that may change. When your administrator changes the value of the variable, all answers containing that variable will also change.

To insert a variable into an answer

In the Question or Answer field of an answer, type a dollar sign ($) followed by the variable name. For example, if your administrator added a variable for a support email address at your organization called contact, you could insert the variable for the email address in the answer, such as `$contact`. If the email address changes, all answers containing the contact variable are updated.

The assigned value displays when customers view the answer.

Important Because variables are case sensitive, you must type the variable name exactly as it is defined. Refer to Adding variables.

Contact your administrator for a list of variables defined for your application.

Previewing answers

Before making an answer available to customers, you can preview it on the **customer portal** to ensure everything is accurate. You can verify that the answer and answer sections appear as you anticipated by viewing the answer with different access levels selected. Refer to Controlling answer visibility.

Note Customer portal **themes** are not applied when previewing answers on the **content pane**. Refer to Defining themes.

To preview an answer

1 From an answers report, right-click the answer and select Preview Answer.

2 Select the access levels from the Access Level drop-down menu and click the Preview button. Only the sections of the answer with the selected access level will appear on the Answer Preview window.

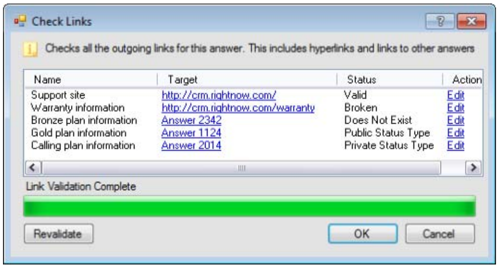
Validating answer links

You can check for broken links in HTML and URL answers. This functionality applies to hyperlinks and links to other answers. The broken links checker functions on a per-answer basis.

Note When validating an HTML answer, the broken links checker scans text on the Question and Answer tabs. When validating a URL answer, the broken links checker scans the URL field.

To validate links in an answer

1 While editing an answer, click the Check Links button on the ribbon. The Check Links window opens and link validation begins.



The following table describes the columns and buttons on the Check Links window.

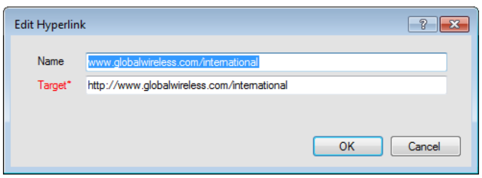
Table 341: Check Links Window Description

Column/Button	Description
Name	This column displays the name of the links that have been checked for validity. **Note:** If a link does not have a name, this column is empty. Because links in URL answers do not have names associated with them, this column is empty for all URL answers.
Target	This column displays the links that have been checked for validity. **Note:** Hyperlinks open in a new browser, whereas answer links open on the Answer Preview window.

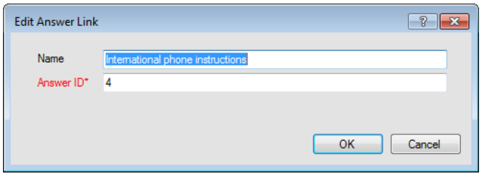
Table 341: Check Links Window Description (Continued)

Column/Button	Description
Status	This column displays the status of the links. The following statuses will display depending on the type of link being validated. • **Valid**—This status is used only for hyperlinks and signifies that the links checker successfully visited the link destination. • **Broken**—This status is used only for hyperlinks and signifies that the links checker attempted to visit the link destination, but was unsuccessful. • **Does Not Exist**—This status is used only for answer links and signifies that the links checker did not find the answer ID in the knowledge base. • **Public Status Type**—This status is used only for answer links and signifies that the answer was found in the knowledge base and is associated with a Public status type. • **Private Status Type**—This status is used only for answer links and signifies that the answer was found in the knowledge base and is associated with a Private status type.
Action	This column displays the actions that can be performed on the link. Currently, Edit is the only action available.
Status Bar	The status bar shows the progress of the validation process. It is not an indicator of the validity of the links. Rather, it is an indicator of the number of links being validated by the links checker.
Revalidate	Click this button to restart the validation process for all links displayed on the Check Links window.

2 To edit a link, click Edit in the link's Action column. If you are editing a hyperlink, the Edit Hyperlink window opens.



If you are editing an answer link, the Edit Answer Link window opens.



Note Although you can update fields (such as changing the Target field), you cannot leave a field blank. If a link does not have a name associated with it, the Name field is disabled.

3 Type your changes in the appropriate fields.

4 Click the OK button. The Edit Hyperlink or Edit Answer Link window closes and all links are automatically revalidated and displayed on the Check Links window.

5 Click the OK button on the Check Links window. The Check Links window closes.

Deleting answers

You can delete answers from Service when they become outdated. However, use extreme caution when deleting answers because deleting an answer will also delete all associated relationships.

Caution Deleting is permanent and cannot be undone.

To delete an answer

1 Right-click the answer on the content pane and select Delete.

2 Click the Yes button to delete the answer.

Other answer actions

Besides editing and adding answers, you may have other answer management duties as well. You might, for example, want to print an answer, copy an answer, or make the same change to multiple answers.

- **Printing answers**—You can create a printable version of your answers. When using this function, the answer opens in a new window. The print command is then launched through your web browser and you can choose to print the contents of the page. Refer to Printing records.
- **Copying answers**—You can copy an existing answer to make a new answer or sibling answer. When copying an answer, the language and access level are retained, but the status is set to Private to prevent you from accidentally publishing it. Refer to Copying records.
- **Updating multiple answers**—You can edit more than one answer at the same time and edit various fields such as status, assigned staff member, review and publish on dates, products, categories, and custom fields. This feature saves you time when you want to make the same change to multiple answers. Refer to Updating multiple records.

Working with model questions

Using functionality in Oracle Service Cloud and **Oracle RightNow Virtual Assistant Cloud Service** (Virtual Assistant), you can offer your customers a better experience when they search for answers by guiding them directly to the information they need. Virtual Assistant uses best-in-class semantic search technology combined with industry-specific linguistic dictionaries and advanced algorithms to ensure your customers' questions are matched to deliver the right answers immediately.

From the Model Questions tab of a custom answer **workspace** or from the standard Answers Default report, you can link answers in the **knowledge base** to **model questions** in Virtual Assistant.

Note Configuration options will not be visible until Virtual Assistant is enabled. Contact your Oracle account manager.

In addition, foreign languages are not supported when working with model questions.

Creating a custom answer workspace

Before working with **model questions**, a custom answer **workspace** must be created and the Model Questions tab and **control** added to it. This is not necessary if you are adding model questions from the Answers Default report, as the Model Questions button displays on the **ribbon** after Virtual Assistant is enabled. See To add a model question from the Answers Default report.

To create a custom answer workspace for model questions

1 Click the Configuration button on the **navigation pane**.

2 Double-click Workspaces / Workflows under Application Appearance. The Workspaces explorer displays on the **content pane**.

3 Expand the Standard folder, right-click Answer workspace, and select Copy. The Copy Answer As window opens.

4 Type a name for the copied workspace in the Name field and click the OK button.

5 Open the copy of the answer workspace.

6 Right-click on the Notes tab and select Add Tab Before.

7 Click the Design tab on the ribbon.

8 In the Label section of the ribbon, click the Text drop-down menu and rename the tab Model Questions.

9 Click the Insert Control tab on the ribbon.

10 In the Relationship Items section of the ribbon, drag the Model Question control under the Model Questions tab on the workspace.

11 Click the Save and Close button on the ribbon.

Now you need to update staff members' **profiles** by selecting the Model Questions check box on the Service tab of the Permissions page. Refer to Service permissions. You must also assign this custom answer workspace to staff member profiles. Refer to Customizing profiles.

Adding and associating model questions

You can create **model questions** from existing answers, associate existing answers in Oracle Service Cloud with existing model questions in Virtual Assistant, and create one or more model questions from the Answers Default report. All options are discussed in the following procedures.

To add a model question from an existing answer

1 Right-click an answer in an answers report and select Open. The answer displays on the **content pane**.

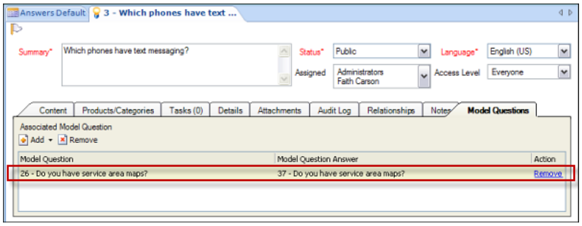
2 Click the Model Questions tab.

3 Click the Add button and select Add New to open the Choose a Model Question Category window.

4 Click the category drop-down menu and select a **leaf** category.

5 Click the OK button. The new model question and answer are added to the list.

6 Click the Save button on the ribbon. IDs are assigned to the model question for association and validation purposes.



7 To remove the association between the answer in Oracle Service Cloud and the model question in Virtual Assistant, select the model question in the list and click the Remove button on the toolbar or click the Remove link under the Action column.

8 Click the Save and Close button on the ribbon.

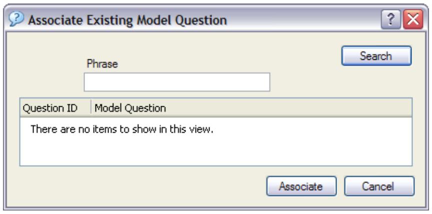
9 Log in to Virtual Assistant and validate the model question. This ensures that an association is made between the answer in the Oracle Service Cloud **knowledge base** and the model question in the Virtual Assistant database. Refer to the Virtual Assistant documentation.

To associate an existing answer with an existing model question

1 Right-click an answer in an answers report and select Open. The answer displays on the **content pane**.

2 Click the Model Questions tab.

3 Click the Add button and select Add Existing. The Associate Existing Model Question window opens.



4 Type a single word value in the Search field and click the Search button.

Note Searches are performed against only the Question field (title) of model questions. To view the Question field for model questions, you must log in to Virtual Assistant. Refer to the Virtual Assistant documentation.

In addition, wildcards are not supported when searching for model questions.

5 Select one or more model questions to associate with the answer in Oracle Service Cloud.

6 Click the Associate button. The model question is added to the list.

7 To remove the association between the answer in Oracle Service Cloud and the model question in Virtual Assistant, select the model question in the list and click the Remove button on the toolbar or click the Remove link under the Action column.

8 Click the Save and Close button on the ribbon.

9 Log in to Virtual Assistant and validate the model question. This ensures that an association is made between the answer in the Oracle Service Cloud **knowledge base** and the model question in the Virtual Assistant database. Refer to the Virtual Assistant documentation.

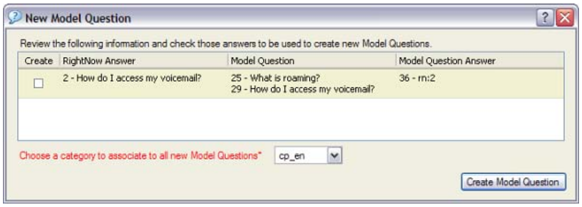
To add a model question from the Answers Default report

1 Open the Answers Default report located at Public Reports > Service > Views–Service > Answer Views.

2 Select one or more answers in the list.

3 Click the Model Questions button on the **ribbon**. The New Model Question window opens, displaying the answer and its associated Virtual Assistant model questions.

Tip For the Model Questions button to display on the ribbon, the Model Questions check box must be selected on the Service tab of staff members' profiles. Refer to Service permissions.



4 Select the check box under the Create column to associate an answer with an existing model question.

Note If an answer does not have an existing model question association, the check box under the Create column is selected by default to signify that a model question association will be made.

5 Click the category drop-down menu and select a **leaf** category.

6 Click the Create Model Question button. The New Model Question window closes.

7 Click the Save and Close button on the ribbon.

8 Log in to Virtual Assistant and validate the model question. This ensures that an association is made between the answer in the Oracle Service Cloud **knowledge base** and the model question in the Virtual Assistant database. Refer to the Virtual Assistant documentation.

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Content Library

Your agents will frequently use the same words, phrases, and replies when responding to customer questions. Standard text can be inserted in incident responses or in chat sessions, or added as a **business rule** action, making the information your organization presents more consistent. You can also add variables as shortcuts to insert into your answers, incident responses, or chat sessions.

Both standard text and variables save time and eliminate errors when responding to incidents, chatting with customers, and creating answers. You can also add folders to organize standard text and variables and organize folders in the tree.

Adding standard text

In addition to saving time and eliminating errors, creating standard text will help your agents respond to similar incidents with consistent information. For example, you may want to create standard text for commonly used information about your products and pricing, or to relay standard troubleshooting or contact information to customers.

You can embed variables as shortcuts in standard text, including variables defined on the Variables editor or system-defined variables. You can also assign a hot key to any standard text. Agents can use a hot key as a shortcut for inserting standard text when working on incidents or engaged in a chat session. Refer to Inserting standard text.

To add or edit standard text

1 Click the Configuration button on the **navigation pane**.

2 Double-click Standard Text under Service. The Standard Text tree displays on the **content pane**.

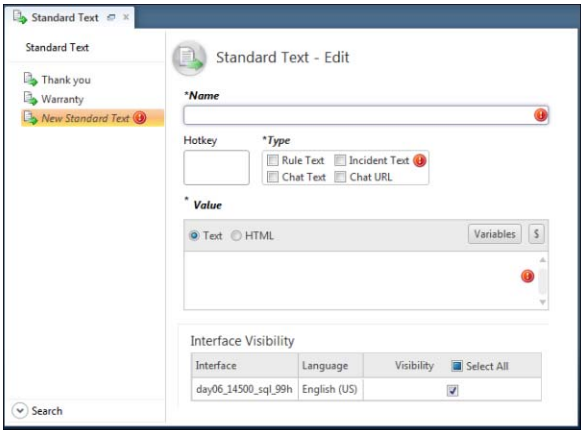
Tip You can search for standard text by clicking Search at the bottom of the tree. Refer to Working with configuration items.

In addition, folders can be added to the Standard Text tree to help organize standard text. Refer to Adding folders.

3 To add standard text, click the New button on the **ribbon** to display the editor.

Or

To edit standard text, click it in the tree.



4 Enter the following field information.

Table 342: Standard Text Editor Description

Field	Description
***Name**	Type the name of the standard text. The item name in the Standard Text tree on the left side of the content pane is populated or revised as you type.
Hotkey	Type the hot key letters, numbers, or both in this field. Agents can quickly insert standard text by pressing **F8** and the hot key when working on an incident or during a chat session. Refer to Inserting standard text. **Note:** To locate the shortcut keys, agents can right-click a standard text response and select Find.
***Type**	Select at least one of the following check boxes for the standard text type.
Rule Text	Select this check box to include the standard text as a rule action.
Chat Text	Select this check box to enable this text to be accessed by agents when engaged in a chat session. Refer to Inserting standard text. **Note:** This check box appears only when Oracle RightNow Chat Cloud Service (Chat) is enabled.
Incident Text	Select this check box to include this text in the Standard Text list when adding or editing an incident.
Chat URL	Select this check box to enable this URL to be accessed by agents when engaged in a chat session. Agents can push this URL to customers, which opens a browser on their computer displaying the URL. Refer to Inserting standard text. **Note:** This check box appears only when Chat is enabled.
***Value**	Select the appropriate radio button for adding standard text in plain text or HTML format. **Note:** If both plain text and HTML versions of a standard text entry are available, the HTML version displays by default in the Preview section on the Standard Text window. Refer to Inserting standard text.
Text	Select this radio button to add the standard text in plain text.

Table 342: Standard Text Editor Description (Continued)

Field	Description
HTML	Select this radio button to add standard text in HTML. For information on how HTML fields in standard text are displayed in responses, refer to Answer ID 1434. **Note:** All standard text images must be referenced by URL.
Variables	Click this button to select a variable defined on the Variables editor. Refer to Adding variables.
$	Click this button to choose from the following system-defined variables. When the standard text is appended, the variable is replaced with the related data. **Note:** If you type a period immediately after the variable, and then an alphabetic character, the period becomes part of the variable name.
SmartAssistant Solutions	Select this option to append the SmartAssistant Solutions variable. `$solutions` will appear in the Value text box.
Response Link	Select this option to append the Response Link variable. `$response_link` will display in the Value text box.
Incidents	Select Incidents and then one of the variables on the list. For the list of available standard content variables, refer to Answer ID 6529. Custom fields and attributes defined in your system are also on the list. **Note:** For a description of the standard content variables on the list, refer to the Incidents table information in the data dictionary (Configuration > Database > Data Dictionary).
Contacts	Select Contacts and then one of the variables on the list. For the list of available standard content variables, refer to Answer ID 6529. Custom fields and attributes defined in your system are also on the list. **Note:** For a description of the standard content variables on the list, refer to the Contacts table information in the data dictionary (Configuration > Database > Data Dictionary).

Table 342: Standard Text Editor Description (Continued)

Field	Description
Orgs	Select Orgs and then one of the variables on the list. For the list of available standard content variables, refer to Answer ID 6529. Custom fields and attributes defined in your system are also on the list. **Note:** For a description of the standard content variables on the list, refer to the Organizations table information in the data dictionary (Configuration > Database > Data Dictionary).
Interface Visibility	Select the individual interfaces where you want to display the standard text. **Note:** All interfaces are selected by default. You can prevent standard text from appearing on all interfaces by clearing the Select All check box.

5 Click the Save and Close button on the ribbon.

Caution You can delete standard text at any time by selecting the standard text entry in the tree and clicking the Delete button on the ribbon. However, when you delete standard text, all instances of the standard text will also be deleted.

- Adding folders
- Inserting standard text

Adding variables

A variable is a predefined shortcut for entering a long string of text when adding an answer, responding to an incident, engaging in a chat session, or creating standard text. Variables can be entered in the Question and Answer fields of an answer. When the answer is displayed on the answer details page of the **customer portal**, the variable is replaced with whatever value you specify. Variables can also be **indexed** to make the answer contents more searchable. Agents can copy a variable and paste it or type the variable inline when responding to a customer in a chat session or an incident response.

Variables are also helpful to use for information that may change. By updating the value of the variable, you will also update all answers that contain that variable. For example, suppose you want to add a contact variable for a support email address at your organization. Instead of staff members typing the email address every time, you can add the address as a variable. If the email address changes, all answers containing the contact variable are updated.

To add or edit a variable

1 Click the Configuration button on the **navigation pane**.

2 Double-click Variables under Service. The Variables tree displays on the **content pane**.

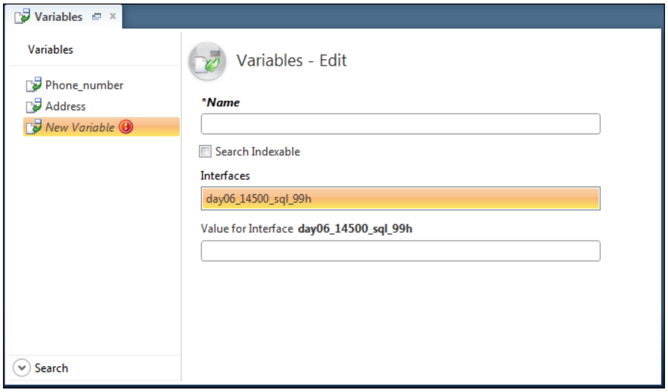
Tip You can search for variables by clicking Search at the bottom of the tree. Refer to Working with configuration items.

In addition, folders can be added to the Variables tree to help organize variables. Refer to Adding folders.

3 To add a variable, click the New button on the **ribbon** to display the editor.

Or

To edit a variable, click it in the tree.



4 Enter the following field information.

Table 343: Variables Editor Description

Field	Description
*Name	Type the name of the variable. The item name in the Variables tree on the left side of the content pane is populated or revised as you type. **Note:** Variable names cannot include spaces. We suggest using an underscore character (_) instead.
Search Indexable	Select this check box to index the text for searching on the customer portal.
Interfaces	Select the interfaces where this variable can be used.
Value for Interface	Type the text of the variable. **Note:** Variables are case sensitive.

5 To view answers that are dependent on the variable, click the Dependencies button on the ribbon. The Dependencies button is active only when you edit a variable.

6 Click the Save and Close button on the ribbon.

Caution You can delete variables at any time by selecting the variable in the tree and clicking the Delete button on the ribbon. A dependency check will then be performed and any answers that contain the variable will display on the Dependency Conflict window. To delete all instances of the variable, click Yes. Otherwise, update the applicable answers before deleting the variable.

For information about adding a variable to **standard text**, refer to Adding standard text. Also see Inserting variables into answers.

❖ Adding folders
❖ Inserting variables into answers

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Service Level Agreements

Service level agreements (SLA) in Oracle RightNow Cloud Service (Service) control the type and amount of support you offer your customers. Using response requirements, you can track the effectiveness of your customer service and determine whether staff members are meeting defined service goals for initial response and incident resolution times.

You can also meter the service and support your customers receive. For example, you can control how many incidents an organization can submit based on the number of incidents defined in their assigned **SLA instance**.

Configuring service level agreements

Before you create SLAs, you need to add the holidays your organization observes and define default response requirements so you can track staff members' response and resolution times. Default response requirements are used for SLAs that do not have custom response and resolution requirements. See To add custom response requirements to an SLA.

Adding and editing holidays

To ensure your organization meets its service goals, you need to add all holidays observed by your organization. Holidays work in conjunction with your default **response requirements** and any custom response requirements defined in individual SLAs. That is, by adding holidays, you can temporarily suspend response requirements for those days when staff members are not available to respond to customer inquiries and answer their questions.

For example, if your organization observes Independence Day, add it as a holiday so the defaults you set for response and resolution times are suspended for that day. Failing to add the holidays your organization observes will present an inaccurate picture of how staff members are meeting their service goals.

To add or edit a holiday

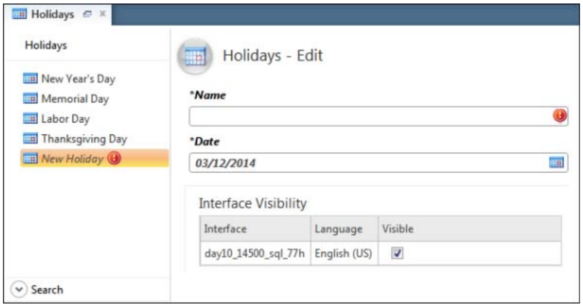
1 Click the Configuration button on the **navigation pane**.

2 Double-click Holidays under Service > Service Level Agreements. The Holidays tree displays on the **content pane**.

3 To add a holiday, click the New button on the **ribbon** to display the editor.

Or

To edit a holiday, click it in the tree.



4 Enter the following field information.

Table 344: Holidays Editor Description

Field	Description
*Name	Type the name of the holiday.
*Date	Click in this field and type the month, day, and year. (The current date appears in this field.) Or Click the calendar to select a different day in the month. Use the left and right arrows at the top of the calendar to change the month, and then click a day.

Table 344: Holidays Editor Description (Continued)

Field	Description
Interface Visibility	Select the check box next to each interface for which this holiday applies. **Note:** When you have multiple interfaces for different countries, you can make a holiday active in one interface but not in another. For example, since July 4 is a holiday in the United States but not in Canada, you would select only your U. S. interfaces for this holiday. However, if your support is handled from the United States, you may want to make the holiday an option in both Canadian and U. S. interfaces.

5 Click the Save and Close button on the ribbon.

Note You must add an entry for all holidays that occur yearly. For example, you must add separate entries for July 4, 2014, and July 4, 2015.

Defining response requirements

The next step in setting up your SLAs is to define your response requirements. Response requirements are the maximum times allowed for incident response and resolution during your organization's operating hours. For example, you may have a service goal of initially responding to all customer inquiries within one business day (8 work hours) and resolving all incidents within three business days (24 work hours). By defining these default response requirements, you can measure staff member performance in responding to and solving incidents. You can also use the response requirements for those SLAs that do not have customized response requirements.

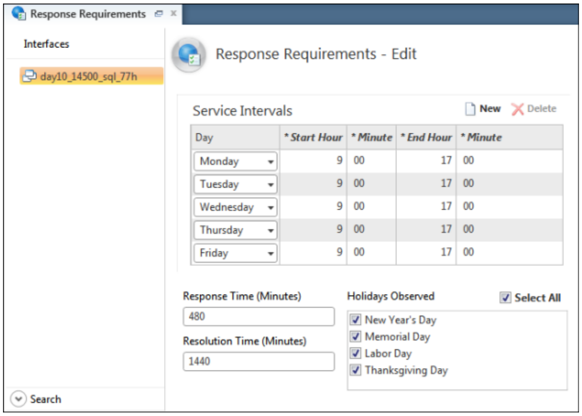
Because Service supports both default and custom response requirements, you have flexibility in offering different levels of support to customers. For example, if you want your levels of service to be based on how quickly customers receive an initial response and their incidents are solved, you can set up custom response requirements for each SLA. Refer to To add custom response requirements to an SLA.

To define default response requirements

1 Click the Configuration button on the **navigation pane**.

2 Double-click Response Requirements under Service > Service Level Agreements. The Response Requirements tree displays on the **content pane**.

3 Click the appropriate **interface** in the tree to display the editor.



4 Enter the following field information for the first service interval. Press **Tab** to move between interval fields.

Table 345: Response Requirements Editor Description

Field	Description
Service Intervals	Use these fields to select the day and time **intervals** for the default response requirements.
New	Click this button to add a new row for the default response requirements.
Delete	Click this button to delete the selected default response requirement.
Day	Click this drop-down menu to select a day of the week. Press **Tab** to move between fields.
*Start Hour	Type the start hour using a 24-hour clock (for example, if your business day starts at 8:00 A.M., type 8 in this column).
*Minute	Type the start minute from 0 to 59.
*End Hour	Type the end hour using a 24-hour clock (for example, if your business day ends at 5:00 P.M., type 17 in this column). **Note:** The end hour must be a number greater than the start hour.

Table 345: Response Requirements Editor Description (Continued)

Field	Description
*Minute	Type the end minute from 0 to 59.
Response Time (Minutes)	Type the maximum number of minutes (between 1 and 99999) that staff members have to initially respond to a new incident. For example, if you require staff members to initially respond within 4 hours, type 240 in this field.
Resolution Time (Minutes)	Type the number of minutes (between 1 and 99999) that staff members have to solve incidents assigned to them. For example, if you require that incidents be resolved within 8 hours, type 480 in this field.
Holidays Observed	Select the holidays that will suspend the response requirements. **Note:** Select the Select All check box to select all holidays in the Holidays Observed section.

5 Click the Day drop-down menu to select the day for the next service interval and press **Tab**.

Tip You can have the same day of the week listed in two intervals. For example, if your organization has both day and afternoon shifts, you can add separate intervals for each shift.

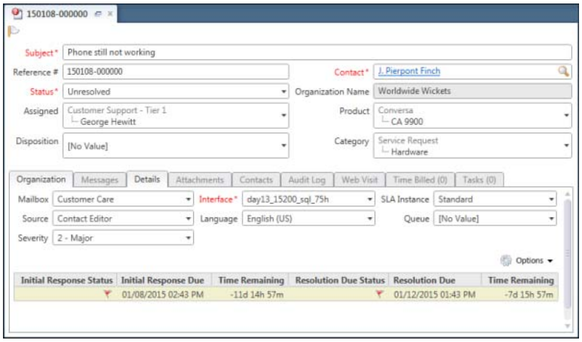
6 Click the Save and Close button on the **ribbon**.

❖ [To add custom response requirements to an SLA]

Configuring resolution due calculations

For SLAs that have response times defined, you can have resolution due dates and times calculated automatically when an SLA instance is added to an incident. This saves you from having to perform complex calculations to account for holidays and service hours.

To display resolution due calculations, you must create a custom incident milestones report and add it to a custom incident workspace. The following figure shows an incident workspace that has been configured to display resolution due calculations.



To create the incident milestones report

1 Create a new report with the following column definitions. Refer to Custom Reports.

Table 346: Custom Incident Milestones Report Columns

Heading	Definition
Initial Response Status	if(incidents.status_type=2,100,round(((date_diff(sysdate(), incidents.rel_due))*-1)/60,0))
Initial Response Due	incidents.rel_due
Time Remaining	if(incidents.status_type=2,0,round(((date_diff(incidents.rel_due, sysdate())))/60,0))
Resolution Due Status	round(((date_diff(sysdate(), milestone_instances.due_date))*-1)/60,0)
Resolution Due	milestone_instances.due_date
Time Remaining	if(incidents.status_type=2,0,round(((date_diff (milestone_instances.due_date,sysdate())))/60,0))

2 Use the following conditional formatting for the Initial Response Status and Resolution Due Status columns.

Table 347: Conditional Formatting for Status Flags

Condition	Display	Image	Color
Greater than 15	Image Only	Flag	Green

Table 347: Conditional Formatting for Status Flags (Continued)

Condition	Display	Image	Color
Less than or equals 0	Image Only	Flag	Red
Less than or equals 15	Image Only	Flag	Yellow

3 Use the Minutes (Days, Hours, Minutes) format for both Time Remaining columns.

4 Set the following report options to refresh the data regularly:
- Refresh report when data shown is changed in the editor
- Automatically refresh report at regular interval > Auto-Refresh enabled by default > Interval 55 Seconds

5 Clear all of the check boxes in the Customize Record Commands window so that no commands will be available at runtime.

6 Click the Save and Close button to save the custom report and exit the report design center.

To add the incident milestones report to a custom incident workspace

1 Copy the standard incident workspace and name it, for example, Incident Milestones. Refer to Creating custom workspaces.

2 Open the custom incident workspace. Refer to Editing workspaces.

3 Click the Details tab.

4 Add the custom incident milestones report to the Details tab.

5 Click the Save and Close button to save the custom workspace and exit the workspace editor.

6 Edit your staff members' profiles to use the new Incident Milestones workspace. Refer to To add or edit a profile.

After an SLA instance is applied to an incident, you can view the resolution due date and time. See To credit an incident to an SLA instance.

Setting up SLAs

After adding your holidays and defining default **response requirements** for your staff members, you can configure SLAs for your application. Begin by deciding what type of SLAs to offer. For example, you could offer certain customers a premium SLA that provides them with unlimited support for a period of time, and offer other customers a standard SLA that limits the number of incidents they can submit during a specified time period.

In addition, you can control whether customers without an SLA can access your support site, or submit incidents through email or the Ask a Question page. You can also add business rules to automatically assign SLAs to specific customers.

Setting up SLAs consists of the following actions.

- Create the SLAs you want to offer. Refer to Creating SLAs.
- Set up **business rules** to automatically assign SLAs to customers. Refer to Using business rules to automatically issue SLAs. Also, review how staff members can manually assign SLAs when working on incidents and editing organizations and contacts. Refer to Manually issuing SLAs.

Creating SLAs

SLAs are designed to allow you flexibility in providing support to your customers. When you create an SLA, you can choose the duration of the SLA and limit the SLA based on the number of incidents that can be submitted.

You can also assign custom **answer access levels** to an SLA so that customers have **privileged access** to special groups of answers. Additionally, you can define custom response requirements for each SLA or use the default response requirements already defined.

To create an SLA

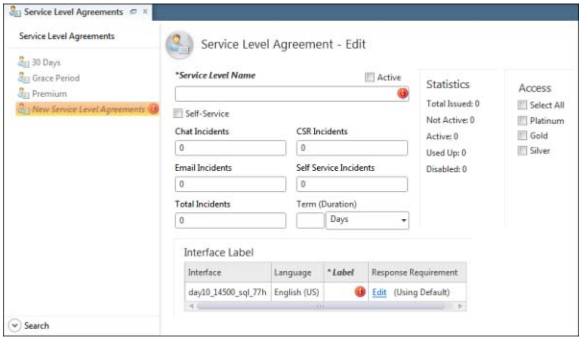
1 Click the Configuration button on the **navigation pane**.

2 Double-click Service Level Agreements under Service > Service Level Agreements. The Service Level Agreements tree displays on the **content pane**.

3 To add a service level agreement, click the New button on the **ribbon** to display the editor.

Or

To edit a service level agreement, click it in the tree.



4 Enter the following field information.

Table 348: Service Level Agreements Editor Description

Field	Description
***Service Level Name**	Type the name of the SLA. When you move to another field, the Label field in the Interface Label section is populated with the name you typed in the Service Level Name field.
Active	Select this check box to allow **instances** of the SLA to be applied to contacts or organizations. When selecting or clearing this check box, the name of the SLA (in the tree) changes from black to orange and displays in italicized font. After clicking the Save button on the ribbon, the name changes from orange to light gray and displays in normal font. **Note:** If this check box is cleared, the SLA is considered inactive and cannot be used with business rules.
Self-Service	Select this check box to allow customer access to the Answers page on the customer portal. **Note:** If this check box is cleared, customers will not be able to view answers and may be directed to a permission denied page.
Chat Incidents	Type the maximum number of allowable chat incidents. Enter a zero if no incidents are allowed or leave the field blank to allow an unlimited number of incidents.

Table 348: Service Level Agreements Editor Description (Continued)

Field	Description
CSR Incidents	Type the maximum number of allowable incidents that can be created by a staff member for the contact or organization (for example, when customers contact your organization by phone). Enter a zero if no incidents are allowed or leave the field blank to allow an unlimited number of CSR incidents.
Email Incidents	Type the maximum number of allowable email incidents. Enter a zero if no incidents are allowed or leave the field blank to allow an unlimited number of email incidents. **Note:** If the SLA_SUBMIT_EMAIL **configuration setting** is enabled, a valid, active SLA must exist for contacts and organizations to send emails to Service. If the EU_SLA_VISIBLE configuration setting is enabled, SLA information will be visible in email responses. Refer to Customizing configuration settings.
Self-Service Incidents	Type the maximum number of allowable incidents created from the Ask a Question page. Enter a zero if no incidents are allowed or leave the field blank to allow an unlimited number of incidents.
Total Incidents	Type the total number of incidents allowed from all incident sources. **Note:** The number in the Total Incidents field must be greater than or equal to the value of any single incident field. For example, if the number of chat incidents equals 10, and all other incidents have a field value of 5, then the total number of incidents allowed must be 10 or more. The number in the Total Incidents field must also be less than or equal to the sum of the values of all of the single incident fields. For example, if the sum of the field values is 50, then Total Incidents cannot be greater than 50.
Term (Duration)	Type a number in this field and select days, weeks, months, or years from the drop-down menu. Leave the field blank to indicate there is no time limit on the SLA. If you specify a number, the start date is the date of issue.
Statistics	The following fields describe the statistics for an SLA.
Total Issued	The number of times this SLA has been issued.
Not Active	The number of instances of this SLA in the Not Active state.

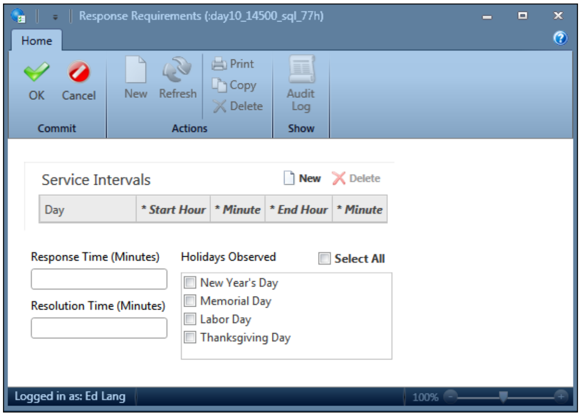
Table 348: Service Level Agreements Editor Description (Continued)

Field	Description
Active	The number of instances of this SLA in the Active state.
Used Up	The number of instances of this SLA in the Used Up state.
Disabled	The number of instances of this SLA in the Disabled state. Refer to Viewing disabled SLA instances.
Access	Select the answer access levels assigned to the SLA. **Note:** Answer access levels will display only if they have been added to the application. Refer to Adding and editing answer access levels.
Interface Label	This section contains the names of all available interfaces, the languages they are implemented in, and the language-specific label of the SLA. Click Edit next to an interface to change response requirements for the SLA. If you do not change response requirements, the default response requirements are used. Refer to To add custom response requirements to an SLA. **Note:** When using multiple-language interfaces, you must type the label in the Label field in the language of the interface.

5 Click the Save and Close button on the ribbon.

To add custom response requirements to an SLA

1 When adding or editing an SLA, click Edit next to the interface in the Interface Label section. The Response Requirements window displays.



2 Fill in the Service Intervals, Response Time, Resolution Time, and Holidays Observed fields. Refer to Defining response requirements.

3 Click the Save and Close button on the **ribbon**.

❖ Using business rules to automatically issue SLAs

❖ Manually issuing SLAs

Using business rules to automatically issue SLAs

Once you create SLAs, they can be automatically issued to organizations and contacts with no organization association using **business rules**. Once an SLA has been automatically applied to an organization or contact, a unique **SLA instance** is associated with the organization or contact. Refer to Applying SLAs and crediting incidents to SLAs.

Note Contacts associated with an organization cannot be assigned an SLA instance, as the SLA instance is applied to the organization.

❖ Manually issuing SLAs

Manually issuing SLAs

Staff members can manually apply SLAs to organizations and contacts when editing incidents associated with an organization or contact. Once a staff member has applied an SLA, a unique **SLA instance** is associated with that organization or contact.

If an organization or contact has more than one active SLA, staff members can select which SLA to apply to an incident. For example, a contact may have two active SLAs, one that allows unlimited incidents and lasts for thirty days, and another that allows ten of each type of incident and lasts for one year. If a new incident is applied to the limited incident SLA, the staff member can re-assign the incident to the unlimited incident SLA to more efficiently use the customer's entitlements. Refer to Applying SLAs.

Maintaining SLAs

Maintaining your SLAs is an important part of your customer service solution, and Service provides you with tools for evaluating the performance of your SLAs and how they are meeting your customers' needs. You can also edit SLAs as necessary.

Analyzing SLAs

With analytics, you can track and report on staff members' performance and service level achievements. You can see the usage status of SLAs as well as generate specific reports regarding performance and achievement requirements of each SLA. Analytics can assist you in evaluating and monitoring agent performance, SLA usage and performance, and customer support levels. SLA analytics are located at Public Reports > Service > SLA Reports.

For statistical information about individual SLAs, refer to Creating SLAs.

Editing SLAs

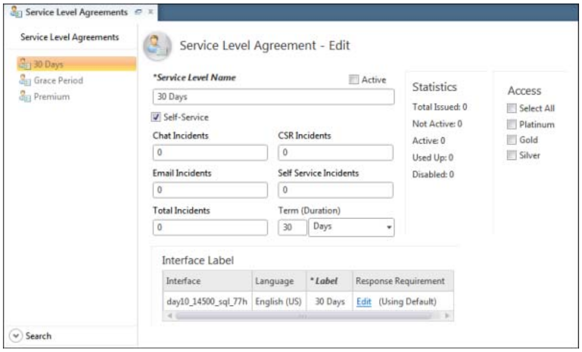
Analyzing your SLAs can help you pinpoint the most effective ones and the ones that may need to be changed. You can edit your SLAs at any time. However, once an **SLA instance** is applied to an organization or contact, it cannot be changed. When you edit an SLA, the changes will not affect the instances of the SLA that have already been applied to organizations or contacts. Changes will affect only future instances of the SLA applied to a contact or organization. For your reference, a view-only version of the SLA instance is archived. Refer to Viewing disabled SLA instances.

To edit an SLA

1 Click the Configuration button on the **navigation pane**.

2 Double-click Service Level Agreements under Service > Service Level Agreements. The Service Level Agreements tree displays on the **content pane**.

3 Click the appropriate service level agreement in the tree to display the editor.



4 Edit field information as necessary. Refer to Creating SLAs.

5 Click the Save and Close button on the **ribbon**.

The next time you assign this SLA to contacts and organizations, the changes will apply to all instances of the SLA.

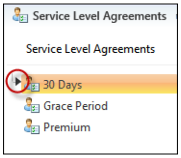
Viewing disabled SLA instances

If an SLA is edited after an instance of the SLA has been assigned to contacts or organizations, the assigned instance is converted to read-only mode to prevent editing. The read-only version of the **SLA instance** is archived, allowing you to view the settings for the previous, or "disabled," instance of the SLA.

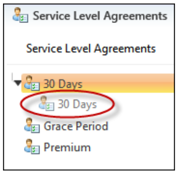
To view disabled SLA instances

1 Click the Configuration button on the **navigation pane**.

2 Double-click Service Level Agreements under Service > Service Level Agreements. The Service Level Agreements tree displays on the **content pane**. If a disabled SLA exists, an arrow displays next to the active SLA it is associated with.



3 Click the arrow to view the disabled SLA. Disabled SLAs display in a light gray font.



4 Select the disabled SLA. The Service Level Agreement editor displays on the content pane and the disabled SLA opens in read-only mode.

SLA samples

The following SLA samples show you how to meter service and offer different levels of support to your customers. SLA samples are provided for a 30-day SLA, a grace period SLA, and a premium SLA.

Sample 1: 30 Days SLA

In this example, the 30-day SLA restricts support to 30 days, but allows contacts and organizations to submit an unlimited number of incidents during that time period. Support begins when the SLA is assigned and automatically ends after 30 days. In this sample, the default response requirements are used.

To add a 30-day SLA

1 Click the Configuration button on the **navigation pane**.

2 Double-click Service Level Agreements under Service > Service Level Agreements. The Service Level Agreements tree displays on the **content pane**.

3 Click the New button on the **ribbon** to display the editor.

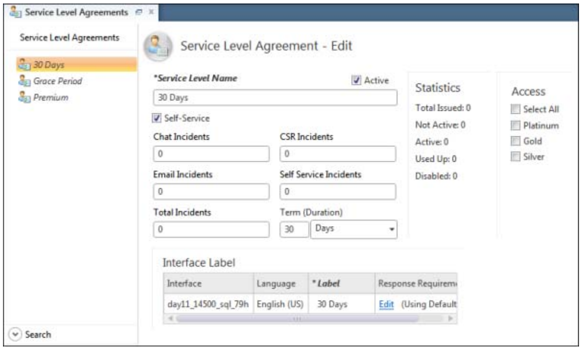
4 Type **30 Days** in the Service Level Name field.

5 Select the Active check box.

6 Select the Self-Service check box to allow access to the **customer portal**.

7 Type **30** in the Term (Duration) field and select Days from the drop-down menu.

Note Do not enter any number in the Chat Incidents, CSR Incidents, Email Incidents, Self-Service Incidents, and Total Incidents fields. Leaving these fields blank, or null, will allow contacts and organizations assigned this SLA to submit an unlimited number of each type of incident until the 30-day term has expired.



8 Click the Save and Close button on the ribbon.

Sample 2: Grace Period SLA

This sample is for a two-incident SLA that could be assigned to contacts or organizations whose SLAs have recently expired. The duration is defined using the Total Incidents field. The Term (Duration) field is left blank because the defining measure is the number of incidents, not the length of time. In this SLA, the default response requirements are also used.

To add a grace period SLA

1 Click the Configuration button on the **navigation pane**.

2 Double-click Service Level Agreements under Service > Service Level Agreements. The Service Level Agreements tree displays on the **content pane**.

3 Click the New button on the **ribbon** to display the editor.

4 Type **Grace Period** in the Name field.

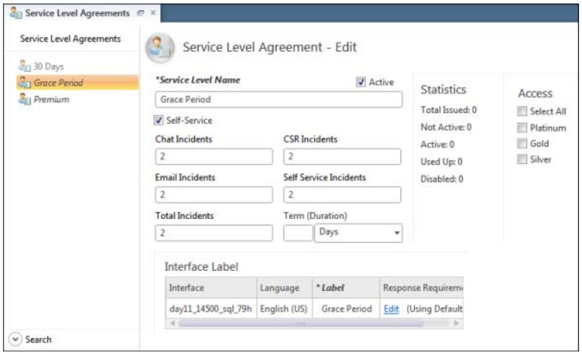
5 Select the Active check box.

6 Select the Self-Service check box to allow access to the **customer portal**.

7 Type **2** in the Total Incidents field.

Note Leaving the Chat Incidents, CSR Incidents, Email Incidents, and Self-Service Incidents fields blank, or null, will allow contacts and organizations assigned this SLA to submit an unlimited number of incidents. By typing the number 2 in the Total Incidents field, you are allowing customers to submit 2 of any incident type, but limit the total number of incidents the contact or organization can submit to 2.

The Term (Duration) field is blank because there is no time limit on the SLA. Contacts and organizations may submit the incidents at any time, until they have submitted two incidents, at which time the SLA will expire.



8 Click the Save and Close button on the ribbon.

Sample 3: Premium SLA

This type of SLA could be offered to organizations or contacts who request premium service. It is set up to provide faster incident response and resolution times than standard SLA entitlements. For example, staff members must initially respond within four hours and resolve incidents within two working days (sixteen hours).

The SLA has a duration of one year and will allow forty total incidents comprised of ten chat incidents and thirty CSR incidents. In this SLA, custom response requirements are used. Refer to To add custom response requirements to an SLA.

To add a premium SLA

1 Click the Configuration button on the **navigation pane**.

2 Double-click Service Level Agreements under Service > Service Level Agreements. The Service Level Agreements tree displays on the **content pane**.

3 Click the New button on the **ribbon** to display the editor.

4 Type **Premium** in the Name field.

5 Select the Active check box.

6 Select the Self-Service check box to allow access to the **customer portal**.

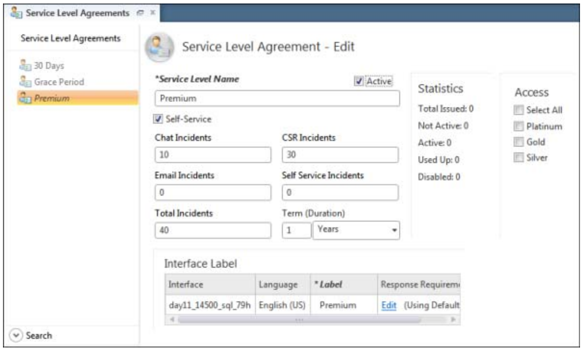
7 Type **10** in the Chat Incidents field.

8 Type **30** in CSR Incidents, Email Incidents, and Self-Service Incidents fields.

9 Type **40** in the Total Incidents field.

Note The number in the Total Incidents field must be greater than or equal to the sum of all incident fields. For example, if the sum of all incident fields equals 40, then the total number of incidents allowed must equal 40 or less. The number in the Total Incidents field must also be greater than or equal to any single incident field. For example, if the number of chat incidents equals 5, and all other incidents have a field value of 10, then the total number of incidents allowed must be 5 or more.

10 Type **1** in the Term (Duration) field and select Years from the drop-down menu.



11 Click the Save and Close button on the ribbon.

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Co-Browse Configuration

Co-browsing lets customers share their desktop with agents who are helping them on the telephone or during a chat session. Staff members can guide customers through web pages using their mouse or other pointing device to demonstrate actions. In effect, they take control of the customer's browser to show the customer how to complete an action. Co-browse helps eliminate the confusion that can arise when giving instructions to customers through dialog or text. Co-browse is also effective for assisting customers in filling out forms or completing a sale.

Best Practices for Co-browse

Best practices for co-browse include clearly defining the business problem you are solving, investing in a pilot program, making a good first impression, ensuring security requirements are met, knowing when to engage a customer, providing a good customer experience, and making continuous improvements. Refer to *Best Practices for Oracle RightNow Co-browse Cloud Service*.

Configuring co-browse on incident workspaces

Co-browse configuration for incident **workspaces** consists of creating a custom incident workspace with a tab where agents can co-browse with customers. In addition, a co-browse link must be added to the **customer portal** before agents can co-browse with customers. Refer to Adding the CobrowsePremium widget to the sidebar.

Note Before you can configure co-browse, it must be enabled. To enable co-browse, contact your Oracle account manager.

To configure co-browse on an incident workspace

1 Click the Configuration button on the **navigation pane**.

2 Double-click Workspaces under Application Appearance. The Workspaces explorer displays on the **content pane**.

3 Expand the Standard folder, right-click the incident workspace, and select Copy. The Copy Incident As window opens.

4 Type a name for the copied workspace in the Name field and click the OK button.

5 Open the copy of the incident workspace.

6 Right-click next to the Audit Log tab and select Add Tab.

7 Click the Design tab on the **ribbon**.

8 In the Label section of the ribbon, click the Text drop-down menu and rename the tab Co-browse.

9 Click the Insert Control tab on the ribbon.

10 In the Relationship Items section of the ribbon, drag the Co-browse **control** under the Co-browse tab on the workspace.

11 Click the Save and Close button on the ribbon.

Now you need to assign this custom incident workspace to **profiles**. Refer to Customizing profiles. For information about using co-browse on incident workspaces, refer to Co-browsing with customers.

- Adding the CobrowsePremium widget to the sidebar
- Co-browsing with customers

Configuring co-browse on chat workspaces

Co-browse configuration for Oracle RightNow Chat Cloud Service consists of creating a custom chat sessions **workspace** with a tab where agents can co-browse with customers. In addition, a co-browse control must be added to the workspace ribbon so staff members can invite customers to co-browse when they are chatting with them.

Note Before you can configure co-browse, it must be enabled. To enable co-browse, contact your Oracle account manager.

To configure co-browse on a chat workspace

1 Click the Configuration button on the **navigation pane**.

2 Double-click Workspaces under Application Appearance. The Workspaces explorer displays on the **content pane**.

3 Expand the Standard folder, right-click the chat sessions workspace, and select Copy. The Copy Chat Sessions As window opens.

4 Type a name for the copied workspace in the Name field and click the OK button.

5 Open the copy of the chat sessions workspace.

6 Right-click next to the Incidents tab and select Add Tab.

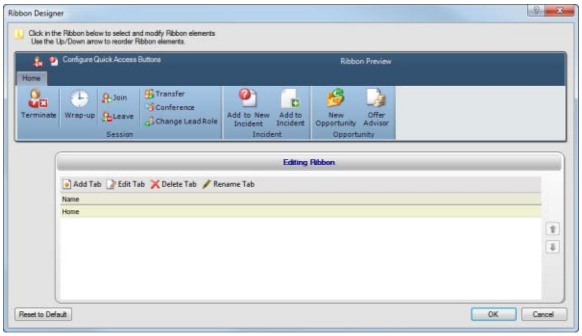
7 Click the Design tab on the **ribbon**.

8 In the Label section of the ribbon, click the Text drop-down menu and rename the tab Co-browse.

9 Click the Insert Control tab on the ribbon.

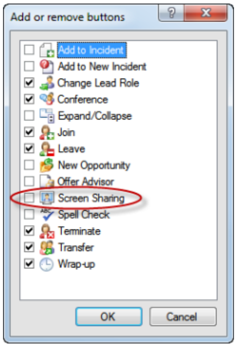
10 In the Relationship Items section of the ribbon, drag the Co-browse **control** under the Co-browse tab on the workspace.

11 Click the Home tab on the ribbon and click the Ribbon button. The ribbon designer opens.



12 Click a button in the Session group to activate the buttons.

13 Click the Add Buttons button on the ribbon designer toolbar. The Add or Remove Buttons window opens.



14 Select the Screen Sharing check box and click the OK button. The Screen Sharing button displays on the ribbon designer.

15 Click the OK button. The ribbon designer closes.

16 Click the Save and Close button on the ribbon.

Now you need to assign this custom chat sessions workspace to **profiles**. Refer to Customizing profiles. For information about using co-browse on chat workspaces, refer to Co-browsing with customers.

- ❖ Customizing profiles
- ❖ Co-browsing with customers

Adding co-browse permission to profiles

Co-browse is not fully functional until staff members have been assigned co-browse permissions in their **profile**. Once you create or edit a profile containing co-browse permissions, you can then assign the profile to individual staff members. This lets you designate which staff members have access to co-browse. You can assign co-browse permissions to one or more profiles based on your organization's needs.

To add co-browse permissions to a profile

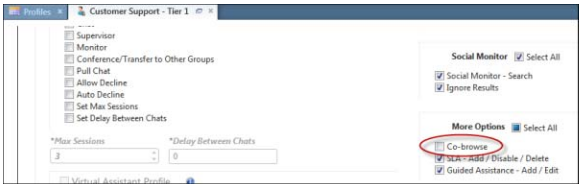
1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management. The report opens on the **content pane**.

3 Double-click the profile you want to edit. The Profile editor opens.

4 Click the Permissions button on the **ribbon**. The Permissions page opens.

5 Click the Service tab.



6 Select the Co-browse check box.

7 Click the Save and Close button on the ribbon.

Note Before agents can use co-browse, you must assign a profile containing co-browse permissions to their staff account. Refer to Adding and editing staff accounts.

Co-browse session reporting

The Co-Browse Summary report displays co-browse activity from all sources and shows detailed information about each co-browse session such as agent and contact names, when the session started and ended, and what caused the session to end. With this information, you can spot trends and implement steps to improve customer satisfaction.

The Co-Browse Summary report is available at Public Reports > Service > Co-Browse. Before staff members can use the report, it must be added to their **navigation sets**. Refer to Modifying navigation sets.

Tip All co-browse data is stored in the *cobrowse_sessions* table. Although the table is used for the Co-Browse Summary report, it can also be used for custom reports. Refer to Creating reports.

- Modifying navigation sets
- Creating reports

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Offer Advisor Administration

When agents work with your customers, they are in a perfect position to provide information about new and upgraded products and services. The Offer Advisor feature helps both you and your agents. First, you can create promotions and define which groups of customers are eligible for each promotion. Second, it provides agents with solid information to successfully present offers to customers and contribute to increased revenue for your organization.

Product promotions are a natural use of Offer Advisor. But you can also use the feature to provide personalized service notices that enhance your levels of customer support. For example, Offer Advisor can help agents remind customers about soon-to-expire warranties or notify them about product recalls. Besides the promotions that you create, Offer Advisor also automatically generates product suggestions based on a customer's purchase history.

To learn how agents use Offer Advisor when they work with customers, refer to Opening Offer Advisor.

What is Offer Advisor

Offer Advisor provides offers—that is, promotional information and product suggestions—your agents can present to customers who contact your customer support group. With Offer Advisor's specifically targeted offers, an agent has the ability to cross-sell (by offering products compatible with those the customer has already purchased) or up-sell (by offering a premium version of a product the customer currently owns). You can also use Offer Advisor to offer SLAs and renewals, remind customers about warranties, add customers to a newsletter mailing list, provide information about product recalls, or deliver other messages to your customers. Offer Advisor includes settings that automatically create sales opportunities when a customer expresses interest in a promotion or suggestion.

Offer Advisor delivers the following types of offers.

Promotion

A promotion is a program defined by a staff member, usually from the marketing department, that specifies the effective dates, the product (if applicable to the promotion), the promotion's priority, and the target eligible for the promotion. The promotion description contains information for the agent, such as a text guide to help the agent present the promotion to the customer. The promotion also defines which targets are eligible for the offer. Targets are created using Offer Advisor target rules, a unique type of business rule. Customers who meet the conditions specified in a target rule are automatically added to the defined target.

When an agent responds to a customer's question, Offer Advisor retrieves information about the customer and the incident. Offer Advisor then applies the target rules and evaluates the customer information to determine if the customer belongs to a target. If the customer belongs to one or more targets, Offer Advisor searches for promotions the target is eligible for and displays them to the agent.

The displayed list of available promotions includes the assigned priority ranking and acceptance rate for each promotion. Also shown is the date of the most recent positive response, if any. (Previously refused offers are not displayed to avoid repeating an offer in which the customer has already expressed no interest.)

Suggestion

A suggestion is an automated product recommendation that predicts customer interest based on purchase history (if data is integrated into the Oracle Service Cloud application). Unlike promotions, which are created by marketing personnel, suggestions for recommended products are automatically generated. Offer Advisor uses a predictive model to develop product suggestions based on the customer's purchase history.

Offer Advisor first identifies groups of customers who have similar purchasing behavior. When a customer submits an incident, Offer Advisor assigns the customer to the best matching group. Then Offer Advisor compares products the customer has already purchased to products purchased by other members of the group. For example, the customer may belong to the group of customers who have purchased cruise vacations. If many members of that group have taken Alaskan cruises, but the customer has not, Offer Advisor may recommend an Alaskan cruise as the customer's next purchase.

Offer Advisor ranks a product suggestion based on the strength of the recommendation (that is, the probability that the customer is interested in the offer). Offer Advisor does not generate suggestions when it does not have enough information for the customer or when it predicts a low likelihood of the customer accepting the offer.

Text matching

When the Offer Advisor window displays promotions and suggestions, an agent can search for specific terms that best express the customer's interests. The search reorders the offers, ranking each according to its match weight.

Match weight depends on where the search term is found in an offer. For example, if the agent-entered search term matches a keyword for the promotion, the offer has a higher match weight than it would if the search term were found in the product description. Match weights are high (best match), medium, or low. The highest weight occurs when the agent-entered search terms match promotion keywords. Medium weights are assigned when the search term matches the promotion or product name or the text in the promotion's summary field. Low weights result when terms match the promotion guide or product description.

Setting up Offer Advisor

Configuration settings are used to enable Offer Advisor and configure its functionality. After Offer Advisor has been enabled and configured, staff members can use it while assisting customers. Configuration options will not be visible until Offer Advisor is enabled. Contact your Oracle account manager.

Important Even with Offer Advisor enabled, you must be sure that the Offer Advisor button appears on the **ribbon** of the **workspace** that agents use when they work with **incidents**. By default, it appears on the standard incident workspace. If agents use a custom incident workspace and the Offer Advisor button is not available on the ribbon, they will not be able to tell if a customer is eligible for offers. Refer to Customizing ribbons and Quick Access toolbars.

Once Offer Advisor is enabled, complete the following steps to configure Offer Advisor.

1 Integrating purchase history data—If you want Offer Advisor to use purchase history, you must integrate that data. For help with this, contact your Oracle account manager.

2 Creating targets—Every promotion needs an intended audience, which is its target. You can create unique targets for specific promotions as well as general targets you can use for multiple promotions.

3 Adding promotions—Once you have enabled Offer Advisor, integrated purchase history day, and created targets, you can create promotions that include dates, products, information for the agent, and targets.

❖ Integrating purchase history data

- ❖ Creating targets
- ❖ Adding promotions

Integrating purchase history data

Offer Advisor must have a customer's purchase history before it can generate product suggestions and apply target rules that have conditions based on purchase history. When sales information resides in an external application, you can integrate sales transaction information into your database, including customer information, purchased products, price, and purchase dates. For information about integrating purchase history data, contact your Oracle account manager.

Creating targets

Every promotion is associated with at least one target, the group of customers to whom you want to present your promotion. You can create a target to use for a single promotion, or you can create general targets to be used with multiple promotions.

Targets are created with target rules, which are one type of business rule. Business rules automate your workflow by establishing a set of conditions and a resulting action. If the conditions are met, the action is taken. Refer to Business rules overview.

Target rules single purpose is to define targets—groups of customers—that meet the conditions you specify. You add a rule to specify the conditions you want a customer to meet and if the conditions are met, the customer automatically becomes part of the target.

For example, you might want to promote SLAs. Using target rules, you can use product purchase dates to identify customers with expiring warranties who constitute your target. In another example, you might want to promote a premium calling plan for cellular phone customers in a specific region. You can use target rules to specify geographical limits and identify those customers who currently have basic calling plans. In another situation, you might create a target consisting of all your customers. In that case, you simply name the target and save the rule without setting any conditions.

For information about how agents interact with Offer Advisor, refer to Opening Offer Advisor.

Creating target rules

Because only one state is permitted for target rules, this state—called Targets—is automatically added when you open target rules.

Note You cannot add states or functions in target rules.

Regardless of the conditions you select, the default action is always "Contact will match this target." You cannot add an action for the Else clause of a target rule.

When you define the conditions of a target rule, you can use fields from the incident, contact, and organization tables in the database. This lets you define targets in terms of a large number of attributes, including demographic information you can gather using custom fields. You can also create a target that includes all of your customers by creating a rule that has no conditions. For lists of the fields allowed for incident, contact, and organization objects, refer to Choosing conditions.

You can also select a unique Purchased Products condition for target rules. The Purchased Products condition is actually a combination of three conditions, all of which must be met in order for the Purchased Products condition to be met. These criteria are product, price, and date purchased. In the Purchased Products condition, you can include or restrict products, define the price range, and specify the time frame of purchases.

To create a target rule with a Purchased Products condition

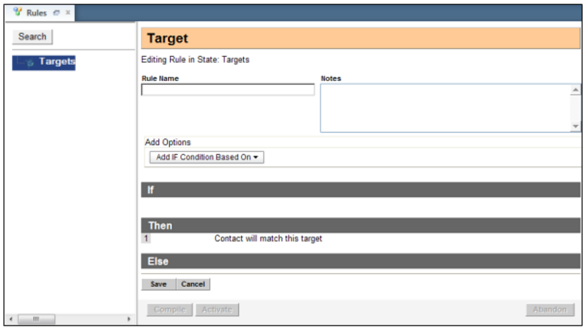
1 Click the Configuration button on the **navigation pane**.

2 Double-click Rules under Site Configuration. The Rules tree and editor display on the **content pane**.

3 Click the Offer Advisor button on the **ribbon**. The Browse Targets editor opens.

4 Click the Edit button on the ribbon. The Target editor opens.

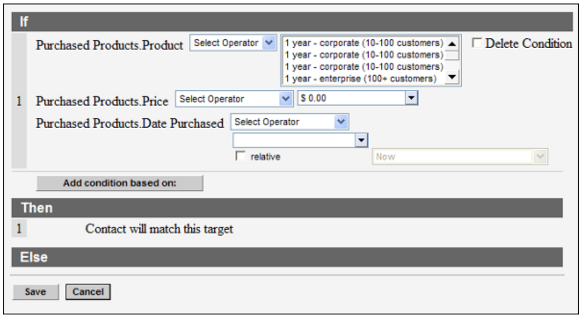
5 Right-click Targets in the tree and select New Rule. The Targets editor is activated.



6 Type the name of the target rule in the Name field.

7 To add notes to the rule, type them in the Notes field.

8 Click the Add IF Condition Based On button and select Purchased Products.



9 Enter the following field information.

Table 349: Purchased Products Condition Description

Field	Description
Product	Select a product from the menu. To select multiple products, press **Ctrl** while selecting each product. For information about adding sales products, refer to Adding and editing sales products.

Table 349: Purchased Products Condition Description (Continued)

Field	Description
Price	Click this drop-down menu and type a value in the Amount field. Click the Currency drop-down menu and select the currency.
Date Purchased	Click the drop-down menu to open the current month's calendar and select a purchase date. Use the arrows at the top to change the month if necessary. Or select the Relative check box to select a relative time condition. Refer to Relative time conditions.

10 Select the operator for the Product, Price, and Date Purchased conditions from the Select Operator drop-down menu. The available operators are described in the following table.

Table 350: Operators for Purchased Products

Field	Description
Equals	Select this operator if you want the product, price, or purchase date to exactly match the selection.
Not equals	Select this operator if you do not want the product, price, or purchase date to exactly match the selection.
Less than	Select this operator if you want the price to be lower than the entered price or the date to occur before the selected date.
Greater than	Select this operator if you want the price to be higher than the entered price or the date to occur after the selected date.
Less than or equal to	Select this operator if you want the price to be lower than or equal to the entered price or the date to occur before or on the same date as the selected date.
Greater than or equal to	Select this operator if you want the price to be higher than or equal to the entered price or the date to occur after or on the same date as the selected date.
In range	Select this operator if you want the price or purchase date to fall within the range you specify.
Not in range	Select this operator if you want the price or purchase date to fall outside the range you specify.

Table 350: Operators for Purchased Products (Continued)

Field	Description
Is null	Select this operator if you want the price or purchase date to contain no value.
Is not null	Select this operator if you want the price or purchase date to contain a value.

11 Click the Save button to save the target rule.

12 Click the Activate button to compile and activate the target rule base. Refer to Compiling and activating rule bases if you need help with this step.

Note If you click the Compile button instead of the Activate button, the rule is checked for errors, but not activated. Offer Advisor does not apply this target rule to customer information until it has been activated.

- ❖ Choosing conditions
- ❖ Compiling and activating rule bases

Relative time conditions

The Purchased Products condition lets you select a value for the Date Purchased part of the condition. There may be times when you want to set a specific date and time, which you can do by opening the calendar and selecting them. At other times, however, you might want that value to be relative. For example, you may want a condition "If the purchase date is less than 24 hours from the time the contact was acquired." In that case, you can select a relative time for the rule's condition. Relative time calculates the number of minutes or hours from the current time or from a specific event, such as the time the contact or incident was created.

The following procedure shows you how to set a relative time condition using the time a contact was acquired, but the procedure is the same for setting other relative time conditions.

To select the relative time condition for Date Purchased

1 Click the Configuration button on the **navigation pane**.

2 Double-click Rules under Site Configuration. The Rules tree and editor display on the **content pane**.

3 Click the Offer Advisor button on the **ribbon**. The Browse Targets editor opens on the content pane.

4 Click the Edit button on the ribbon.

5 Right-click the rule you want to add the relative time condition to and select Edit. The Target editor is activated.

6 Click the Add IF Condition Based On button and select Purchased Products. In this example, assume you want the target group to include those contacts who purchased a product within twenty-four hours of being acquired as a contact.

7 Select the Relative check box for Date Purchased. The calendar drop-down menu is removed and the Relative time field displays.

8 Click the Relative Time drop-down menu above the Relative check box. The Relative Time window opens.

9 Complete the fields in the Relative Time window.
   a Click the Directions drop-down menu and select + (Future).
   b Type 24 in the Offset field.
   c Click the Unit drop-down menu and select Hours.
   d Click the Save button to save your settings and close the Relative Time window.

10 Click the Event drop-down menu to the right of the Relative check box and select Contact.Acquired.

11 Click the Select Operator drop-down menu and select Less Than.

12 Click the Save button to save the new relative time condition for the rule.

Creating and modifying promotions

Promotions include the product or message you want agents to present to customers who belong to a specific target group. Promotions also define the active dates, the promotion's priority, URLs to open when customers express interest in or accept a promotion, and scripts and tips for agents.

You may find it helpful to use existing promotions as the basis for new promotions. In those cases, you can save the promotion with a new name and then make any changes. Even if you do not intend to make any changes, you should rename the promotion so it is possible to distinguish between them in reports.

Adding promotions

Because every promotion requires at least one target, you must define the promotion's target before you can complete the promotion. When you add a promotion, you may already have a target you want to present the promotion to, or you may decide to create a target specifically for this promotion. If you begin creating a promotion before defining a target, you can save the promotion and return later to assign a target. Refer to Creating targets.

If your promotion applies to a sales product, you must also be sure the product is in the product catalog. For example, you might create promotions that offer a discount on a new model of cell phone or a free warranty with a purchase. In these examples, the sales products are the cell phone and warranty. In another example, you might want to offer free shipping on all purchases or create a promotion that simply makes an announcement to your customers. In those cases, do not specify a sales product when you create the promotion. Refer to Adding and editing sales products.

After you know what product and targets are included in your promotion, you can add the remaining details. These include start and end dates, priority, URLs for taking the next action, and information to guide the agent in presenting the promotion to customers.

Important Even though the Promotions editor lets you create a promotion, it does not make other changes that may be necessary to enact the promotion. For example, if you create a promotion that offers an extended service agreement, you must also change the customer's **SLA** to reflect acceptance of the promotion.

- ❖ Creating targets
- ❖ Adding and editing sales products

To add or edit a promotion

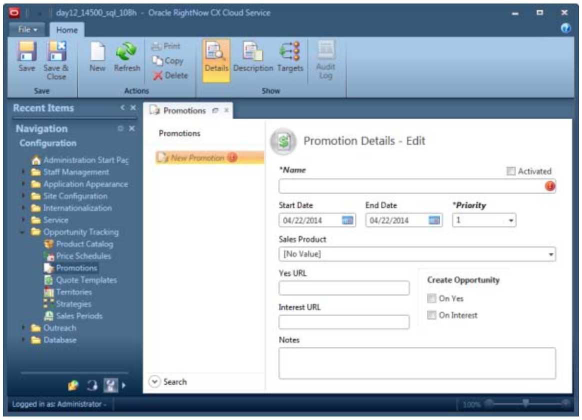
1 Click the Configuration button on the **navigation pane**.

2 Double-click Promotions under Opportunity Tracking. The Promotions tree displays on the **content pane**.

3 To add a promotion, click the New button on the **ribbon** to display the editor.

Or

To edit a promotion, click it in the tree.



4 Type the name of the promotion in the Name field.

5 To define properties, refer to Selecting details for promotions.

6 To enter a summary, guide, and keywords, refer to Providing promotion information to agents.

7 To specify targets, refer to Selecting targets for promotions.

8 Click the Save and Close button on the ribbon to save the promotion.

❖ Selecting details for promotions

❖ Selecting targets for promotions

Selecting details for promotions

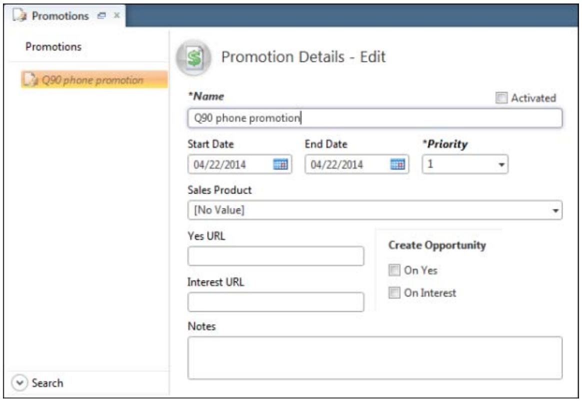
You can define the start and end dates, the product associated with a promotion, its priority, and the URLs that agents are directed to based on customer response.

To select details for a promotion

1 Click the Configuration button on the **navigation pane**.

2 Double-click Promotions under Opportunity Tracking. The Promotions tree displays on the **content pane**.

3 Click the promotion in the tree to display the editor.



4 Enter the following field information.

Table 351: Promotions Editor Description

Field	**Description**
Activated	Select this check box to activate the promotion. To discontinue a promotion during its active period (between the start and end dates), clear the check box.
Start Date	Click this drop-down menu to open the current month's calendar and select a start date for the promotion. Use the arrows at the top to change the month, if necessary, and then select the date.
End Date	Click this drop-down menu to open the current month's calendar and select an end date for the promotion.
*Priority	Click this drop-down menu to select a priority for this promotion. 1 is the highest priority and 10 is the lowest. Priority determines the promotion's order in the list seen by agents. **Note:** If two or more promotions with the same priority are offered to the customer, their positions in the promotions list are random.
Sales Product	Click this drop-down menu and select the sales product (if you want the promotion to have a sales product). **Note:** Promotions do not require a sales product. For example, you might want to offer free shipping on all orders, so you would not make a sales product selection.

Table 351: Promotions Editor Description (Continued)

Field	Description
Yes URL	Type the URL the agent is directed to if the customer accepts the promotion. For example, you might direct the agent to an order form with a discounted price. **Note:** You can pass variables through this URL to populate the page with contact information or other fields you select.
Interest URL	Type the URL the agent is directed to if the customer expresses interest in the promotion. For example, you might direct the agent to a form for entering leads. **Note:** You can pass variables through this URL to populate the page with contact information or other fields you select.
Create Opportunity on Yes	Select this check box to add an opportunity when the customer accepts the promotion. The opportunity is added automatically with no input required from the agent presenting the offer.
Create Opportunity on Interest	Select this check box to add an opportunity when the customer expresses interest in the promotion. The opportunity is added automatically with no input required from the agent presenting the offer.
Notes	Type comments, reminders, and other information about the promotion.

❖ Selecting targets for promotions

Providing promotion information to agents

You can provide information to help agents present promotions to customers. In addition, you can add a summary of the promotion and keywords associated with the promotion.

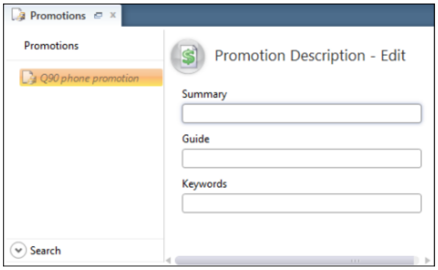
To provide promotion information

1 Click the Configuration button on the **navigation pane**.

2 Double-click Promotions under Opportunity Tracking. The Promotions tree displays on the **content pane**.

3 Click the promotion in the tree to display the editor.

4 Click the Description button on the **ribbon** to open the Description page.



5 Enter the following field information.

Table 352: Promotion Description

Field	Description
Summary	Type the text the agent will see in the list of promotions displayed on the Offer Advisor window.
Guide	Type a script, sales tips, or other guidelines to help the agent present the promotion to the customer.
Keywords	Type keywords in this field. Offer Advisor compares these keywords, along with other words associated with the promotion, to the search terms the agent enters to find offers matching the customer's interests.

6 Click the Save and Close button on the ribbon.

Selecting targets for promotions

You can assign one or more of the available targets to the promotion you are adding. If you want to define a new target for this promotion, refer to Creating targets.

Note If you define a new target before you finish creating the promotion, you must activate the target rule and reopen the Promotions editor. The new target then appears in the Available Targets list so you can assign it to the promotion.

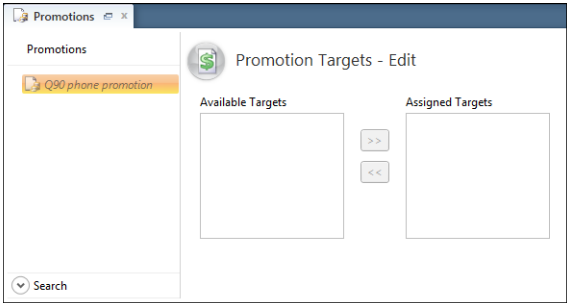
To select targets for a promotion

1 Click the Configuration button on the **navigation pane**.

2 Double-click Promotions under Opportunity Tracking. The Promotions tree displays on the **content pane**.

3 Click the promotion in the tree to display the editor.

4 Click the Targets button on the **ribbon** to open the Targets page.



5 Select a target for this promotion in the Available Targets list and click the right arrow. The target displays in the Assigned Targets list. Refer to Creating targets.

6 To assign additional targets, repeat step 5.

7 To remove a target, select it in the Assigned Targets list and click the left arrow. The target now displays in the Available Targets list.

8 Click the Save and Close button on the ribbon.

❖ Selecting details for promotions

Modifying promotions

You can edit and delete promotions as necessary. To edit a promotion, click it in the tree. Make your changes and save the promotion. You can also copy a promotion, modify it, and save it with a new name. The default name is Copy of [Promotion Name].

If you want to modify an existing promotion to use as a new promotion, it is good practice to open the promotion and save it with a new name. If you merely edit the properties of a promotion and do not change the name, your historical data regarding the effectiveness of that promotion may become skewed, preventing accurate reporting.

For example, if you create a Holidays 2013 promotion by renaming the Holidays 2012 promotion, you can distinguish statistics from each promotion, even if everything else in the two promotions is identical. If, however, you do not change the name, two years' worth of data are combined in one report, making it impossible to distinguish between them.

This practice also allows agents to present the Holidays 2013 promotion to customers who were not interested in the 2012 promotion. If the name does not change, the promotion is not available to customers who said no to the previous year's promotion.

To delete a promotion, click the Delete button on the ribbon. A message asks you to confirm the deletion.

Note Deleting a promotion may prevent accurate reporting by causing some reports to be incomplete. It is good practice to delete only old promotions that are no longer required for historical purposes. You can also add a folder for archiving purposes.

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Offer Advisor

When working with customers, you are in a unique position to anticipate their needs and provide them with specifically targeted information. Offer Advisor identifies current promotions that customers are eligible for and generates product suggestions based on their purchase histories.

Offer Advisor does more than simply provide you with a list of offers. It also displays guides to help you present the offer or information to the customer. It may contain product information and direct you to URLs to enter information about orders or leads. Offer Advisor can help you deliver high levels of personalized customer service by providing customers with reminders and service opportunities.

What is Offer Advisor

Promotions are special offers made to specific groups of customers. Examples of promotions include free shipping for customers who buy certain products, extended warranties for customers whose basic warranty is about to expire, and discounted prices on accessories for products customers have already purchased. A staff member in your organization, usually from the marketing department, defines a promotion.

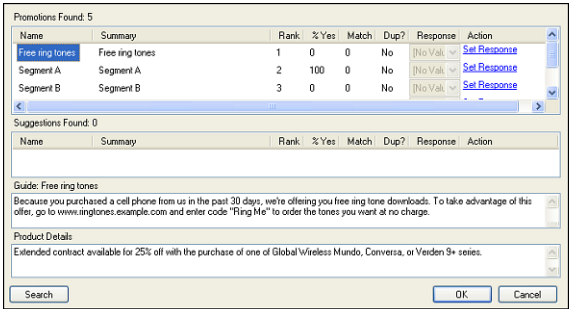
Suggestions, on the other hand, are generated automatically. These are product recommendations based on customer characteristics and purchase history. Just as SmartAssistant searches the knowledge base and suggests possible answers to a customer's questions, Offer Advisor searches for customer characteristics and past purchases to suggest possible products they may be interested in. For example, Offer Advisor may suggest a Caribbean cruise to a customer who has previously purchased a Mexican cruise vacation.

- Opening Offer Advisor
- Presenting offers

Opening Offer Advisor

Offer Advisor evaluates customer information when you open an incident, searching for **promotions** the customer is eligible for and product suggestions that the customer might be interested in. If it finds promotions, product **suggestions**, or both, the Offer Advisor button is enabled on the **ribbon**.

After you solve the incident, click the Offer Advisor button on the ribbon. The Offer Advisor window displays and contains promotions and suggestions.

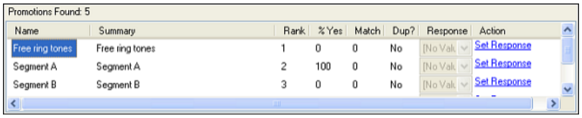


- Promotions Found
- Suggestions Found

Promotions Found

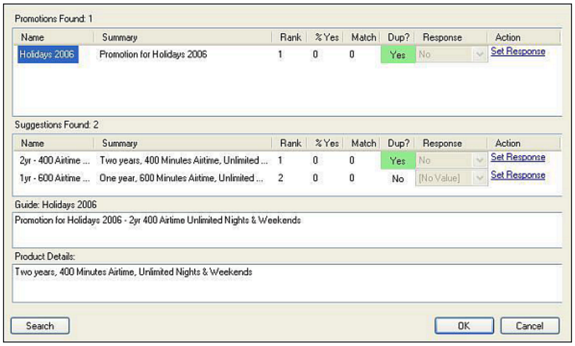
The Promotions Found section of the Offer Advisor window displays promotions the customer is eligible for. The maximum number of displayed promotions has been set by your administrator, so it is possible that the customer is eligible for other lower-ranking promotions that do not appear unless you scroll down.

Note If the customer previously expressed no interest in a promotion, the promotion does not appear on the Offer Advisor window, and you will not be put in the position of presenting a promotion the customer has already rejected. Nor will the product associated with the rejected promotion appear in the Suggestions Found list.



When working with promotions, keep the following points in mind.

- You can revise the order of the promotions using any of the column headings in the Promotions Found section, although the Rank, % Yes, and Match columns are the most useful. The Name column is simply the name assigned to the promotion by the marketing staff member who developed it. The Summary column provides a brief overview of the promotion.
- Promotions are initially ranked by priority, which is the relative importance assigned to it by the staff member who created it. These values appear in the Rank column. Although a rank of 1 indicates the highest priority, multiple promotions that have the same priority are not differentiated by rank in this list, so lower promotions may have the same priority as the first promotion.
- The % Yes column lists the historical response rate, which is the percentage of times customers have accepted this promotion. To rearrange the promotions in order of acceptance, click the column heading.
- You can enter search terms that indicate the customer's interest. The Match column prioritizes promotions based on how well your search terms match keywords and other text of the promotion or product. To list the promotions in order of match, where a high value indicates a strong match, click the Match column heading. Lower-ranking promotions that did not appear when the list was prioritized by rank may now be displayed based on their match with the search terms you entered. To learn how to search for matches, refer to To enter search terms.
- The column titled Dup? is used to indicate whether the product in the promotion is duplicated in a suggestion. If the same product appears in Promotions Found and Suggestions Found, the Dup? value in the row is Yes and is highlighted in green.



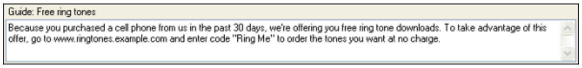
Suggestions Found

The Suggestions Found section of the Offer Advisor window displays recommendations for products that Offer Advisor has determined are a good fit for the customer. The maximum number of displayed suggestions has been set by your administrator, so it is possible that other lower-ranking suggestions are available even though they may not appear until you scroll down. Just as you can with promotions, you can revise the order of suggestions using the Rank, % Yes, and Match columns.

Guide

The guide section of the Offer Advisor window contains information about a selected promotion. This information was entered for your use by the marketing staff member who created the promotion. Depending on your organization's practices, the information may be a script for a phone conversation, text you can enter into an email response, or simply talking points for the promotion. For example, if most of your customer support requests come through phone calls, the marketing staff member may write a general script for you to use when talking with a customer. If your main channel of communication with customers is through email, the guide may contain text you can copy or append to the response.

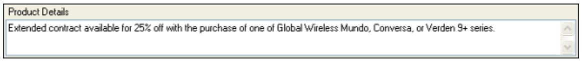
Note The guide section displays "Offer Guide is unavailable" if you have selected a suggestion instead of a promotion or if marketing personnel did not enter information when creating the promotion.



To copy information in the guide to paste in the response, right-click in the Guide section and select Copy. Or you can append the information to the response by right-clicking and selecting Append To Thread.

Product Details

The Product Details section contains information from the Sales Product Catalog about the selected product suggestion or the product for the selected promotion. (Promotions do not require an associated product. If the selected promotion does not involve a product, this section displays “Product Details are unavailable.”)



To copy information in the Product Details section to paste in the response, right-click in the Product Details section and select Copy. Or you can append the information to the response by right-clicking and selecting Append To Thread.

Presenting offers

After you have opened the Offer Advisor window and reviewed the **promotions** and **suggestions**, you can select one to present to the customer. You can revise the order of the lists of promotions and suggestions to help you decide which offer has the highest potential of success. You can select the offer’s rank or its acceptance rate, or you can enter search terms to determine how well the offer matches the customer’s interests and use the match value as your selection criterion.

Tip You should strongly consider any offer with Yes displayed on a green background in the Dup? column. This indicates a product that appears in both promotions and suggestions.

To select a promotion or suggestion

To use rank as the selection criterion, select the promotion or suggestion ranked 1.

Or

To use acceptance rate, click the % Yes column heading to list the promotions in order of acceptance rate.

To enter search terms

1 Click the Search button on the bottom of the Offer Advisor window. The Offer Advisor Search window opens.

2 Type the search terms, separated by a space or comma, and click the OK button. The list of offers is automatically ranked according to match value.

Note The search terms you enter are applied only to the promotions and suggestions available to this customer, not to all promotions and suggestions.

To present an offer

1 If you are on a phone call with the customer, read or paraphrase the guide and product information to the customer.
Or
If you are responding to an incident, right-click in the guide or product information section to copy the text or append it to the response. Modify as necessary before sending the response.

2 Click Set Response in the Action column for the offer you want to present. The associated drop-down menu in the Response column is activated.

3 Click the drop-down menu and select one of the following options.

Table 353: Offer Advisor Response Options

Option	Description
Yes	Select this option if the customer accepts the offer. Depending on how the promotion is defined or how Offer Advisor is configured, this button may take you to a URL for follow-up action (for example, an order form).
Interest	Select this option if the customer expresses interest in the offer but is not ready to accept it. Depending on how the promotion is defined or how Offer Advisor is configured, this button may take you to a URL for follow-up action.

Table 353: Offer Advisor Response Options (Continued)

Option	Description
No	Select this option to indicate the customer's lack of interest in the offer. The promotion or suggestion is disabled in the Offer Advisor window, and the response is recorded to prevent the offer from being made to this customer in the future.
Defer	Select this option when you are sending the offer by email and do not yet know the customer's response.

4 Click the OK button to return to the incident.

5 Click the Save and Close button on the ribbon to save the incident and record the customer's responses to the offers. If you do not save the responses, the reports generated by managers and marketing staff will not account for these responses, and the historical information with this customer will not be accurate for future interactions.

Note If you send an email to a customer who replies with an indication of interest, you can reopen the incident, open the Offer Advisor window, select the promotion or suggestion, and select Yes, Interest, or No to document the response appropriately.

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Oracle RightNow Wireless

Customers can access Oracle RightNow Cloud Service (Service) with a wireless device that supports the wireless application protocol (WAP). The Oracle RightNow Wireless (Wireless) interface provides access to the Support Home page where customers can search for answers and manage their questions.

Note Generic terms are used for features and functions that may vary depending on your brand of wireless device. Consult your manufacturer's user manual for specific operating instructions.

Options in Wireless

Customers can access your support site using their WAP device or any device with a WAP browser, such as a PDA. After entering the URL, customers can access a limited Support Home page for viewing and searching for answers and asking questions. The customer support site is accessed through the following URL:

http://<your_site>.custhelp.com/cgi-bin/<your_interface>.cfg/php/wap/enduser.php

If your site requires customers to log in with a user ID and password, the Wireless interface will also require them to log in. Customers can then access their customer account in addition to all public features through the Wireless interface.

Note If customers have forgotten their user ID or password, they can scroll down and click the Account Assistance link. From there, customers can retrieve their User ID or reset their password.

If **email address sharing** is enabled, multiple contacts can share the same email address when using Wireless. Refer to Email address sharing.

If your site does not require customers to log in, the Support Home page opens after entering the URL and pressing the Submit button. Customers can access all public features, but not restricted functions such as My Questions.

The functions on the Support Home page depend on the configuration of your customer support site, and can include the following options.

- **Find Answers**—To search the knowledge base. Refer to Finding answers.
- **Ask a Question**—To submit questions. Refer to Asking a question.
- **Login**—To log in to My Questions. Refer to My Questions.
- **Create a New Account**—To create an account. Refer to Creating an account.

❖ Finding answers

❖ Asking a question

❖ My Questions

❖ Creating an account

Finding answers

The Find Answers option allows customers to search for answers by product, category, or keyword. When customers search by product or category, they can view a list of question summaries related to the specific product or category. Then they can view a specific question description and answer. When searching by keyword, customers can type a word or phrase to search the knowledge base. Wireless then returns a list of question summaries containing the keyword or phrase, and customers can view question descriptions and answers.

Note Menu-type custom fields display on answers reports on the Wireless interface, but other custom field types do not. Refer to Custom Fields Data Types.

- **Searching for answers by product or category**—To search for answers by product or category, customers must first select Find Answers on the Support Home page and then select Product Hierarchy or Category Hierarchy. After selecting a product or category, a list of related answers displays. After scrolling through the list of answers and selecting one to display, customers can select Solution to display the answer. At this point, customers have the following three options.
  - ▷ Select Related Answers and press the Select button to view a list of **SmartAssistant** suggested answers.
  - ▷ Select Answers and press the Select button to return to the Find Answers page.
  - ▷ Select Submit Feedback and press the Select button to submit feedback about the answer.
- **Searching for answers by keyword**—Customers can also choose to search for an answer using a word or phrase. To search for answers by a keyword, customers first select Find Answers on the Support Home page and then select Keyword. After customers enter keywords, a list of answers displays. Customers can then select an answer to view.

Note When viewing answers, customers can rate answers and submit feedback on how an answer can be improved. From the answer details page, customers can select Submit Feedback to see the list of feedback options.

Asking a question

When customers cannot find an answer to their question in your knowledge base, they can submit their questions to your support staff. Customers select Ask a Question on the Support Home page and select a product and category to open the Ask a Question page. Customers then enter their question, enter their email address, and submit the question.

If there is not a contact record in the knowledge base that matches an email address entered by a customer, a record is added using only the email address. You must edit the contact record to add more information.

Note Wireless does not apply data validation to custom fields.

My Questions

My Questions contains your customers' personal account information where they can view and edit any questions they have submitted and update their profile information. To access My Questions, customers must log in with their user ID and password or create an account.

Note The information on the My Questions page can also be accessed through the Support History page on the **customer portal**. Refer to Editing the Support History page.

After logging in, customers open the Support Home page with My Questions options. From this page, the following options are available.

- View a question
- Update a question
- Access account profile information

To view a question, customers first select My Questions and then select the question to view. From the open question, they can select options to update the question, return to the questions list, or return to the Support Home page.

To update a question while viewing it, customers select Update Question and then enter additional information about the question in the text field. The I No Longer Need An Answer To This Question option can be cleared on this page.

To access account profile information, customers select Account Profile on the Support Home page. On the Edit My Profile page, customers can update first and last names and email addresses.

Creating an account

When customers visit your Support Home page for the first time, they can create an account to use when updating or tracking questions from their WAP device.

Important If a password is required on the Support Home page, customers cannot create a new account from their WAP device.

To create an account, customers select Create a New Account from the Support Home page and enter the following information.

- **User ID**—The customer-defined user ID that can be any combination of numbers and characters except spaces and quotation marks.
- **Password**—The customer-defined password for the account.
- **Email Address**—The customer's email address.
- **First Name**—The customer's first name.
- **Last Name**—The customer's last name.

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Mobile Agent App

You can manage incidents, tasks, and contacts on the go using your Apple iPad or iPhone device, the Oracle Tap application, and your Oracle Service Cloud credentials. You can also view, create, assign, escalate, forward, and add to the threads of incidents from anywhere, and you can search and view organization records, staff accounts, and answers. Additionally, you can create and edit contacts, tasks, and notes.

Note Because Oracle often revises the Oracle Tap application to enhance its functionality, screens and procedures may not always match this documentation.

All figures showing mobile content were captured using an Apple iPad device.

Getting started

Once enabled and configured, you can view and manage your Oracle Service Cloud data on your device. You will need to complete the following tasks to start using the mobile agent app.

1 Modify configuration settings on the Service Console to enable the mobile agent app and configure its functionality. The mobility configuration settings are located at RightNow Common > Mobility. Refer to Customizing configuration settings.

2 Assign staff members permission on the Service Console to access the mobile agent app. Refer to Assigning mobile agent app permission.

3 Install the Oracle Tap application from the business category of the Apple App Store on your device.

4 Configure the Customer Service and Support cloud option on your mobile device by entering the following URL to your Oracle Service Cloud application:

https://<your virtual host>/cgi-bin/<your interface>.cfg/php/tap/v1

The Oracle Tap application uses the same field names you are familiar with from the Service Console, making it easy to learn the menu structure and locate information. By customizing message bases with the Message Bases editor on the Service Console, you can modify the descriptive text strings seen in the mobile application as well. The main menu of the mobile device displays staff, incidents, answers, contacts, organizations, or tasks based on the mobile **navigation set** for each profile defined on the Service Console. When you view the audit log on the Service Console, you will see activity from a mobile device labeled as such.

Assigning mobile agent app permission

Administrators can specify which profiles have permission to use the mobile agent app on the Service Console.

To assign mobile agent app permission in profiles

1. Click the Configuration button on the **navigation pane**.
2. Double-click Profiles under Staff Management. The report opens on the **content pane**.
3. Double-click the profile you want to edit. The Profile Editor opens.
4. Click the Permissions button on the **ribbon**. The Permissions page opens.
5. Select the Account Authentication check box in the Mobile Agent App section on the Administration tab.
6. Click the Save and Close button on the ribbon.

Editing mobile navigation sets

The mobile agent app provides a default mobile navigation set. The default navigation set gives you access to staff, incidents, answers, contacts, organizations, tasks, and custom objects. You can copy and customize a mobile navigation set to meet staff member needs. Refer to Modifying navigation sets.

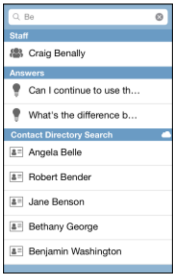
Searching for records

Located on the main menu, the search function makes it easy to locate a specific contact, organization, staff member, or incident.

To search for a record

1 Tap the Search field to type all or part of a search term. There is an implied wildcard when searching, so typing `be` in the Search field returns all records containing the letters `be`.

2 Swipe up to view the remainder of the results.



Viewing staff details

When you tap the Staff button on the main menu, a report of all staff members displays. Additionally, you can filter the report by name, group, phone number, or email address to quickly locate a staff account. Tap the staff member's name to view details, including manager, group, profile, account locked status, phone numbers, and email addresses. Tap the Directs, Incidents, or Tasks button on the Staff Summary screen to view the staff member's direct reports, assigned incidents, and assigned tasks.

Locking and unlocking staff accounts

Administrators can lock and unlock staff accounts using the mobile agent app. From a Staff/ Summary page, tap Edit, tap the Account Locked control, and tap Save.

Resetting staff passwords

Administrators can reset staff account passwords. From a Staff/Summary page, tap Actions, tap Reset Password, type the new password, type the new password again to confirm, and tap Save.

Editing incidents

Being able to view and edit key incident fields while on the go increases your effectiveness. You no longer have to wait to update incidents—you can do it immediately.

When you tap the Incidents button on the main menu, a report of your open incidents displays. Three standard reports, including Open Incidents, My Inbox (default), and Incidents Open Longer Than x Days, make finding an incident quick and easy.

Note By default, the Open Longer Than x Days filter is set to five days. To change the number of days, modify the MOBILITY_LONG_OPEN_INC_DAYS configuration setting on the Service Console.

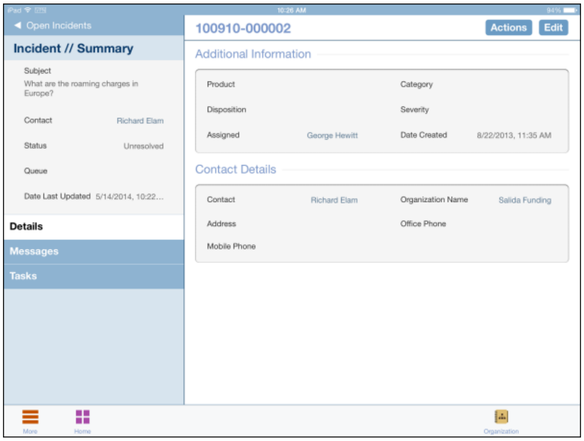
Additionally, you can filter the incidents by subject, contact's full name, status, reference number, date last updated, queue, agent's assigned account, severity, and product ID. The Incidents report displays the incident's subject, contact, status, its reference number, the date it was last updated, agent, severity, and attachments. Tap New Incident to create an incident. In addition, incidents can be created from the staff, contact, and organization workspaces. Tap the incident to display details including reference number, subject, contact, status, queue, date last updated, product, product, category, disposition, severity, assigned agent, date created, organization, address, phone numbers, and attachments. Tap the Messages or Tasks button on the Incident Summary screen to view the messages and tasks associated with that incident. Tap Actions to create a task or message.

Note By default, the application retrieves incidents updated during the past thirty days. To change the number of days, modify the MOBILITY_INCIDENTS_-DAYS_LIMIT configuration setting on the Service Console.

Mobile incident workspace

The mobile agent app provides a standard workspace for working with incidents. The workspace defines which fields are available, which buttons are displayed, and how the information is organized on the content pane. The following figure is an example of the standard incident workspace for the mobile agent app.

Note The mobile incident workspace has line display limitations which may result in truncated field names or information.



Your organization may use the standard mobile incident workspace, or your administrator may have created one or more customized workspaces. Your **profile** defines the workspace you see when you work with incidents on your mobile device, whether it is the standard workspace or a customized workspace. If you are using a customized workspace, keep in mind that the workspace your profile uses may display a different combination of fields, or it may display them in a different location. Refer to Custom workspaces.

Note: Custom objects and custom fields may be displayed on custom mobile workspaces. Refer to Custom Objects and Custom Fields.

Editing key incident fields

The fields you see when viewing or editing an incident are defined for the incident mobile workspace. Key fields may be edited.

To edit key incident fields

1. From an incidents report, tap the incident.
2. Tap Edit.

3 Review and edit the following field information.

Table 354: Incident Fields Description

Field	Description
Reference #	The incident's reference number is a read-only field with a value assigned by Oracle Service Cloud.
Subject	This field contains the subject of the incident.
Contact	This field contains the name of the contact associated with the incident.
Status	Tap this pop-over menu and select an incident status.
Queue	Tap this pop-over menu and select a queue into which to move the incident.
Date Last Updated	This read-only field contains the date and time the incident was last updated.
Product	Tap this pop-over menu and select the product associated in the incident. **Note:** Use the Search feature at the top of the pop-over to locate the product quickly. Wildcards are implied, so typing b in the Search field returns all items containing the letters b.
Disposition	Tap this pop-over menu and select a disposition that indicates the resolution of the incident. **Note:** Use the Search feature at the top of the pop-over to locate a disposition quickly. Wildcards are implied, so typing b in the Search field returns all items containing the letters b.
Assigned	Tap this pop-over menu and select a staff member to assign the incident to. **Note:** Use the Search feature at the top of the pop-over to locate staff members quickly. Wildcards are implied, so typing b in the Search field returns all items containing the letters b.
Category	Tap this pop-over menu and select the category for the incident. **Note:** Use the Search feature at the top of the pop-over to locate categories quickly. Wildcards are implied, so typing b in the Search field returns all items containing the letters b.

Table 354: Incident Fields Description (Continued)

Field	Description
Severity	Tap this pop-over menu to select a severity level for the incident. The severity level serves as an importance indicator for any agents that work on the incident. The highest severity incidents are usually solved first.
Date Created	This read-only field contains the date and time the incident was created.
Address	This read-only field contains the address of the contact associated with the incident.
Mobile Phone	This read-only field contains the mobile phone number of the contact associated with the incident.
Organization Name	This read-only field contains the name of the organization for the contact associated with the incident.
Office Phone	This read-only field contains the office phone number of the contact associated with the incident.
Attachments	Tap the plus sign to add a file or tap the red X to delete an attachment.

4 Tap the Save button to commit changes or tap the Cancel button to discard changes.

To create an incident from a staff, contact, or organization summary

1 Tap Actions.

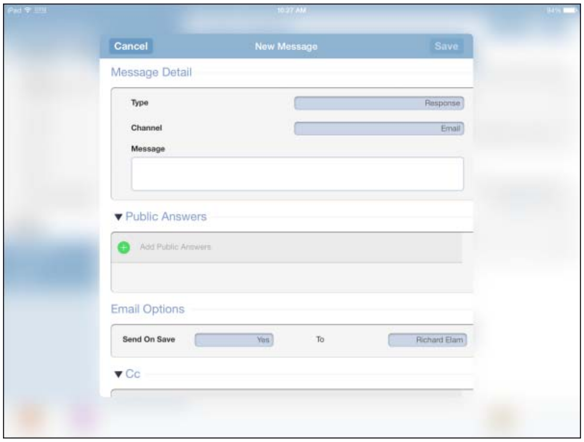
2 Tap New Incident.

3 Enter incident field information.

4 Tap the Save button to save the incident or tap the Cancel button to discard the incident.

Adding messages

The Messages button displays the incident thread communication. When you tap the message or tap Actions and New Message, the message pop-over displays. The following figure shows the message pop-over.



The following table describes the buttons and fields that appear on the Message pop-over.

Table 355: Message Pop-over Description

Button/Field	Description
Cancel	Tap this button to cancel the message without saving changes.
Save	Tap this button to save the message. This button is available only when creating a message.
Type	Tap this drop-down menu and select one of the following options to add a message to an incident.
Private Note	Select this option to type the text that you want to be viewed only by other staff members. Customers cannot view this information.
Response	Select this option to type your response to the customer's question. This is the default option when you create a message.
Customer Entry	Select this option to enter information for the customer. For example, select Customer Entry when the customer's question occurs during a phone call.
Channel	Tap this drop-down menu and select one of the following options to identify a channel for a response.
No Channel	Select this option if no channel is specified. This is the default option when you create a message.

Table 355: Message Pop-over Description (Continued)

Button/Field	Description
CSS Web	Select this option to specify the channel as a web communication.
Email	Select this option to specify the channel as an email communication.
Fax	Select this option to specify the channel as a fax communication.
Phone	Select this option to specify the channel as a phone communication.
Post	Select this option to specify the channel as a social communication.
Message	Type a response.
Public Answers	Tap the plus sign to add a public answer to the message.
Send On Save	Tap this drop-down menu to select yes or no to automatically send your response to the primary contact when you save the message. **Note:** This menu is available only if the Send Response permission is selected for your profile.
To	This read-only field contains the name of the primary contact associated with the incident.
Cc	Tap this button to open the Add Cc pop-over, tap the name of the recipient. **Note:** All recipients are able to see the email addresses in the Cc field.
Bcc	Tap this button to open the Add Bcc pop-over, tap the name of the recipient. **Note:** No recipients are able to see the email addresses in the Bcc field.

To add a message to an incident

1 From an incidents report, tap the incident.

2 Tap Actions.

3 Tap New Message.

4 To identify a type for a message, tap the Type drop-down menu and select one of the following options: Private Note, Response, or Customer Entry. (Response is the default.)

5 To identify a channel for a response, tap the Channel drop-down menu and select one of the following options: No Channel, CSS Web, Email, Fax, Phone, or Post. (No Channel is the default.)

6 Tap the message panel to display the keypad and type your message.

Note The message pop-over supports an inline spell checker that automatically identifies misspelled words as you type.

7 Tap the Save button to save the message or tap the Cancel button to discard the message.

Adding time billed

Once added to a custom incident workspace, the time billed button displays on the incident summary. When you tap time billed or tap Actions and New Time Billed, the time billed pop-over displays. The following figure shows the time billed pop-over.

The following table describes the buttons and fields that appear on the Time Billed pop-over.

Table 356: Time Billed Window Description

Field	Description
Cancel	Tap this button to cancel the time billed without saving changes.
Save	Tap this button to save the time billed.

Table 356: Time Billed Window Description (Continued)

Field	Description
Date	Tap the drop-down menu to open the select a date. The default is today's date.
Billed By	Tap this drop-down menu and select a staff member.
Billed Minutes	Enter the time billed value in minutes.
Billable Task	The default billable task is Miscellaneous, but your administrator may have added other billable tasks for you to select. Tap this drop-down menu and select a task.
Notes	Type a note about the time billed for the incident.

Adding SmartSense emotive rating

SmartSense can help you determine the attitude of customers and staff members in incident correspondence. You can use SmartSense to determine which customers need immediate attention and when to notify supervisors or other staff members about specific incidents or situations.

Two SmartSense ratings can be placed on a custom mobile incident workspace: one for the customer and one for the staff member editing the incident. SmartSense scans the text and rates the words and phrases in all customer entries for the customer rating and all responses for the staff member rating. Refer to SmartSense Emotive Rating.

Editing contacts

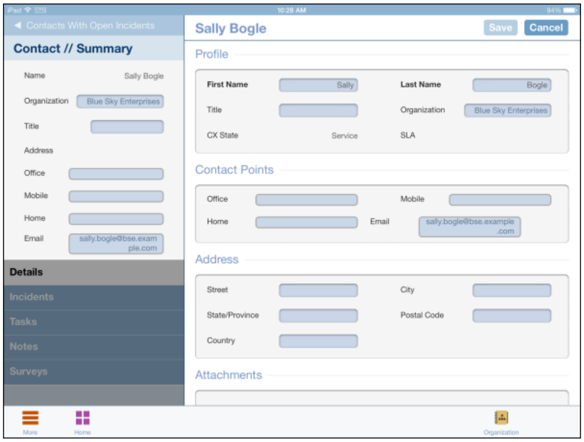
When you tap the Contacts button on the main menu, a report of all contacts with open incidents displays. Additionally, you can filter the list by name, organization, title, phone numbers, or email address to quickly locate a contact. Tap the contact's name to view details, including title, organization, CX State, SLA, phone numbers, email addresses, and street address. Tap the Incidents, Tasks, Notes, or Surveys button on the Contact Summary screen to view the associated incidents, tasks, notes, and surveys.

Note By default, the Incidents filter associated with a contact is set to ninety days. To change the number of days, modify the MOBILITY_INCIDENTS_CONTACTS_ORGS_DAYS_LIMIT configuration setting on the Service Console.

Mobile contact workspace

The mobile agent app provides a standard workspace for working with contacts. The workspace defines which fields are available, which buttons are displayed, and how the information is organized on the content pane. The following figure is an example of the standard contact workspace for the mobile agent app.

Note The mobile contact workspace has line display limitations which may result in truncated field names or information.



Your organization may use the standard mobile contact workspace, or your administrator may have created one or more customized workspaces. Your **profile** defines the workspace you see when you work with contacts on your mobile device, whether it is the standard workspace or a customized workspace. If you are using a customized workspace, keep in mind that the workspace your profile uses may display a different combination of fields, or it may display them in a different location. Refer to Custom workspaces.

Note Currently, not all custom objects are supported on the contact mobile workspace.

To edit key contact fields

1 From a contacts report, tap the contact.

2 Tap Edit.

3 Enter the following field information.

Table 357: Contact Fields Description

Field	Description
First Name	Type the contact's first name in this field.
Last Name	Type the contact's last name in this field.
Title	Type the contact's title in this field.
Organization	Tap this field to open the Organization search pop-over and search for an organization to associate with the contact.
CX State	This read-only field classifies how the contact was added, whether through Oracle RightNow Cloud Service (Service) when working on an incident, Oracle RightNow Outreach Cloud Service (Outreach) when adding contacts, or Oracle RightNow Opportunity Tracking Cloud Service (Opportunity Tracking) when working on an opportunity, and what areas of Oracle Service Cloud the contact has since had activity in.
SLA	This read-only field displays the service level agreement. **Note:** This field applies only to Service and only to contacts that do not have an organization association. If the contact is associated with an organization, you must apply SLA instances to the organization, not the contact.
Office Phone	Type the contact's office phone number in this field.
Mobile Phone	Type the contact's mobile phone number in this field.
Home Phone	Type the contact's home phone number in this field.
Email	Type the contact's email address in this field. **Note:** If you enter an email address that is already in the knowledge base, you will receive an error message and not be able to save the contact. If email address sharing is enabled, meaning multiple contacts can share the same email address, an icon with an exclamation point displays when you type an email address that is associated with a different contact in the system. If this icon appears, you can save the contact without changing the contact's email address. Email address sharing validation begins when the Email address field receives focus and ends when the field loses focus. Refer to Email address sharing.

Table 357: Contact Fields Description (Continued)

Field	Description
Address	Type information in the Street, City, and Postal Code fields, and make selections on the State and Country fields' pop-over menus.
Attachments	Tap the plus sign to add a file or tap the red X to delete an attachment.

4 Tap the Save button to save the contact or tap the Cancel button to discard the contact.

To add a contact

1 From the contact report, tap New Contact.

or

From the contact report, tap a contact and tap Actions.

2 Tap New Contact.

3 Enter contact field information.

4 Tap the Save button to save the contact or tap the Cancel button to discard the contact.

Viewing organizations

When you tap the Organizations button on the main menu, a report of all organizations with open incidents displays. Additionally, you can filter the list by name, industry, or parent organization to quickly locate an organization. Tap the organization's name to view details, including billing address, parent organization, CX state, industry, SLA, and attachments. Tap the Contacts, Incidents, Tasks, or Notes button on the Organization Summary screen to view the associated contacts, incidents, tasks, and notes. Tap Edit on the Organization Summary screen to add or remove attachments.

Note By default, the Incidents filter associated with an organization is set to ninety days. To change the number of days, modify the MOBILITY_INCIDENTS_CONTACTS_ORGS_DAYS_LIMIT configuration setting on the Service Console.

Editing tasks

When you tap the Tasks button on the main menu, a report of your incomplete tasks displays. A second standard report, All Incomplete Tasks, provides quick access to incomplete tasks. Additionally, you can filter the list by name, due date, status, assigned, organization, incident, or contact to quickly locate a task. Tap the task to view details, including assigned staff member, status, priority, due date, contact, and associated incident. Tap the Notes button on the Task Summary screen to view the associated notes. Tap New to create a task. In addition, tasks can be created from the staff, incident, contact, and organization workspaces.

Note By default, the Tasks filter is set to thirty days. To change the number of days, modify the MOBILITY_TASKS_DAYS_LIMIT configuration setting on the Service Console.

To edit task fields

1 From a tasks report, tap the task.

2 Tap Edit.

3 Review and edit the following field information.

Table 358: Task Fields Description

Field	Description
Name	Type the name of the task.
Assigned	Tap the pop-over menu to assign the task to a staff member.
Due Date	Tap this field to open the calendar and select the date the task is due. The default is seven days from today.
Status	Tap this pop-over menu and select a status. The status options include Not Started, In Progress, Completed, Waiting, and Deferred. **Note:** To set the status to completed, tap Actions. Tap Mark As Complete to set the Status to Completed and the Percentage Complete to 100% in a single step.

Table 358: Task Fields Description (Continued)

Field	Description
Percentage Complete	Tap this pop-over menu and use the slider to select the percentage of the task that is complete. **Note:** To set the status to completed, tap Actions. Tap Mark As Complete to set the Status to Completed and the Percentage Complete to 100% in a single step.
Notes	Type any notes about the task in this field.
Priority	Tap this pop-over menu and select Low, Normal, or High as the task's priority.
Planned Completion	Tap this field to open the calendar and select the task's planned completion date.
Date Complete	Tap this field to open the calendar and select a completion date for the task.
Task Type	Tap this pop-over menu to select a task type.
Contact	Tap this pop-over menu to select the contact associated with the task.
Incident	Tap this pop-over menu to select the incident associated with the task.
Organization	Tap this pop-over menu to select the organization associated with the task.
Attachments	Tap the plus sign to add a file or tap the red X to delete an attachment.

To add a task from a staff, incident, contact, or organization summary

1 Tap Actions.

2 Tap New Task.

3 Enter task field information.

4 Tap the Save button to save the task or tap the Cancel button to discard the task.

Adding notes

Keeping track of comments, reminders, and details concerning customers and projects ensures all the information is easily accessible to you and other staff members. Notes are not visible to customers.

To add a note from a contact, organization, or task

1. Tap Actions.
2. Tap Add Note.
3. To identify a channel for a response, tap the Channel drop-down menu and select one of the following options: No Channel, CSS Web, Email, Fax, Phone, or Post. (No Channel is the default.)
4. Tap the note panel to display the keypad and type your message.

Note The note pop-over supports an inline spell checker that automatically identifies misspelled words as you type.

5. Tap the Save button to save the note or tap the Cancel button to discard the note.

Viewing answers

When you tap the Answers button on the main menu, a report of all public answers displays. Three standard reports, including All Answers, Public Answers (default), and Internal Answers, make finding an answer quick and easy. Additionally, you can filter the list by summary, status, access level, language, keywords, category, or product to quickly locate an answer. Tap the question to view details, including question, answer, answer notes, answer ID, status access level, language, agent, product, category, date created, and date last updated.

Forwarding incidents

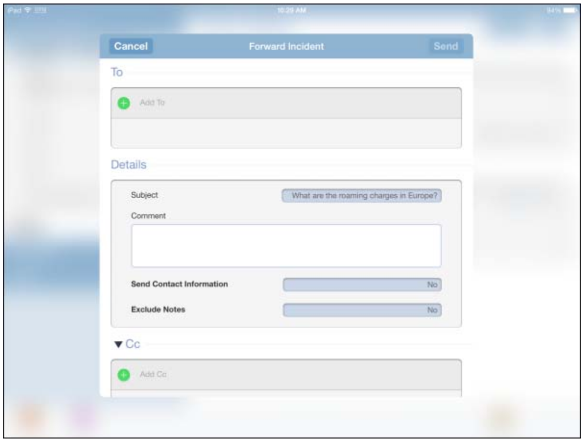
There may be times when you need to forward an incident to a staff member. For example, you might need information from another staff member before you can reply to a customer's incident. When you forward an incident, you can forward any files that are attached to the incident, send contact information, and add comments.

Note If you are adding an incident instead of editing an existing one, you must first save the incident before you can forward it.

To forward an incident

1 Tap Actions.

2 Tap Forward Incident.



3 Enter the following field information.

Table 359: Forward Fields Description

Field/Button	Description
Add To	Tap this button to open the Add To pop-over and tap the name of the recipient.

Table 359: Forward Fields Description (Continued)

Field/Button	Description
Subject	The subject for the incident appears in this field.
Send Contact Information	Select this check box to send the primary contact information with the record. The information that is sent includes the contact's email address, first and last names, contact type, title, any phone numbers that have been entered, and any custom field information.
Exclude Notes	Select this check box to exclude any notes in the incident thread from being forwarded with the incident.
Cc	Tap this button to open the Add Cc pop-over and tap the name of the recipient. **Note:** All recipients are able to see the email addresses in the Cc field.
Bcc	Tap this button to open the Add Bcc pop-over and tap the name of the recipient. **Note:** No recipients are able to see the email addresses in the Bcc field.
Comment	Type any comments you want to forward with the record in this field. **Note:** Text entered in the Comment field will display as the body of the email that is sent to recipients.

4 Click the Send button to forward the incident.

Editing settings

When you tap the Settings button on the main menu, the Settings pop-over displays. You can specify if login credentials are saved, how long the app will wait for a server response, if the data cache is cleared when the application is closed or restarted, and which server is used. Additionally, you can view the version and the license agreements.

Table 360: Settings Pop-over Description

Button/Field	Description
Done	Tap this button to save changes.
Device	
Remember Login Details	Tap this button to enable or disable the storing of login credentials.
Network Request Timeout	Displays the designated time the app will wait for a response from the server. You can edit this value.
Flush Data Cache	Tap this button to enable or disable the clearing of the data cache when the app is closed or restarted. Note: Selecting On will flush the data cache and logout the agent immediately.
Appearance	
Theme	Select a theme for your display.
Show Presentation Taps	Tap this button to enable or disable showing presentation taps.
About	
Version	Displays the version of Oracle Tap being used.
EULA	Displays the End User License Agreement terms and conditions.
Third Party Attributions	Displays the third-party attributions, including copyright information, licensing, and terms and conditions.

You can also specify the time periods used to initiate an automatic logout and to maintain offline authentication of Oracle Service Cloud.

- By default, the number of seconds the agent can leave the application idle before being logged out of Oracle Service Cloud is 300 (5 minutes). To change the number of seconds, modify the MOBILITY_IDLE_TIMEOUT configuration setting on the Service Console.
- By default, the number of seconds the application will store the agent's credentials for offline authentication of Oracle Service Cloud is 28800 (8 hours). To change the number of seconds, modify the MOBILITY_SESSION_TIMEOUT configuration setting on the Service Console.

Customer Portal

The following sections are intended for administrators, designers, and developers using Oracle RightNow Customer Portal Cloud Service. They contain information and procedures for implementing the customer portal.

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Getting Started with the Customer Portal

The Oracle RightNow Customer Portal Cloud Service (Customer Portal) is your customer support interface. Your customers can search for information, review the contents of your **knowledge base**, ask questions of your support staff, request a **chat** session, ask your **community** for answers to their questions, and manage their account information. Because the Customer Portal is integrated with your Oracle Service Cloud application, customers have access to your knowledge base for immediate self-service. Likewise, any information they enter by submitting an incident, updating account information, or providing feedback on an answer is immediately available to your support staff on the Oracle Service Cloud **administration interface**.

You'll configure your customer portal by editing the **template**, **pages**, and **widgets** that make up the customer interface. Additional configuration work occurs on the administration interface, so it's as important to have an understanding about Oracle Service Cloud as it is to understand the structure of the Customer Portal and how to work with the code it uses.

Here are a few basic points to keep in mind as you begin working with your customer portal.

- The reference implementation is the set of default pages and files that make up the Customer Portal as it exists before you configure and customize it for your specific needs. There are three default reference implementations: one for the standard pages typically displayed on desktop browsers, one for display on mobile devices, and a basic page set for devices with limited or no JavaScript capability. You'll edit these default files so they meet your organization's support goals and maintain the appearance of the rest of your organization's website. After working with the default pages, you should understand the concepts well enough to create custom pages for your site.
- You'll use a text editor such as TextPad, NotePad, WordPad, or Adobe Dreamweaver to build and modify your customer portal pages. You'll also need a WebDAV client such as Cyberduck.

- You use **configuration settings** on the Oracle Service Cloud administration interface to set up certain functionality for your customer portal, such as SmartAssistant and search options. But you'll use the Customer Portal Administration site, WebDAV, and widgets to configure the actual customer portal pages.

Note This section contains basic information about your customer portal, but you can find more technical information for developers, including sample code, API references, and the framework overview, in the Developer Overview.

Opening your customer portal

When your customers go to your support site, they'll see the customer portal pages you've created and modified. You can view changes as you're working on them or you can open the page set that your customers see on your production site.

Open your customer portal by typing the URL in your web browser, or select it from the **file menu** on the **Service Console**.

Note When you open your customer portal, you might be looking at the **development** pages you're working on but haven't yet **staged** and **promoted**. Or you may be viewing the same **production pages** your customers see. If there's a page header that says Customer Portal Development Area, you're looking at your development pages. The set of pages that opens depends on which area you've selected to view on the Customer Portal Administration site: production, staging, development, or the reference implementation. To view development pages, go to `https://<your_site>/ci/admin` and select View Development Area on the dashboard.

To open your customer portal through a URL

Launch your web browser and type the following URL.

```
https://<your_site>/app
```

The Support Home page opens.

To open your customer portal from the Service Console

1. Log in to Oracle Service Cloud.
2. Click File.

3 Select Links > [your_site] > End-user. The Support Home page opens.

Understanding the Customer Portal file structure

The **templates**, **pages**, **widgets**, and other assets used to create your website are available through WebDAV.

WebDAV for the Customer Portal

The customer portal uses WebDAV to help you manage your website files. WebDAV offers a familiar file structure, easy uploading and downloading of multiple files, and file security through login access. After you set up a WebDAV connection to upload and download files, you can use any text editor you want to create and edit files for your customer portal, or you can use Adobe Dreamweaver, which uses its own WebDAV protocol for site management and configuration.

Oracle recommends using Cyberduck for WebDAV access to Customer Portal files. Download Cyberduck.

Important You must enable MOD_CP_DEVELOPMENT_ENABLED before you can make changes to your development site. If you do not enable this setting, you cannot make changes to your customer portal and your customers will see the default reference implementation with no customization. Refer to Enabling the development area.

Note If you use special characters in any PHP file, you must use a text editor that lets you save the file with UTF-8 encoding without the leading Byte Order Mark (BOM) character.

Viewing files from a URL

To view your customer portal files from the **Customer Portal Administration site**, use the following procedure.

To view files from a URL

1 In a web browser, type `http://<your_site>/dav.` The Index Of window opens.

Note If you have not already logged on to the Customer Portal Administration site, you'll need to enter your Oracle Service Cloud user name and password.

2 Click the *cp* link to display the folders.

3 Click the folder you want to display files for and continue drilling down through subfolders to display the file you want. When you click an individual file name, you are asked if you want to open or save the file.

Important Although you can edit files directly on the server, we recommend downloading files to your local workstation, making your changes locally, and then uploading them back to the server.

Page sets

The Customer Portal contains four sets of pages, each of which can be viewed from the Customer Portal Administration site.

- **Development files**—These are the files you work with when you want to make changes to your customer portal. They cannot be seen by your customers until you stage and promote them. The page and template files are in the */cp/customer/development/views* folder, and your custom widgets are in */cp/customer/development/widgets/custom*.
- **Staging files**—After editing your development pages, you can stage them, which means they are compiled and optimized to look and perform as they will on the production site. These files, located in */cp/generated/staging*, are not editable, nor are they visible to your customers.
- **Production files**—The production files, located in */cp/generated/production*, have been promoted from the staging site and are visible to your customers.
- **Reference implementation files**—These are the default, read-only files that make up the original customer portal reference implementation before you modify them. They are located in */cp/core/framework/views* and */cp/core/widgets*. If you've made changes to one of your development files that you don't want to keep, you can revert to the original file by copying the original from its reference implementation folder and pasting it to the appropriate subfolder in */cp/customer/development*, effectively overwriting your changes.

Review the folder structure here.

Folder structure

The Customer Portal incorporates an intuitive, easy-to-navigate file structure that lets you clearly identify the files you can edit. The main directory is called *cp*, and it includes the following main folders.

Note Some procedures in this documentation include in using a root */euf/* folder, which is correct even though you cannot see the folder in your WebDAV file structure.

- The core folder—All the non-editable Customer Portal files.
- The customer folder—The Customer Portal files you can edit, including all pages and custom widget files used on your development site, as well as assets (CSS, images, and themes) and error pages.
- The generated folder—All staged files and all files you have promoted to your production site.
- The logs folder— Logs for each staging, promoting, and rollback operation.

The core folder

The *core* folder contains all of the underlying Customer Portal code. You cannot add or remove files in this folder, nor can you edit any of the folder names or files.

- **assets**—The *core/assets* folder contains all web assets used by the Customer Portal Administration site, organized in the following subfolders: *debug-js, default, ejs, images,* and *thirdParty*. The *default* subfolder contains the CSS, images, and themes for the pages, templates, and widgets in the reference implementation. You can always use these files to view and revert to the reference implementation.
- **framework**—This folder is the core of the Customer Portal code base and contains all view files for the standard pages, templates, and view partials. It also contains files and information about version changes, controllers, libraries, models, and utilities.
- **widgets**—The *widgets* folder contains the files for all standard widgets, including controllers, views, CSS, images, logic, and YAML information files. You can use these files to the view the code for the standard widgets.

The customer folder

The *customer* folder contains all the Customer Portal files you can modify, organized in the following subfolder structure.

- **assets**—This folder contains the assets you can add, edit, and delete, including the subfolders *css, images,* and *themes.* Assets include all files for your customer portal that are not **pages**, **templates**, or **widgets,** including CSS, JavaScript, images, video, and other rich web media. You can add, remove, edit, and execute files and add subfolders to the *assets* folder. In addition to the *css* and *images* subfolders, the *assets* folder includes a *feedback* folder and the *default* subfolder that contains default versions of the asset files provided in the **reference implementation**. If you make changes to any of the assets and then decide to revert to the standard assets, you can copy them from the *default* subfolder.

With the exception of the *themes* subfolder, all other files in the *assets* folder are shared by development and production files. Even if you don't stage and promote your development pages, changes you make may affect the look and function of your production pages. For example, if production pages call a file in the *assets* folder and you modify that file in the course of your development work, the change will be immediately visible to your customers.

Note Although all other files in the */cp/customer/assets/* folder are shared between the production and development areas, files in the *themes* subfolder of */cp/customer/assets/* are used strictly by the development files. When you **stage** the development pages, these files are copied to a time-stamped folder in the staging directory and called from that folder. The themes you develop are kept in this isolated sandbox that cannot be accessed by production files. The themes are applied to your production site only when you **promote** the staged files into production.

- **development**—The *development* folder is your working folder, containing all templates and pages to create and update your customer portal. It contains the following subfolders.
  - ▷ **config**—Contains files to define model extensions, hooks that extend functionality, and mappings to convert page names from previous frameworks to the current one. You can edit these files but you cannot delete them. The file *hooks.php* lets you define a PHP array of functions that is executed before and after the API calls of your choice. The file *mapping.php* redirects page requests and defines parameter mapping when you are migrating from Customer Portal Framework Version 1 (previously referred to as the Classic or November 07 end-user interface).

- ▷ **controllers**—Contains a custom controller file, *AjaxCustom.php,* which provides sample code that you can edit. You cannot delete or rename this file. However, you may add other controller files to the *controllers* folder.
- ▷ **errors**—Contains two PHP scripts used to display customized error pages: *error_-general.php* and *error_php.php.* Besides customizing the appearance of these pages, you can also use information provided by the customer portal (which includes severity, message, file name, and line number of the error) to provide more specific information to customers than the standard 404 error page delivered by the web server. You can edit these files but you cannot add any files to this folder.
- ▷ **helpers**—Contains the *sample_helper.php* file and can be used for storing PHP utility function files. Refer to Creating custom helpers.
- ▷ **javascript**—Contains a single javascript file, *autoload.js,* which you can edit, although you cannot delete or rename this file. The file as it is configured in the reference implementation contains no code. When you add content to it, such as common functions and event declarations, it will be automatically loaded on every page. This lets you make common changes without having to manually load them on individual pages.
- ▷ **libraries**—Contains the *Sample.php* file and can be used for storing singleton PHP class files. Refer to Creating custom libraries
- ▷ **models**—Contains a *custom* subfolder, which contains two sample model files, *ExtendedSample.php* and *Sample.php,* and any models you create.
- ▷ **views**—Includes all display files that do not contain logic. The *admin* pages are used to display answer previews on the **Service Console**. The *pages* folder contains all customer portal pages. The *templates* folder includes *standard.php* used for the reference implementation pages, *mobile.php* for the mobile page set, *basic.php* for the basic page set, and *agent.php* for previewing a guide on the Oracle Service Cloud administration interface. The *Partials* folder contains custom view partials, files you can create to minimize code duplication. Refer to View partials.
- ▷ **widgets**—Contains a folder for custom widgets.

- **error**—Contains a *splash.html* page and the following static HTML pages that you can customize to provide additional information when the following error types are returned. These pages can contain only HTML elements and cannot contain any customer portal tags, such as widgets or fields. The default message is "There has been an error with your request."
  - ▷ *error404.html*—Displayed when an **HTTP 404 Not found** error code is returned.
  - ▷ *error413.html*—Displayed when an **HTTP 413 Request entity too large** error code is returned.

- *error500.html*—Displayed when an **HTTP 500 Internal server** error code is returned.
- *splash.html*—Displayed when your site is being upgraded. For information, refer to Splash page for maintenance mode.

The generated folder

The *generated* folder contains two subfolders: *production* and *staging*, which mirror the structure of the */cp/customer/development* subfolders. The *staging* subfolder contains the development files that you have staged through the Service Console or the Customer Portal Administration site. Your customers cannot see the files in the *staging* folder. The *production* subfolder contains the staged files that have been promoted into production. Those files are visible to your customers.

Both subfolders also have a *backup* subfolder that contains the original source code from the previous staging and promoting activities. The *staging* folder includes a *themes* subfolder that is copied from your development site when you stage the development pages. These folders allow the rollback function.

None of the files in the *generated* folder can be edited or deleted. Nor can you add any files.

The logs folder

The *logs* folder contains logs for every stage, promote, and rollback operation performed on your site as well as a log that documents changes made to Customer Portal files so you can see when and by whom the files were modified.

General file information

This section contains general information about working with your customer portal files.

Editing customer portal files

After you've configured Customer Portal functionality on the administration interface (explained in these instructions), most of the remaining procedures in this guide involve editing the files that make up your customer portal. These procedures generally begin by telling you to open the file and end with instructions to save the edited file.

That's a bit of oversimplification, so let's talk about what we're assuming in these cases. First, unless otherwise noted, we're always assuming that you're working with the **templates** and **pages** in your *development* folder. Once your development site functions as you want it to, you can **stage** the pages from the **administration interface** or the **Customer Portal Administration site**. The resulting staging environment represents what your customers will see when you **promote** the staged pages into production. But you can modify files all you want on your development site without worrying that your customers will see something you're not ready to make public.

Important You must enable MOD_CP_DEVELOPMENT_ENABLED before you can make changes to your development site, which means it must be enabled in order to make changes to the customer portal. If you do not enable this setting, your customer portal will be the out-of-the-box reference implementation, and it cannot be edited. Refer to Enabling the development area.

Before you can work with a development file, the recommended practice is that you download it from the server so you can edit it. Once you've downloaded the file to your workstation, you can make your edits in a text editor and save the file. After that, you'll need to upload it again to see your changes in a web browser. The download and upload processes are done through a WebDAV connection.

So whenever you follow a procedure for editing a file, remember that the procedure is really just one part—step 2—of the following overview for all file-editing procedures.

1 First, download the file to your workstation, where you can open it.

2 Edit the file as described in the procedure and save it.

3 Upload the file to the server.

4 View and verify your changes on your development site.

Query string parameters

The Customer Portal does not use query string parameters within URLs. When question marks are encountered in a URL, the content in the query string is ignored and the page is rendered as if the content is not in the URL. For example, if you use the following URL expecting to display only those answers associated with the product that has an ID of 55, what actually happens is that the Answers page will load normally without any search filters.

```
http://<your_site>/app/answers/list?p=55
```

To achieve your original intention, use the following code instead.

```
http://<your_site>/app/answers/list/p/55
```

Although they are not used in the URLs, you can still access the values stored in the query string. The PHP superglobal $_GET array is populated with any query string key/value pairs that are found. For example, in the previous URL, the $_GET array would contain `['p'] => 55`.

File naming conventions

When you create custom files for your customer portal, you can use upper and lowercase alphanumeric characters and the underscore symbol to name them. Paths are case insensitive, so a mix of upper and lowercase characters is allowed but ignored. Valid file names begin with a letter or an underscore and can be followed by alphanumeric or underscore characters.

Note The native WebDAV client in an English version of Windows does not handle file names that contain multi-byte characters.

CSS and JavaScript files are namespaced with an "rn_" prefix to avoid naming conflicts with any custom files you might create.

Framework versioning

Let's start by distinguishing between **migration** and **upgrading.** Migration is the process of moving from one version of the Customer Portal framework to a newer one. Upgrading is the process of moving from one release of Oracle Service Cloud to a newer release, such as upgrading from November 2012 to February 2015.

Because Framework Version 3.2 offers independence between the framework of your customer portal and your version of the Oracle Service Cloud application, your customer portal maintains all of your prior customization efforts even when you upgrade to newer versions of Oracle Service Cloud. The Customer Portal "floats" on top of the application, which means you can take advantage of new Oracle Service Cloud product releases without being required to adopt customer portal changes you may not be ready to undertake.

The versioning system of the Customer Portal framework lets you upgrade to newer versions of Oracle Service Cloud while leaving your customer portal site untouched because the Customer Portal version is independent of the Oracle Service Cloud release version. This gives you control to migrate to a new Customer Portal framework when it's convenient for your schedule rather than being forced to migrate because of your organization's upgrade to Oracle Service Cloud.

Note Widget versioning is handled separately from framework versioning and is discussed in Widget version management.

The Customer Portal uses three levels of versions: major, minor, and nano. Each version level implies a varying degree of change to the framework. The version numbering scheme follows a pattern such as 3.1.4.

- **major**—A major version change usually involves a fundamental change in a core component of the Customer Portal and will require work on your part to migrate from one version to the next. The current version, Framework Version 3.2, for example, is a major change to the Framework Version 2, previously known as the November 09 framework. (Framework Version 1 is also known as the Classic or November 07 end-user interface.) Major version changes are indicated by a a change to the first digit of the version number (for example, the "3" in 3.1.4). You have complete freedom to decide whether you want to migrate to the new major version or remain on your current version.
- **minor**—A minor change is not backward compatible. These changes may or may not affect you, depending on the area and extent of the change and how it impacts your customizations. Still, you have the choice of opting in to the change rather than risking the possibility of breaking any of your custom code through an automatic update. Minor version changes are indicated by the second digit in the version number, for example, the "1" in 3.1.4.
- **nano**—Nano changes are fully backward compatible so theses changes will be applied automatically to your customer portal code with no impact to your site. This means you will always have the most current nano version of the framework being used by your customer portal, giving you the benefit of enhancements and bug fixes without having to do any work to consume them. Nano changes are indicated by the third digit of the version number, that is, the "4" in 3.1.4.

If your installation of Oracle Service Cloud is a new installation, it includes Customer Portal Framework Version 3.2. If you're upgrading from an earlier version of Oracle Service Cloud, Framework Version 3.2 will be available for you to migrate to whenever you're ready, but your customer portal site will continue to use whatever framework version you're currently using.

Important Although widget versions are not tied to framework versions (there is not a specific set of widgets that must be used with a specific framework), widgets do have framework dependencies. So it's possible that some of the widgets you used when your customer portal was on Framework Version 2 will not work with Framework Version 3.2. If any of your existing widgets are not compatible with the new framework version you are migrating to, you will see a warning message on the Customer Portal Administration site during the migration process.

Versioning in the development, staging, and production areas

The Customer Portal Administration site clearly defines the version of framework and widgets being used by the development, staging, and production modes of your customer portal. You'll be able to identify out-of-date versions as well as understand the differences between that version and the current version.

Each area of your customer portal can use a different version of framework. For example, your development site probably contains the newest framework, which you customize and test before staging it. Then once you've confirmed that your staged pages are correct, you can promote them to your production site where they will have public visibility.

Dependency checks are run when you select a version update to ensure that your Oracle Service Cloud application supports the selected customer portal framework. Dependency checks also let you know if any of your current widgets must be migrated in order to function on the newer framework.

You will see only the version being used for your development, staging, and production areas if your installation of the Customer Portal is new. If you have migrated from a previous framework, that version (Framework Version 1 or 2) will also be displayed.

Framework versions

The Recent Changes tab on the Framework Versions page of the Customer Portal Administration site will provide details of the changes from one framework version to another to help you decide whether you want to use the newer version. Refer to Framework tab for information about the Framework Versions page.

Overview of Oracle Service Cloud elements

If you are not an **administrator** or have not previously worked with the Oracle Service Cloud application, this section provides a brief overview of the elements you can use to create your organization's customer portal.

The knowledge base is the term we use to describe how information in the database is presented. This is the information staff members see on the **agent desktop** and customers see on your customer portal. Some of the information in the knowledge base includes the following.

- **Contacts**—Each of your customers has a contact record in the knowledge base that includes basic information, such as name, email address, and phone number. Contact records also include information about any support issues or questions the customer has submitted as well as any other information your organization asks customers to provide.
- **Answers**—Answers are the heart of your knowledge base. Whether your organization calls them FAQs, help topics, or something else, an answer is the information in the knowledge base that provides a solution to a common customer support question. Your customers can search for answers to their questions, and you can create new answers from questions your customers commonly submit.
- **Incidents**—Incidents are created automatically when your customers submit a request for help through the Ask a Question page of your customer portal or when they provide feedback on your site or a specific answer.
- **Reports**—A report is simply a list of records. The application offers a full range of **standard reports**, and you can also create **custom reports**. The list of answers that is returned when a customer conducts a search is simply a report that has been filtered on the search terms. Customer Portal reports are listed on the **administration interface** and can be accessed by clicking the Analytics button and then opening the Reports explorer to find Public Reports/Service/Views–Service/Customer Portal.
- **Configuration settings**—You can accomplish most of the configuration of your customer portal by editing code for the templates, pages, and widgets that make up your site. There are, however, certain properties that are configured through the administration interface using configuration settings that define behavior on your customer portal. Refer to Defining configuration settings.
- **Message bases**—A message base is an editable text string that lets you customize headings, labels, buttons, and other text on your customer portal. When you reference a message base by its standard name in a line of code, the page automatically displays the text of the message base.

- **Data dictionary**—The data dictionary lists the available database tables and fields that can be used for many input and output widgets. You can also use the Business Objects link on the Customer Portal Administration site (Framework > Business Objects) to look up field and table names for contacts, answers, and incidents.

Editing message bases

Many widgets and page headings use message bases, which are unique text strings that support internationalization. You can identify message bases in Customer Portal code because they use an `rn:msg#...#` tag. The label between the # symbols points to the specific message base to be used. When you reference a message base in the code, the page automatically displays whatever text is associated with it.

For example, when customers are logged in, the template code that generates the Welcome message is `#rn:msg:WELCOME_BACK_LBL#`. You can edit the message that appears (in this case, it is simply the word "Welcome") in one of three ways.

- **Change the value of the message base**—Every place in the code that calls the message base will then use the new value you defined for the message base.
- **Reference a different message base**—If another message base uses the language you want, you can reference that message base instead of the one that appears in the default code.
- **Type whatever message you want**—If you want the change to appear only once and if internationalization is not a concern, you can simply type whatever you want into the code for the page or widget.

We'll assume for the sake of this example that you want to change the `#rn:msg:WELCOME_BACK_LBL#` label that is called by default in the template code.

Note Message base labels appear in uppercase text with the words separated by an underscore character.

To change the value of a message base

1. Log in to Oracle Service Cloud.
2. Click the Configuration button.
3. Double-click Message Bases under Site Configuration. The Search window opens.
4. Type `welcome` in the Text field and click Search.

5 Locate WELCOME_BACK_LBL in the list of message bases and type the new message in the Text field.

6 In the Message column of the WELCOME_BACK_LBL row, type whatever you want the message base to say.

7 Click the Save button on the ribbon.

Now, whenever you refer to the WELCOME_BACK_LBL label in customer portal code (or anywhere else it might be used on the **Service Console**), instead of saying "Welcome," it uses your new definition for the message base.

To reference a different message base

1 Log in to Oracle Service Cloud.

2 Click the Configuration button.

3 Double-click Message Bases under Site Configuration. The Search window opens.

4 Enter search criteria to help you find the message base you want to use as a replacement. (See Searching message bases if you need help.)

5 When you have located the replacement message base you want, note its name.

6 Open the *standard.php* file in the */views/templates* folder.

7 Locate the following line of code.

```
#rn:msg:WELCOME_BACK_LBL#
```

8 Edit the code with the name of the message base you want to use as a replacement. Your code will resemble the following.

```
#rn:msg:WELCOME_TO_RIGHTNOW_LBL#
```

9 Save *standard.php*.

To type a new message

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
#rn:msg:WELCOME_BACK_LBL#
```

3 Type the new message, replacing `#rn:msg:WELCOME_BACK_LBL#` with whatever text you want to appear. Your code will resemble the following.

```
Welcome to the Global Wireless Support Site
```

Note If you're typing an original message, you don't need to use quotation marks or type #rn:msg: in the code.

4 Save *standard.php*.

Customer Portal reports

The following site reports track visits to your customer portal. You can find these reports in the Reports explorer (often found in the Analytics navigation list) under Public Reports > Service > Site Reports > Customer Portal.

- **Referring Sites**—This report provides a list of sites that referred customers to your customer portal and includes a percentage of customers referred from each site.
- **Visits by Browser**—This report shows the percentage of visits to your customer portal by browser type so you can identify the browsers your customers are using.
- **Visits by Browser and Operating System**—This report shows a table of browser and operating system combinations and the percentage of visits by each combination.
- **Visits by Operating System**—This report shows the percentage of visits to your customer portal by operating system to identify which operating systems are used most frequently by your customers.
- **Visits by Page Set**—This report shows the Customer Portal page set mapping usage by percentage of sessions that accessed each page set: standard, mobile, and any other page set defined by page set mapping on the Customer Portal Administration site. Drilling down lets you view browsers and operating systems used to access a page set.
- **Visits by Time**—This report provides the number of visits that occurred during each defined unit of time as well as a percentage of visits per time unit.

Refer to Visit information for an explanation of visits, including how to maintain data when linking to another page within a single customer visit.

Visit information

A visit is defined as the time a customer spends on your support site, beginning when a customer who does not already have an open visit navigates to a page on your site through a browser. A visit ends under any of the following circumstances.

- The customer is inactive for a time longer than that specified by the VISIT_INACTIVITY_TIMEOUT **configuration setting**. The default value for the setting is 30 minutes. (Learn how to edit configuration settings here.)
- The length of the customer's visit has exceeded the time specified in VISIT_MAX_TIME. The default value for the setting is four hours.
- The customer closes the browser.
- The customer's browser does not have cookies and the customer navigates away from your customer portal and then returns.

Note Customer visits that result from clicking the PollingSyndication widget are tracked as **Oracle RightNow Feedback Cloud Service** visits, not as Customer Portal visits. For information about this **syndicated widget**, refer to Offering customers a survey.

Visit management and click tracking

By default, visit management and click tracking are handled for you. However, when you create custom files, you must manually define click tracking with the Clickstream page meta tag. When you make changes to custom files, you may not see the results you expect within **Oracle RightNow Analytics Cloud Service** because your changes could affect this reporting. The best practice is to test your changes with reporting to ensure your results are reflected correctly.

Passing visit information in custom pages

Within all links on the standard pages and widgets, **visit** information from cookies is automatically appended. However, if cookies are disabled (either because you have set CP_COOKIES_ENABLED to No or the customer's browser has disabled them), a URL is used to pass visit and profile information through the application.

Note The HTTPOnly flag is set for all cookies.

To pass visit information in links to custom pages

When you generate new links to custom pages, pass this visit information by adding `#rn:session#` at the end of each page URL.

Important If you do not add the tag to a link and cookies are disabled, customers generate a new visit ID every time they click a link. Additionally, if the customer is logged in, they are logged out each time they click a link that does not pass the visit information. To prevent this from occurring, you must make changes to maintain the visit data in links.

Modification of cookie information

If you disable cookies, **visit** data is determined by URL parameters, which you must define in individual lines of code to prevent new visits from being initiated each time the customer navigates away from a page. Cookies are set by default.

To turn off cookies on customer browsers

1 Log in to Oracle Service Cloud.

2 Use the procedure described in To locate and edit configuration settings to locate CP_COOKIES_ENABLED under RightNow User Interface > Customer Portal > Login.

3 Click the drop-down menu in the Value field and select No.

4 Click the Save button on the ribbon.

Next, review information about maintaining visit data in links when cookies are turned off.

Maintaining visit data in links

Pages, templates, and widgets can modify cookie header information in both the development and production pages. They can call the `setcookie()` PHP function or interact with and add to the existing visit data by using the `$CI>session>setSessionData($data)` function.

If a customer's browser does not have cookies enabled and the customer clicks a link on a page, visit data can be lost. You can prevent this by editing the link in one of the following ways to maintain visit data when cookies are turned off.

- **PHP links**—Add `\RightNow\Utils\Url::sessionParameter()` to the end of your link, as shown in the following example.

```
link .= \RightNow\Utils\Url::sessionParameter()
```

- **JavaScript links**—Send the result of this function to the JavaScript and append it to the link. If you are using a widget, you can create a variable such as the following.

```
$data['js']['session'] =
\RightNow\Utils\Url::sessionParameter()
```

Then reference the variable in the logic file.

```
link + data.js.session
```

Note If cookies are enabled, this variable is blank. If cookies are disabled, the variable contains the string to append to the URL, for example, `"/session/L3NpZC9mMU9ERGRhag=="`.

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Configuring Oracle Service Cloud for the Customer Portal

Before you get started working with **pages** and **widgets**, you'll want to do some basic configuration for the Oracle RightNow Customer Portal Cloud Service (Customer Portal) on the **administration interface**. You'll need to assign appropriate permissions to staff members who will be working with your customer portal. You'll also want to review the **configuration settings** to be sure you don't need to change any of the defaults. Additionally, there are configuration options you'll want to set up for features that are accessed through your customer portal, such as search options, **SmartAssistant**, and **related answers**. Finally, if you want to let your customers search for external documents in addition to the answers that are in your knowledge base when they search on your site, you can set up **web indexing**.

Important You must enable MOD_CP_DEVELOPMENT_ENABLED before you can make changes to your development site. If you do not enable this setting, you cannot make changes to your customer portal, and your customers will see the default reference implementation with no customization. Refer to Enabling the development area.

Assigning permissions

All of your staff members have staff accounts that have been set up by you or your **administrator**. Every staff account is assigned a **profile**, which is a set of permissions for working on the administration interface.

Because you want to control who can modify your customer portal, you can define profile permissions to determine who can edit, stage, and promote the pages into production. You can grant the following types of permissions through a staff member's profile, including your own, if you have administrative privileges.

- CP Edit permission lets staff members with this profile access the **Customer Portal Administration site** and edit customer portal pages in the development area using WebDAV. Staff members with CP Edit permission, but not CP Stage or CP Promote permission, cannot access the Customer Portal editor on the **administration interface**. Nor can they access the Deploy tab on the Customer Portal Administration site.
- CP Stage permission lets staff members copy the development files to the staging area. Staff members with CP Stage permission but not CP Promote permission will not have the Promote and Rollback buttons enabled on the Customer Portal editor on the administration interface.
- CP Promote permission lets staff members promote the pages from the staging area to the production area where customers can view them.

Note Staff members who have CP Stage permission automatically have CP Edit permission as well. Staff members with CP Promote permission automatically have CP Edit and CP Stage permissions.

First, decide which staff members need edit permissions. This group may include your administrator and the designers or developers who create and maintain your customer portal. Then either edit an existing profile or create a new profile (see To add or edit a profile if you need help) and edit the profile to assign customer portal permissions.

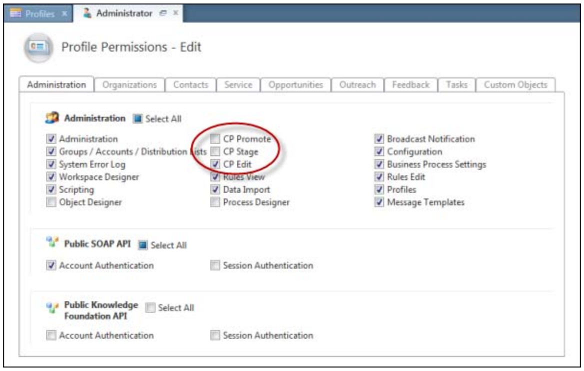
To assign permissions for your customer portal

1. Log in to Oracle Service Cloud.
2. Click the Configuration button on the **navigation pane**.
3. Double-click Profiles under Staff Management. The report opens on the content pane.
4. Double-click the profile you want to assign permissions to. The Profiles editor opens.
5. Click the Permissions button on the ribbon. The Administration tab is displayed by default.

6 To give staff members with this profile full permission to work on your customer portal (which includes editing, staging, and promoting pages to your production site), select the CP Promote check box. The CP Stage and CP Edit check boxes are selected automatically.

7 To give staff members with this profile permission to edit and stage your customer portal pages, but not promote them, select the CP Stage check box. The CP Edit check box is selected automatically.

8 To give staff members with this profile permission to edit your customer portal pages using WebDAV, but not to stage or promote them, select the CP Edit check box. Staff members with this permission can also access the Customer Portal Administration site.



9 Click the Save and Close button on the ribbon.

Defining configuration settings

The Customer Portal gives you complete flexibility in creating **templates**, **pages**, and **widgets** that meet the needs of your organization. Most of this configuration is accomplished by editing the PHP and JavaScript files that comprise your customer portal.

However, other configuration must occur on the **administration interface**. You'll use **configuration settings** to define common features of your customer portal. In addition, configuration settings let you control functionality on specific pages, although you'll configure the pages themselves by editing the files for the template, pages, and widgets.

Working with configuration settings

This section contains procedures for modifying several sets of configuration settings related to your customer portal. The procedures assume that you're familiar with locating and editing configuration settings, as described in the following procedure. (For more detailed information about searching for and editing configuration settings, refer to Searching configuration settings.)

To locate and edit configuration settings

1 Log in to Oracle Service Cloud.

2 Click the Configuration button on the **navigation pane**.

3 Double-click Configuration Settings under Site Configuration. The Search window opens.

4 To open a specific configuration setting, type its name in the Key field and click Search.

5 To display all configuration settings, click the Search button. The Configuration Settings editor opens.

Tip To avoid opening the Search window in future procedures, click the Save As Defaults button before you click Search. You can always refine your search using the filters on the report instead of the filters in the Search window.

a If you know the name of the setting, type it in the Key field and click Search.

Tip You can also enter just the first few letters and append either * or % to serve as a wildcard before clicking Search. All settings that begin with the letters you typed will be returned in the report.

b If you know the location of the setting, expand the folder hierarchy until the tree displays the folder containing the setting. Click the folder and then double-click the setting you want to edit.

Tip Many configuration settings for the Customer Portal are located in one of the subfolders under RightNow User Interface > Customer Portal.

6 In the Values table for the row that contains the Configuration Base (interface name), click the Value field.

7 Type or select the new value.

After you click the Save button on the ribbon, the new value is underlined or it displays a small triangle in the upper left corner of the field to indicate a change from the default value.

Enabling the development area

Important You must enable MOD_CP_DEVELOPMENT_ENABLED before you can make changes to your development site. If you do not enable this setting, you cannot make changes to your customer portal, and your customers will see the default reference implementation with no customization.

To enable the development area

1 Use the procedure described in To locate and edit configuration settings to locate MOD_CP_DEVELOPMENT_ENABLED. (The setting is in the Common > Oracle Products > Modules folder.)

2 In the row for the configuration setting, click the drop-down menu in the Value column and select Yes.

3 Click the Save button on the ribbon.

Now that you have enabled your development area, you can begin editing other configuration settings that affect your customer portal.

Common configuration settings

Before you walk through the steps of configuring specific pages and features for your customer portal, you'll want to review the **configuration settings** that set up common features. These settings let you specify URLs for various pages, define cookie expiration, validate email formats, and define other functionality.

Important Besides impacting your development pages, changes you make to these configuration settings can also affect the reference implementation pages. As a result, the behavior of the reference implementation may not correspond to the descriptions in the online documentation if you have changed the default configuration settings.

Note, however, that none of the URL configuration settings, described in Modifying page settings, modify the reference implementation. The reference implementation always uses the default values for these settings.

Tip You can probably leave all these settings at their default values to get started, especially if you haven't yet added any custom pages. You can come back later and update these if, for example, you create your own login form or other pages.

Modifying page settings

Important None of the changes you make to the page configuration settings modify the **reference implementation**, which always uses the default values for these settings.

To modify page settings

1 Use the procedure described in To locate and edit configuration settings to locate the list of page settings under RightNow User Interface > Customer Portal > Pages.

2 To change any of the default pages, which are defined in the following table, click the Value field and type the name of the new page in the field.

Table 361: Customer Portal Pages Configuration Settings

Setting	Description	Default
CP_404_URL	The page that is loaded when customers navigate to a non-existent page where a 404 error occurs.	error404
CP_ACCOUNT_ASSIST_URL	The page where customers retrieve their user name and password.	utils/account_assistance
CP_ANS_NOTIF_UNSUB_URL	The page where customers unsubscribe from an **answer update notification**.	account/notif/unsubscribe
CP_ANSWERS_DETAIL_URL	The page that displays answer details.	answers/detail
CP_CHANGE_PASSWORD_URL	The page where customers can change their password.	account/change_password
CP_CHAT_URL	The page where customers can submit a request for a **chat session**.	chat/chat_launch
CP_HOME_URL	The home page for your customer portal.	home
CP_INCIDENT_RESPONSE_URL	The page that displays individual questions submitted by customers when they select one from a list of all their questions.	account/questions/detail
CP_LOGIN_URL	The page used to log in to your customer portal.	utils/login_form
CP_WEBSEARCH_DETAIL_URL	The answer details page used to display results from the External Search page.	answers/detail

3 Click the Save button on the ribbon.

Modifying security, login, and syndicated widget settings

For a discussion about session data security and recommended practices, refer to Session data. For a discussion about password controls, refer to Password protection.

Refer to the following sections for additional information about security practices.

- Security-Related Configuration Settings.
- Developing a Security Plan.
- Recommendations for Security-Related Configuration Settings.

To specify outside hosts allowed in a redirect URL parameter

1 Use the procedure described in To locate and edit configuration settings to locate CP_REDIRECT_HOSTS under Common> General > Security.

Note By default, the Value field is blank, which prevents redirection to any outside hosts from a redirect URL parameter.

2 To allow all outside hosts, type * in the Value field.

3 To specify selected outside hosts, enter a comma-separated list of allowed domain names with wildcards (for example, *.oracle.com).

Note You do not need to enter redirects within your interface domain because they are allowed implicitly. Nor do you need to enter redirects to hosts specified in related configuration settings, such as COMMUNITY_BASE_URL.

4 Click the Save button on the ribbon.

To modify login and syndicated widget settings

1 Use the procedure described in To locate and edit configuration settings to locate the configuration settings under RightNow User Interface > Customer Portal > Login.

2 To change any of the default values, defined in the following table, click the Value field and type the new value in the field.

Table 362: Customer Portal Login Configuration Settings

Setting	Description	Default
CP_CONTACT_LOGIN_REQUIRED	If enabled, Customer Portal will require a contact to be logged in when accessing most pages or controls. Notable exceptions include login, password recovery, account creation, and PTA. If your site is password-protected, you should enable this setting. You should also enable it if only the answer pages are password-protected. If you enable this setting, you can override it for individual pages by setting the page meta tag *login_required* attribute to false. **Note:** Changing the value of this setting affects only the development mode. You must stage and promote your customer portal files for this setting to take effect on your production site. To view the value of the setting in the development, staging, and production environments, click the Settings tab on the Customer Portal Administration site and select Sandboxed Configurations. Refer to Sandboxed configurations.	No
CP_COOKIES_ENABLED	Defines whether the Customer Portal tries to set cookies on a customer's browser.	Yes
CP_FORCE_PASSWORDS_OVER_HTTPS	Enabled by default, this setting requires all logged in activity to occur over HTTPS to provide protection from password theft, phishing, and other security threats. When enabled, logged in users will interact entirely on HTTPS. **Note:** If the response to an incident submitted on the customer portal contains an HTTP link to an image, your customer will be prompted to accept the content since the link is not secure.	Yes

Table 362: Customer Portal Login Configuration Settings (Continued)

Setting	Description	Default
CP_LOGIN_COOKIE_EXP	The time before the Customer Portal login cookie expires. Set the value to -1 if you want the cookie to expire when the browser is closed. Set the value to 0 if you never want the cookie to expire.	60 minutes
CP_MAX_INVALID_LOG-INS	Defines the total number of consecutive incorrect logins a customer can attempt before the contact record is disabled. A value of 0 means there is no limit.	10
CP_MAX_LOGINS	Defines the total number of customers that can be logged in to your support site at any given time. The default is 0, which means there is no limit. If you set a value for this setting, you must also set a non-zero value for CP_LOGIN_-MAX_TIME.	0
CP_MAX_LOGINS_PER_-CONTACT	Defines the total number of active, concurrent logins a customer can be logged in with. The default is 0, which means there is no limit. If you set a value for this setting, you must also set a non-zero value for CP_LOGIN_MAX_TIME.	0

3 To restrict what external hosts can install syndicated widgets, type a comma-separated list of domain names using wildcards in the WIDGET_INSTALLATION_HOSTS setting under RightNow User Interface > Customer Portal > Syndicated Widgets. For example, you might type the following in the setting's Value field.

```
*.example.com,*.example.net,*.example.org
```

4 Click the Save button on the ribbon.

Modifying general customer portal settings

To modify general settings that affect your customer portal

1 Use the procedure described in To locate and edit configuration settings to locate the general settings you want to change.

2 To change any of the default values, defined in the following table, click the Value field and type the new value in the field. (The settings all appear under RightNow User Interface.).

Table 363: General Customer Portal Configuration Settings

Setting	Description
General > End-User EU_CUST_PASSWD_ENABLED	Enables the display of the Password field on the customer portal. The default value is Yes. To prevent the Password field from displaying on the Log In and Create Account pages, set the value to No and edit the message bases that refer to passwords.
General > Security VISIT_INACTIVITY_TIMEOUT	Defines the amount of time a customer can be inactive on the customer portal without needing to log in again. The default is 30 minutes.
General > Security VISIT_MAX_TIME	Defines the maximum amount of time a customer **web visit** can last before a new visit and a new session ID are generated. The default is 240 minutes (four hours).
End-User Interface > General EU_SLA_VISIBLE	Allows **SLA** information to be visible in email responses. The default is No.

3 By default, when customers submit questions on your customer portal, any replies are sent to every email address on file for that customer. To send replies only to the address specified on the Ask a Question page, change the default value of OE_SVC_SENDMAIL_SINGLE_ADDRESS, located under Common > General > Outgoing Email, to Yes. (For information, see Single-send email response logic.)

4 Click the Save button on the ribbon.

Open login configuration settings

Before the Customer Portal open login can work with Facebook, Twitter, and Google APIs, you must first register with the sites. After registering, you have the information you need to set values for each of the following configuration settings. These settings provide the application IDs and secret keys for requesting customer credentials for authentication. By default, all of these values are blank.

- FACEBOOK_OAUTH_APP_ID
- FACEBOOK_OAUTH_APP_SECRET
- TWITTER_OAUTH_APP_ID
- TWITTER_OAUTH_APP_SECRET

- GOOGLE_OAUTH_APP_ID
- GOOGLE_OAUTH_APP_SECRET

The Login page will not display the logos associated with Facebook, Twitter, and Google unless these configuration settings contain values.

To register with Facebook

1 Go to the Facebook Developers page.

Note If you are not logged in to your Facebook account, the login page opens. After you have logged in, the Apps page opens.

2 Click the Create a New App button in the upper right corner and follow the Facebook requirements until you see the App ID and App Secret values.

3 Enter values for the FACEBOOK_OAUTH_APP_ID and FACEBOOK_OAUTH_APP_SECRET configuration settings.

   a Use the procedure described in To locate and edit configuration settings to locate the settings under RightNow User Interface > Open Login > OAuth Apps.
   b Click the Value field for FACEBOOK_OAUTH_APP_ID and type the App ID from the Facebook page in the field.
   c Click the Value field for FACEBOOK_OAUTH_APP_SECRET and type the App Secret from the Facebook page in the field.
   d Click Save.

4 On the Facebook page, enter your site's domain in the App Domain field.

Note This must be a valid domain because Facebook uses it to verify that the OAuth requests come from the application. If the domain is not correct, authentication will fail.

5 Click the Website With Facebook Login line under the heading **Select how your app integrates with Facebook.** A site URL field opens.

6 Type your site's URL in the field.

7 Click the Save Changes button.

To register with Twitter

1 Go to the Twitter Create an Application page.

Note If you are not logged in to your Twitter account, the sign in page opens. After you have logged in, the Create an Application page opens.

2 Type the application name and description in the fields.

3 Type the URL for the home page of the application in the Website field.

4 Type a URL in the Callback URL field. This URL is overwritten by the customer portal, so the only requirement is that it not be a URL from your customer portal site. Any other URL will work.

5 Select the check box to indicate your agreement with the terms of service.

6 Type the text displayed in the CAPTCHA.

7 Click the Create Your Twitter Application button. The application details page opens, displaying the consumer key and consumer secret values.

8 Enter values for the TWITTER_OAUTH_APP_ID and TWITTER_OAUTH_APP_SECRET configuration settings.
   - a Use the procedure described in To locate and edit configuration settings to locate the settings under RightNow User Interface > Open Login > OAuth Apps.
   - b Click the Value field for TWITTER_OAUTH_APP_ID and type the consumer key from the Twitter Application Details page in the field.
   - c Click the Value field for TWITTER_OAUTH_APP_SECRET, type the consumer secret from the Twitter Application Details page in the field.
   - d Click Save.

To register with Google

1 Go to the Google Developers Console.

Note If you are not logged in to your Google account, the login page opens. After you have logged in, the Google Developers Console page opens.

2 Click the Create Project button, enter a name for the project, accept the terms of service, and click Create.

3 When the project has been created, click APIS & AUTH in the left sidebar, and then click Credentials.

4 Click the Create a New Client ID button.

5 Select Web Application if it is not already selected.

6 Make no changes to the Authorized JavaScript Origins section.

7 In the Authorized Redirect URI section, type the following, substituting your site name for `site.com.`

```
https://site.com/ci/openlogin/oauth/callback/google
```

8 Click Create Client ID and note the Client ID and Client Secret values.

9 Enter values for the GOOGLE_OAUTH_APP_ID and GOOGLE_OAUTH_APP_SECRET configuration settings.

   a Use the procedure described in To locate and edit configuration settings to locate the settings under RightNow Common > 3rd-Party Applications > URLs.

   b Click the Value field for GOOGLE_OAUTH_APP_ID and type the Client ID from the Google page in the field.

   c Click the Value field for GOOGLE_OAUTH_APP_SECRET and type the Client Secret from the Google page in the field.

   d Click Save.

Modifying settings for pages on your customer portal

A big part of configuring the look and feel of your customer portal involves configuring the specific components of each page by editing the files (**template**, **pages**, and **widgets**) that comprise the page. However, some general **configuration settings**, accessed through the **administration interface**, also control functionality. For example, these settings let you configure searches, including how search results are returned, whether suggested searches are enabled, and whether search text feedback is given to customers.

You can configure the following pages.

- Answers page—Configuration options include **answer solved count**, search results, **search-field weighting**, suggested searches, search text feedback, the aliases word list, **search priority words**, and **stopwords**.
- Answer details page—The configuration option for the answer details page is the **privileged answers** feature.

- Ask a Question page—You can configure **SmartAssistant** suggested answers for the Ask a Question page as well as specify an expiration time during which the form must be submitted.
- Your Account pages—Configuration options include disabling an email link to a customer's incident in confirmation emails, letting customers see all incidents from their organization, defining the length of time an answer subscription stays active, and allowing duplicate email addresses.
- Log In, Create an Account, and Change Password pages—You can configure the security and strength of customer passwords.

Important All procedures regarding editing configuration settings are performed on the administration interface.

Configuring the Answers page

By default, the Answers page lists the answers having the highest **solved count**. The list, which is a report, includes the summary for each answer, the beginning of the answer text, and the date the answer was last updated. Customers can use the search field, including the Advanced Search option that lets them select **products** and **categories**, to find answers to their specific question. Clicking an answer in the list takes customers to the answer details page for that answer.

Note If the beginning of an answer's text contains a link to another answer, the link is not active on the Answers page, but it is active on the answer details page.

You can configure several aspects of the Answers page using configuration settings.

- General search options—Options include whether privileged access is enabled and the maximum year for date searching.
- Answer solved count—You can configure how quickly an answer's solved count ages and how the weighting between long-term and short-term solutions affects the solved count.
- Search results—Configuration options include setting answer filtering thresholds and limits on answers that are returned from a search.
- Customized search-field weighting—These settings let you assign variable weights to different parts of an answer to define how an answer's fields influence its score.
- Suggested searches—You can configure suggested searches that suggest search terms to your customers based on their entries in the search field.

- Search term feedback—You can disable the default search term feedback feature, which provides information to customers regarding misspellings, stopwords, or words that are not found in the knowledge base.
- Aliases word list—You can add words to the *aliases.txt* file to link terms so that entering one term returns the results for all terms that are defined as aliases (synonyms).
- Search priority words—When you use search priority words, you ensure that specific answers are always returned when an associated search term is entered.
- Stopwords—Stopwords let you add words to the list of those that are excluded from indexing and searching.

General search options

The following general search options can be configured.

Enabling privileged access to answers

Customer access to **privileged answers** is disabled by default. If you want to allow privileged access answers, enable the setting using this procedure.

To enable privileged access to answers

1. Use the procedure described in To locate and edit configuration settings to locate ANS_PRV_ENABLED under RightNow User Interface > End-User Interface > Answers.
2. Click the drop-down menu in the Value field and select Yes.
3. Click the Save button on the ribbon.
4. To configure the privileged access option now, click here.

Setting the maximum year for drop-down menus

By default, any drop-down date menus you add to your customer portal will display the current year as the highest year option. If you want to change the latest year listed in the menu, use the following procedure.

To set the maximum year for date drop-down menus

1. Use the procedure described in To locate and edit configuration settings to locate EU_-MAX_YEAR under Common > Knowledge Base > Answer Search.
2. Set the maximum year.

a To set the maximum value to the current year, clear any existing value so the Value field is blank.
b To set a specific year, type that year in the Value field.
c To set an offset (for example, five years from this year), type the offset value in the Value field. In this example, type `+5`.

3 Click the Save button on the ribbon.

Learn how to add a date field to a page or continue configuring the Answers page.

Adding a date field on a page

The following example assumes that you want to add a custom field where customers can tell you how quickly they need an answer to a question they submit on the Ask a Question page. Because that is not a standard incident field, you'll first need to add it as a **custom field**. Then you'll add the custom field to a page.

To add an incident custom date field

1 Click the Configuration button on the **navigation pane**.

2 Double-click Custom Fields under Database. The Custom Fields tree displays on the content pane.

3 Click Incident in the Custom Fields tree.

4 Click the New button on the ribbon to display the editor.

5 In the Name field, type `Answer Needed By`. This is the label that appears on the Ask a Question page.

6 Click the Data Type drop-down menu and select Date Field (or Date/Time if you want to let customers enter a time as well as a date).

7 In the Column Name field, type `answer_needed`. This is the field's name in the database.

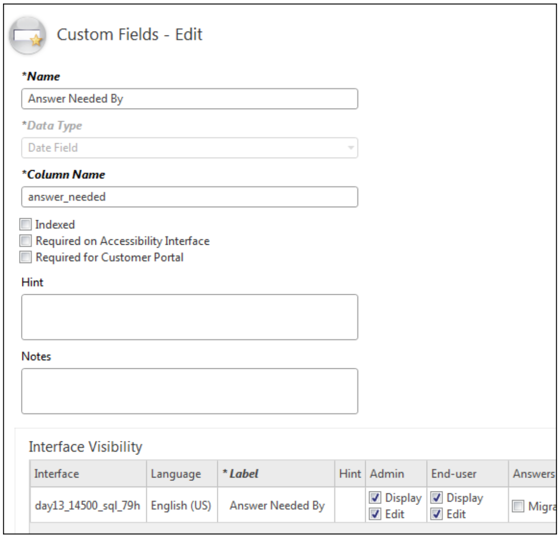
Note The Column Name can include alphanumeric characters and the underscore symbol. It cannot contain spaces.

8 To require customers to complete the field, select the Required for Customer Portal check box.

9 If the Visibility check boxes for End-user Display and Edit are not selected, select both of them.

10 Click the Save and Close button on the ribbon.

Click to view



Adding a custom field to a page

By default, the Ask a Question page displays all incident **custom fields**, so it will display any custom date field. But you might have other custom fields you don't want to display on the Ask a Question page, or you may need to specify parameters for a specific custom field. In that case, you can delete the code that adds all the custom fields and then add code to add the date field back in. The following procedure describes how to do this.

To add a date widget to the Ask a Question page

1 Open the *ask.php* file in the */views/pages* folder.

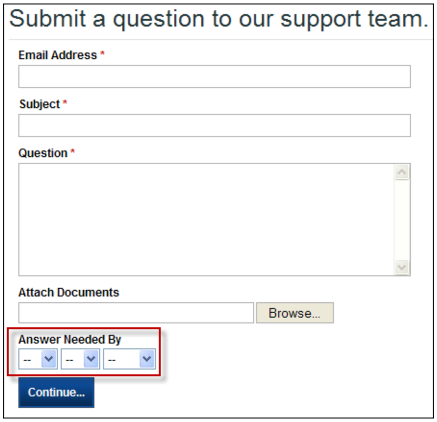
2 Delete the following line of code and leave a blank line where it was.

```
<rn:widget path="input/CustomAllInput"
table="Incident"
always_show_mask="true"/>
```

3 Add the following code to the blank line.

```
<rn:widget path="input/DateInput"
name="Incident.CustomFields.c.answer_needed" />
```

4 Save *ask.php*.



Configuring answer solved count

The Solved Count feature collects information about the usefulness of answers in your knowledge base and uses this data to rank the answers. The feature compiles explicit and implicit data based on how customers use your site.

Explicit data is gathered when customers respond to “Was this answer helpful?” on the answer details page.

Implicit data is compiled when customers view answers. The solved count increases or decreases based on customer activity. An answer’s solved count also increases when it is a SmartAssistant-suggested answer that agents use to respond to an incident.

By default, customer influence on an answer’s ranking accounts for 75 percent of an answer’s score, and agents affect 25 percent. Over time, an answer’s solved count gradually declines as it is viewed less frequently.

You can configure the solved count in these ways.

To define the number of days the solved count is not aged

1 Use the procedure described in To locate and edit configuration settings to locate ANS_NEW_INC_DURATION and ANS_UPD_INC_DURATION under RightNow User Interface > End-User Interface > Answers.

2 To change the number of days a new answer's solved count is not aged, type a value in the Value field for ANS_NEW_INC_DURATION. This is the number of days the answer will be considered new.

3 To change the number of days an updated answer's solved count is not aged, type a value in the Value field for ANS_UPD_INC_DURATION. This is the number of days an answer will be considered updated.

4 Click the Save button on the ribbon.

To define how quickly the solved count ages

1 Use the procedure described in To locate and edit configuration settings to locate SA_AGE_FREQ under Agedatabase > Batch Processing > SmartAssistant.

2 Type a value in the Value field. To disable aging, type 0. To set aging to its maximum value, type 400. Or enter any value between 0 and 400, based on the setting description.

3 Click the Save button on the ribbon.

To specify weighting between long-term and short-term solved counts

1 Use the procedure described in To locate and edit configuration settings to locate SA_-SOLVED_WEIGH_PREF under Common > Knowledge Base > Answer Search.

2 Type the value in the Value field. Refer to the Description field for the options.

3 Click the Save button on the ribbon.

Configuring search results

There are several ways to configure how answers are returned in a search. One way is to specify a threshold, which is a filtering criteria for what answers are returned. A high threshold restricts returned answers to those that have a strong fit, while a low threshold allows more returned answers. You can also determine how match weights are configured to return only the best search results.

Additionally, you can truncate search results if too many matches are returned. The following factors affect the number of returned results.

- **Number of words in the query**—If more words are used, fewer results are generally returned.

- **Number of words matched**—For a search query containing four words, enough results may match three or four words, so answers that match only one or two words can be dropped.
- **Match weight distribution**—If a significant drop occurs in match weight of the answers returned, the results can be truncated.
- **Type of search performed**—For example, similar phrases searching and exact searching have different numbers of expected results.

Select from the following configuration options for search results.

To define the threshold for returned answers

1. Use the procedure described in To locate and edit configuration settings to locate ANS_SRCH_THRESHOLD under RightNow User Interface > End-User Interface > Answers.
2. Type a number between 0 and 100 in the Value field to specify the minimum matching value for answers that are returned in a search.
3. Click the Save button on the ribbon.

To return answers when the minimum threshold is not met

1. Use the procedure described in To locate and edit configuration settings to locate ANS_SRCH_SUB_THRESHOLD under RightNow User Interface > End-User Interface > Answers.
2. Click the drop-down menu in the Value field and select Yes.
3. Click the Save button on the ribbon.

To base search weights on answer clusters and topics

1. Use the procedure described in To locate and edit configuration settings to locate SEARCH_RELEVANCE_FOCUS under RightNow User Interface > End-User Interface > Answers.
2. Type a number between 0 and 3 in the Value field to specify a value based on the setting's description.
3. Click the Save button on the ribbon.

Customizing search-field weighting

You can assign variable weights to the different parts of an answer to indicate how the answer's fields influence its score. For example, you might want keywords and products associated with an answer to carry more weight than words in the body of the answer or any files attached to the answer. The answer search configuration settings let you define the weights of several answer fields.

The minimum value for each setting is 0. Although there is no maximum value, it's a good idea to keep the value for each setting between 0 and its default value.

Note Changing these configuration settings can significantly impact your site's searching performance. You'll want to make changes in small steps and assess site performance after each change.

To customize search-field weighting

1 Use the procedure described in To locate and edit configuration settings to locate the configuration settings under Common > Knowledge Base > Answer Search.

2 To edit any of the following configuration settings, click the Value field and type a value or use the drop-down menu's up or down arrow keys to adjust the default value.

- **a** To edit the weight of the answer's body text (the Answer field), set SRCH_BODY_-WEIGHT.
- **b** To edit the weight of the answer's description (the Question field), set SRCH_DESC_-WEIGHT.
- **c** To edit the weight of the answer's Summary field, set SRCH_SUBJ_WEIGHT.
- **d** To edit the weight of the answer's keywords, set SRCH_KEY_WEIGHT.
- **e** To edit the weight of the answer's products, set SRCH_PROD_WEIGHT.
- **f** To edit the weight of the answer's categories, set SRCH_CAT_WEIGHT.
- **g** To edit the weight of the answer's file attachments, set SRCH_ATTACH_WEIGHT.

3 Click the Save button on the ribbon.

Configuring suggested searches

The suggested searches feature builds links between search words and phrases based on similar answer search results. Then it displays suggested search terms on the Answers page. Suggested searches help your customers search for answers by suggesting terms they might not think of or know the proper terminology for. The suggested search terms are displayed above the list of answers. Customers can then click the suggested search terms to search on those terms without having to type them in the search text field.

Select from the following configuration options for suggested searches.

To disable suggested searches

1 Use the procedure described in To locate and edit configuration settings to locate EU_-SUGGESTED_SEARCHES_ENABLE under RightNow User Interface > End-User Interface > General.

2 Click the drop-down menu in the Value field and select No.

3 Click the Save button on the ribbon.

To return suggestions for related products and categories

1 Use the procedure described in To locate and edit configuration settings to locate SEARCH_SUGGESTIONS_DISPLAY under RightNow User Interface > End-User Interface > Suggestions.

2 If you want to return only recommended product suggestions, type 1 in the Value field. To return only category suggestions, type 2. To return both product and category suggestions, type 3.

3 Click the Save button on the ribbon.

To set a maximum number of suggested products and categories

1 Use the procedure described in To locate and edit configuration settings to locate MAX_-SEARCH_SUGGESTIONS under RightNow User Interface > End-User Interface > Suggestions.

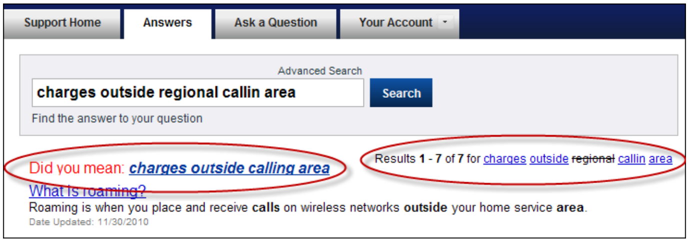
2 Select the Value field and type the maximum number of suggestions you want returned on the Answers page for each product and category.

3 Click the Save button on the ribbon.

Disabling search term feedback

When your customers search for answers, their search terms might include misspellings, very common words, or words that are not found in any answers. By default, answer feedback is provided if any of these situations occur to help your customers refine their search and receive more useful results.

Misspelled words are flagged with a “Did you mean” suggestion for correct spelling. Common words (stopwords) are not included in the search, and you can customize the stopword list to include additional terms. Stopwords that were not used in the search and any search terms that were not found are marked with a strikethrough on the Answers page to indicate that they are not part of the search results.



To disable search term feedback

1 Use the procedure described in To locate and edit configuration settings to locate EU_-SEARCH_TERM_FEEDBACK_ENABLE under RightNow User Interface > End-User Interface > General.

2 Click the drop-down menu in the Value field and select No.

3 Click the Save button on the ribbon.

Configuring answer stopwords

Stopwords are common words that are excluded from indexing and searching. Incidents and answers are analyzed for suggested stopwords, that is, words that occur frequently and widely across incidents or answers. Even if a word occurs multiple times in a single answer, for example, it is not suggested as a stopword unless it is found in other answers as well. You can review the list of suggested stopwords and decide which ones to include.

To add and remove answer stopwords

1 Click the Configuration button on the **navigation pane**.

2 Double-click Answer Stopwords under Service > Knowledge Base. Any suggested stopwords are listed in the Suggested Additions field.

3 To add words from the Suggested Additions list of stopwords to the Active stopword list, select the stopwords you want and click the top >> arrow.

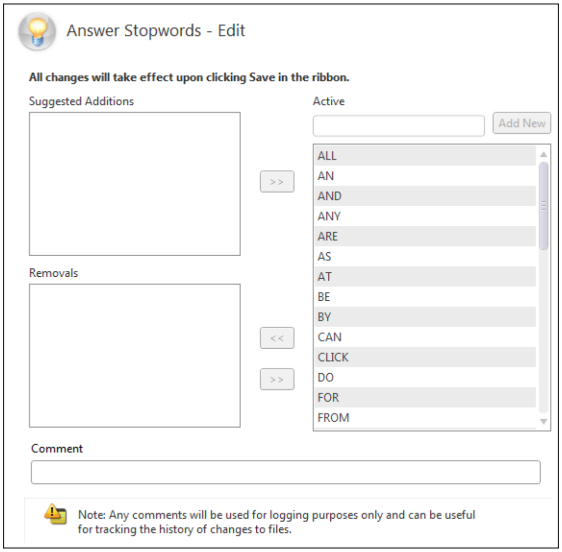
4 To add a stopword that is not in the Suggested Additions field, type the word in the field at the top of the Active list on the right and click the Add New button.

5 To remove a stopword, click the word in the Active list and click the << arrow. The word is added to the Removals field. (To restore a word from the Removals field to the Active list, click the bottom >> arrow.)

Tip We recommend that you remove any words in the Active list that are orange to improve searching performance.

6 Click the Save and Close button on the ribbon to save your added and removed stopwords.

Note The Agedatabase utility must be run before your changes to the stopwords list become active.



Editing the aliases word list

You can use aliases (synonyms) to enhance searching. Adding aliases lets you link terms that are specific to your industry or organization to similar terms your customers may search for. For example, a customer might search for an acronym, such as "GPS," but all of your answers regarding GPS might spell out the full term "global positioning system." Creating an alias word list lets you link these two terms and save time because you need to create this link only once instead of adding it as a keyword to multiple answers.

In this example, you would add the following line to the *aliases.txt* file.

```
GPS,GLOBAL POSITIONING SYSTEM,NAVIGATIONAL SYSTEM
```

The *aliases.txt* file contains no default alias terms. To use this capability, you must customize the file with the terms you want. The *aliases.txt* file can be edited through the **File Manager** on the **administration interface**.

Multiple-word aliases do not work if ANS_AND_SEARCH is enabled, so we recommend that you do not enable this setting. Refer to Best Practices for Knowledge Base and Search Effectiveness and Knowledge Base and Search Tune-Up Checklist.

To edit the aliases word list

1 Click the Configuration button on the **navigation pane**.

2 Double-click File Manager under Site Configuration.

3 In the Switch To drop-down menu, select wordlist files. The list of files in the directory is displayed.

4 Click the Download button in the Action column for *aliases.txt*.

5 Click Save and select a location for the file. The file is downloaded to the location you selected so you can make your edits locally.

6 Using the following example, edit the downloaded file to add aliases.

```
GPS,GLOBAL POSITIONING SYSTEM,NAVIGATIONAL SYSTEM
```

Enter each alias on a separate line using comma-delimited terms in uppercase text. The search terms in the line can contain spaces, so you can use phrases as synonyms for the search word. When a customer enters the first word in a line as a search term, all answers containing that word or any other term on the line are returned.

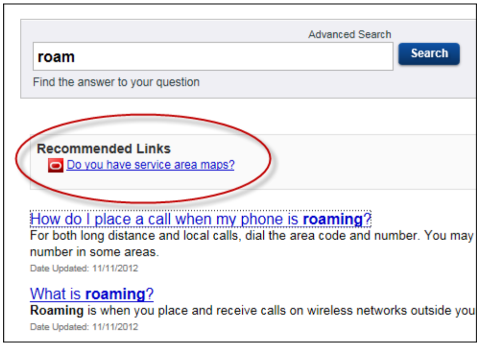
7 Save the edited file.

8 On the File Manager, click the Browse button (next to the Upload field at the bottom of the page) to locate the edited file and click Open. The file is listed in the Upload field.

9 Click Go to upload the file. Click OK to acknowledge that the existing file will be replaced by the one you just edited.

Configuring search priority words

Search priority words let you associate a specific answer or document with specific search terms to ensure that the answer (or document) will always be returned when a customer enters the search term. When you've assigned a search priority word to an answer and the customer enters the search priority word, the answer is displayed in the Recommended Links section on the Answers page.



To add search priority words

1 Click the Configuration button on the **navigation pane**.

2 Double-click Search Priority Words under Service > Knowledge Base. The Search Priority Words tree displays on the content pane.

3 Click the New button on the ribbon to display the editor.

4 Type a name in the Search Priority Word Name field to identify the keyword you plan to enter as a search term.

Note This is not the search term itself, merely the identifier for it. If a customer enters the Name field value as a search term, the associated answer is not returned unless that term is also entered in the Keywords field.

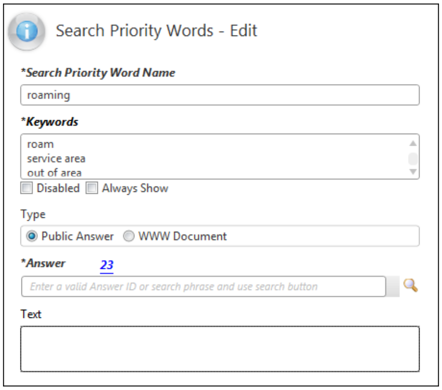
5 In the Keywords field, type search terms, separating each one with a comma, semicolon, or line break. Customers must enter one of the keywords exactly in order for the answer to be returned.

6 If you always want the answer to appear in the Recommended Links section of the Answers page regardless of the search terms customers enter, select the Always Show check box.

7 If you want to associate the search priority word with an answer, select the Public Answer radio button. If you want to associate it with a document, select WWW Document.

8 Type the Answer ID for the answer you want to associate with the search priority words. Or type a title and URL for a document.

9 Click the Save and Close button on the ribbon.



Configuring the answer details page

When customers click the summary of an answer on the Answers or Support Home page, the answer details page opens. From this page, your customers not only can view the answer, but they can also provide feedback on the answer and open any related and previously viewed answers. Additionally, they can share the answer on social networking sites, print it, email to another person, and request notification when the answer is updated.

You can configure **privileged access** for the answer details page. Privileged access lets you give certain customers access to information that is not available to all customers. For example, you might want to give customers who have purchased a premium support contract access to a greater level of information.

An answer's Access Level field controls who can view it, but all answers that you want to appear on your customer portal must have a **Public** answer status.

The following steps are required to configure privileged access.

- Enable privileged access.
- Add privileged answer access levels.
- Add privileged answers.
- Assign access levels to SLAs.
- Assign SLAs to your customers.

Enabling privileged access

To enable privileged access

1 Use the procedure described in To locate and edit configuration settings to locate ANS_PRV_ENABLED under RightNow User Interface > End-User Interface > Answers.

2 Click the drop-down menu in the Value field and select Yes.

3 Click the Save button on the ribbon.

Adding privileged answer access levels

There are two default **answer access levels**, Help and Everyone. In order to use **privileged access**, you must first add custom access levels that let your customers view only certain groups of answers.

If you assign an answer an access level that has visibility on an interface, all customers on that interface can view the answer. If you assign an answer to an access level that does not have visibility on an interface, you can still offer access to certain customers by assigning them an **SLA** that allows privileged access.

You can also tag parts of an answer with different access levels by creating conditional sections within an answer. Customers who are assigned an SLA with a privileged access level can view the conditional sections assigned to that level. Refer to Associating answers with multiple access levels.

To add a custom answer access level

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance.

3 Expand the System Menus folder by clicking the arrow to the left of the folder.

4 Click Answer Access Levels to display the editor.

5 Click the New button on the ribbon.

6 Type the name of the answer access level in the Label field.

7 If you do not want the answer access level to be visible on the interface, clear the Visible check box.

8 Click the Save and Close button on the ribbon to save the answer access level and close the editor.

Adding privileged answers

You can add answers and assign them to the custom access levels or add conditional sections to answers and assign them to the access levels you created. Refer to Inserting conditional sections.

Assigning access levels to SLAs

After you create custom access levels, you must assign the access levels to SLAs. When you create or edit an SLA, you can select one or more access levels for the customers assigned to the SLA. Refer to Creating SLAs.

Assigning SLAs to customers

The last step is to assign **SLAs** to your customers. By assigning an SLA to a group of customers (either organizations or contacts without an organization association), your customers can view **privileged answers** from your customer portal pages. You assign SLAs to customers when you add or edit contacts and organizations. Refer to Applying SLAs.

Configuring the Your Account pages

The Your Account pages contain customers' personal account information. They can change their password and view and edit questions they've submitted, **answer notifications** they've subscribed to, and account settings.

Clicking the Your Account tab opens the Account Overview page, and there are three additional subpages for Your Account: Support History, Account Settings, and Notifications. Most of these pages are configured using page code and widgets, but you can configure the following functionality with configuration settings.

Disabling the email link to a question

By default, a link is included in the confirmation email that is sent to a customer who has submitted a question on the Ask a Question page. When the customer clicks the link in the email message, the question details page opens with the incident, which can then be viewed or updated.

To disable the email link to a question

1 Use the procedure described in To locate and edit configuration settings to locate MYQ_ENABLED under RightNow User Interface > Contact Services > Questions.

2 Click the drop-down menu in the Value field and select No.

3 Click the Save button on the ribbon.

Allowing customers to see all incidents from their organization

By default, customers can see only their own **incidents** on the Support History page. If you want them to be able to view other incidents submitted by members of their **organization**, you need to edit a **configuration setting** and place the OrgList widget on the Support History page.

To let customers view incidents from others in their organization

1. Use the procedure described in To locate and edit configuration settings to locate MYQ_VIEW_ORG_INCIDENTS under RightNow User Interface > Contact Services > Questions.
2. Type 1 if you want customers to see incidents from others in your organization, or type 2 if you want customers to see incidents from others in your organization and all its subsidiaries.
3. Click the Save button on the ribbon.
4. Now, add the OrgList widget to the Support History page.

Specifying the time an answer notification remains active

To specify how long answer notifications remain active

1. Use the procedure described in To locate and edit configuration settings to locate ANS_NOTIF_DURATION under RightNow User Interface > Contact Services > Answer Notification.
2. Type the number of days you want answer notifications to remain active. If you don't want notifications to expire, type 0.
3. Click the Save button on the ribbon.

Allowing duplicate email addresses

If you want to allow your customers to create multiple accounts using a single email address, you can enable **email address sharing**. This feature allows the creation of individual accounts for multiple people who share one email address. This can be useful for multiple staff members (for example, support@example.com) or family members (hendersons@example.net).

Important Email sharing is disabled by default, and you should consider the implications carefully before you enable it. When email address sharing is disabled, safeguards prevent the creation of duplicate contacts to protect your organization's reputation when sending mailings and surveys. Enabling email sharing removes these safeguards. Additionally, if you enable the feature and then later disable it, the application can develop conflicts in the database when duplicate email addresses are encountered.

If email address sharing is enabled and a customer creates an account using an email address that is already in the knowledge base, they see a message referring them to the Account Assistance page.

When the customer enters the email address on the Account Assistance page, a message is sent to the email address. It lists the known users of the email address and contains a link for creating a new account using the same email. Clicking the link takes the customer to the Finish Account Creation page, which asks for a user name and password. After submitting that information, the customer is directed to the Account Settings page, where additional contact information can be entered.

To enable email address sharing

1 Click the Configuration button on the **navigation pane**.

2 Double-click Email Address Sharing under Database. The Email Address Sharing editor displays on the content pane.

3 Select the Enabled radio button.

4 Click the Save and Close button on the ribbon. A message warns you that safeguards for duplicate email addresses will be removed.

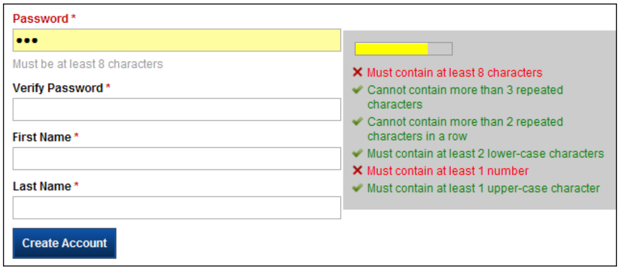
5 Click OK to accept the warning message.

Configuring password requirements

For a discussion about password controls, refer to Password protection.

You can set password requirements that can strengthen customer passwords entered on the Log In, Create an Account, and Change Password pages. The administration interface includes an editor that lets you define the minimum length, the maximum number of character repetitions and occurrences, the number of previous passwords that are stored so they cannot be used for a new password, and the minimum number of upper and lowercase characters, numbers, and special characters. By requiring a defined level of password complexity, you can help your customers protect their information.

The password requirements you define on the administration interface appear to your customers on your customer portal when they are creating or changing their password. The password requirements are displayed on the page when the cursor is moved to the Password field. When the customer begins typing the password, requirements that have been met are marked with a green check mark. Incomplete requirements are marked with a red X. If customers submit the form without meeting the password requirements, they will receive an error notification.



By default, no password requirements are defined, so you must define the password strength requirements you want your customers to meet.

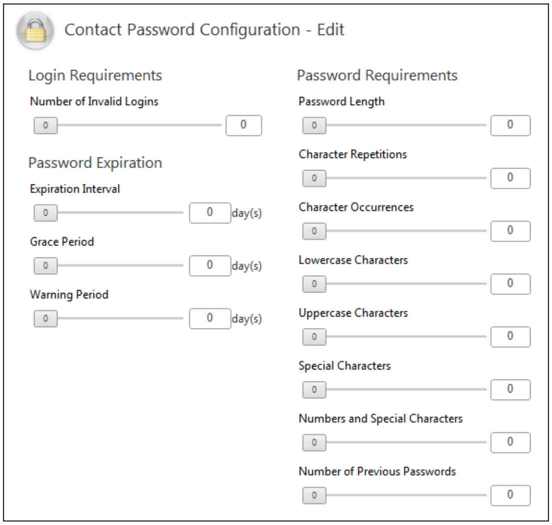
To define customer password requirements

1 Log in to Oracle Service Cloud.

2 Add the Contact Password Configuration item to your configuration list for the Configuration button. (Refer to Creating a navigation set for the administrator if you need help with this step.)

3 Click the Configuration button on the navigation pane.

4 Double-click Contact Password Configuration in the configuration list. The Contact Password Configuration editor opens.



5 Edit the password requirements by either moving the slider to the desired value or by typing the value in the field to the right of the slider.

Table 364: Contact Password Configuration Description

Field	Description
Login Requirements	Establishes a limit on invalid login attempts.
Number of Invalid Logins	The number of invalid login attempts a customer can make before the account is locked. If you don't want to lock customer accounts, leave the value at its default of 0.
Password Expiration	Defines how and when passwords expire.
Expiration Interval	The number of days until the password expires.
Grace Period	The time period in days after password expiration during which customers can enter a new password and still log in.
Warning Period	The number of days prior to expiration that the customer is notified of the impending expiration. Customers can still log in during the warning period.

Table 364: Contact Password Configuration Description (Continued)

Field	Description
Password Requirements	Contains options for defining password requirements and limiting their frequency of use.
Password Length	The minimum number of characters a password must contain. The maximum is 20. If the customer exceeds the maximum number of characters, they will see a message on the customer portal informing them that their password is too long.
Character Repetitions	The maximum number of consecutive repeated characters the password can contain.
Character Occurrences	The maximum number of times a character can be repeated anywhere within the password.
Lowercase Characters	The minimum number of lowercase characters a password must contain.
Uppercase Characters	The minimum number of uppercase characters a password must contain.
Special Characters	The minimum number of special characters a password must contain. Special characters include !, @, ^, $, %, and spaces. **Note:** Best practice recommends defining the Special Characters *or* the Numbers and Special Characters field, but not both.
Numbers and Special Characters	The minimum number of special characters, including numbers, a password must contain. Any combination of special characters and numbers will meet this requirement. **Note:** If you are willing to let numbers count as special characters, set this field. If you do not want to let numbers count as special characters, use the Special Characters field instead of the Numbers and Special Characters field.
Number of Previous Passwords	The number of previous passwords that are stored so they cannot be reused for the new password.

6 To provide hints to your customers regarding password requirements, see Editing the password label to specify password length.

7 Click the Save and Close button.

Using Sitemap

Search engines use web crawlers (**spiders**) to explore your website and index the pages that will be available when searches are conducted. They usually find the pages from links within your site and from other sites. But you may have pages that are not accessible by browsing on the interface (for example, pages that are accessed only when customers complete a form). The spider will not be able to index those pages because it cannot access them. Content in iFrames is not searched and indexed either.

Sitemap lets you inform search engines about all the pages that are available on your site, including those that are not accessible through links. Sitemap is an XML-based protocol used by the major search engines, including Yahoo! and Google. By using the Sitemap protocol, you can identify all the web pages on your customer portal instead of waiting for the search engine spiders to find them.

A Sitemap page is simply a document on a web server that lists all the URLs for a site along with metadata for each URL, including the priority of each page and when it was last updated. Spiders use the page to crawl your customer portal pages more intelligently rather than relying solely on links within the site.

By default, Sitemap is enabled so a Sitemap page is created and registered with Yahoo and Google. The XML output of the page is available at:

https://<your_site>/ci/sitemap

The HTML output of the page is at:

https://<your_site>/ci/sitemap/html

Indexing web pages

You may want documents that are not part of your **knowledge base**, such as web pages, PDFs, and Microsoft Word documents, to be indexed. Indexing lets your customers find indexed documents as well as answers when they search from your customer portal or from an external site using the KnowledgeSyndication widget.

Indexing and searching of external documents are possible if you store the documents on a web server so they are available through a URL. Typically, this limits files to those within the document root, CGI root, or FTP root directories.

Important Because the Web Indexer engine provides support for the Sitemap protocol, it can be pointed to a page that uses Sitemap to better index web pages outside of Oracle Service Cloud. When a Sitemap-formatted page is the starting point for the Web Indexer, all pages identified by the Sitemap page are indexed, not just those available through links. To have the Web Indexer index a site using Sitemap, simply use the Sitemap URL as the root URL in the Web Indexer wizard. Learn about Sitemap here.

In addition to using Sitemap to provide better spidering of your customer portal pages, Web Indexer can index sites that use a Sitemap page. Here's how Web Indexer works.

Web Indexer overview

When customers access Web Indexer documents by searching on your customer portal, an initial list of answers is displayed on the Answers page. The Web Indexer feature displays the answers in the same way as the standard answers search.

After you configure a root URL to be indexed and searchable, a **web spider** is used to follow the hyperlinks contained within the web page, indexing each consecutive page. If any of the consecutive web pages contain hyperlinks, those hyperlinks are followed and those web pages are indexed as well. By using filters, the web spider can be set up to follow only those hyperlinks that are within specified domains, but are not among the excluded domains, subdomains, or URLs. Specified and excluded domains are configurable.

It is possible to have multiple URLs directed to the same document through URL masking and redirection, or the use of query parameters in a URL. During indexing, URLs are normalized to prevent a document from being indexed more than once. For example, the following two URLs can point to the same document in the same location on the web server:

```
http://WWW.EXAMPLE.org/pubs/docs1.txt
http://www3.example.org/pubs/docs1.txt?_user=321&_pass=@Qs!Xa
```

Both of these URLs would be normalized to:

```
http://www.example.org/pubs/docs1.txt
```

This normalization allows the spider to index the document a single time, which saves drive space on the server, increases search performance, and prevents customers from getting the same document returned twice during a search.

You can also create SED (stream editor) statements that rewrite URLs to find and replace strings within the URL or remove portions of a URL before the URL is stored in the index. This function lets you automatically remove query parameters or further normalize URLs. (SED is a stream editor commonly used to find and replace or find and remove patterns in text strings.)

External documents are not re-indexed if they are edited. They will be re-indexed the next time the **Keywordindexer** utility runs. The keyword indexes for external documents are stored in a file on the web server rather than in a database table.

Configure the Web Indexer.

Configuring the Web Indexer

External document searching is enabled through the Configuration Wizard. The wizard lets you set the root URLs, the maximum number of hops (from one hyperlink to another) from the root URLs, and a variety of filters to help restrict the Web Indexer to the selected areas of your website.

Important You must also edit the Answers page if you intend to use web indexing. Refer to Displaying web indexing results.

To configure the Web Indexer

1. Log in to Oracle Service Cloud.
2. Click the Configuration button on the **navigation pane**.
3. Double-click External Search Configuration under Service > Knowledge Base. The Configuration Wizard opens on the content pane.
4. Use the prompts in the Configuration Wizard to configure the Web Indexer. Click the Next button on the ribbon when you have finished configuring each page.
5. Click Save when you are finished.

View external search logs or Return to configuration options for the customer portal.

Viewing external search logs

To view external search logs

1. Log in to Oracle Service Cloud.
2. Click the Configuration button on the **navigation pane**.
3. Double-click Logs under Site Configuration. The Log Viewer page opens.
4. Click External Search Logs on the ribbon.
5. Click the Details link for the log you want to view.

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Customer Portal Template and Page Set

The Oracle RightNow Customer Portal Cloud Service (Customer Portal) is a set of files that control the look and functionality of your organization's support site. The Customer Portal's reference implementation is the standard template, pages, and widgets that are used to create the default site using our best practices for customer support. You have complete flexibility to customize these files for your organization's needs and business practices.

The reference implementation includes a standard template on which all the default pages of the standard Customer Portal are built. (A mobile template also exists for creating pages to be displayed on mobile devices. Refer to Mobile template configuration. An additional basic template exists for devices and browsers with limited JavaScript capability. Refer to Basic template configuration.) In this section, we'll focus on the standard template configuration, common functionality across all pages, and working with the page set.

Note All pages in the Customer Portal reference implementation and all standard widgets conform to the HTML5 specification.

In this section, you'll learn about:

- Configuring the template
- Editing the page set from the template
- Configuring login functionality
- Configuring the Provide Feedback dialog
- Defining themes
- Using page tags
- Standard page files

When you're finished editing the template and are ready to begin configuring individual pages, select a page below to get started.

- Support Home Page

- Answers Page
- Answer Details Page
- Ask a Question Page
- Your Account Pages
- Log In page
- Live Help page or Chat page

Configuring the template

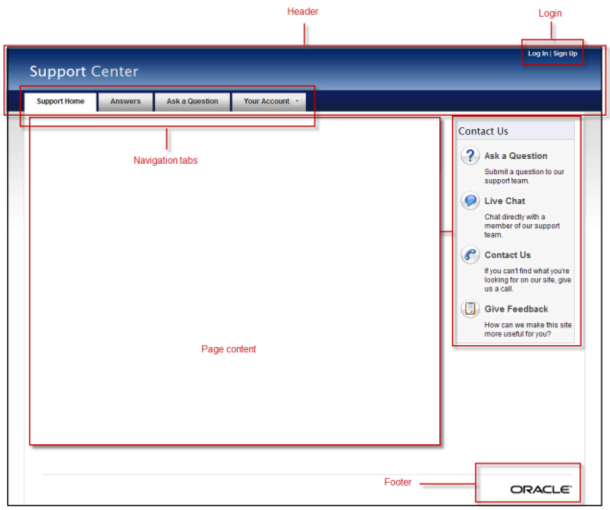
The template for the **reference implementation** of the Customer Portal includes the sidebar, the footer, and the header, which includes login functionality. The navigation tabs for the basic page set—Support Home, Answers, Community (only if enabled), Ask a Question, and Your Account—are defined on the template as well.

Important Any changes you make to configuration settings may affect the reference implementation pages. As a result, the behavior of the reference implementation may not correspond to the descriptions in this section if you have changed the default configuration settings.

Select a template configuration option.

- Configuring security
- Configuring the navigation tabs
- Configuring the sidebar
- Configuring the header
- Configuring the footer
- Adding an announcement to the template

When you finish configuring the template, you can return to other configuration options for the template and page set.



Using iFrames

If you run your customer portal in an iFrame on your organization's website, you should consider a few points prior to implementation. Best practice recommends against using iFrames, so the reference implementation includes a removable widget that prevents your customer portal from being presented in an iFrame.

The use of iFrames can pose several issues. Search engine optimization (SEO) is problematic because content in iFrames is not indexed by web crawlers. As a result, search engines will not display your knowledge base content to customers who are searching for specific information. Security is also a concern in iFrames because clickjacking—that is, misleading your customers into clicking a concealed link—is possible. (To remove the widget that prevents your site from being put into an iFrame, see ClickjackPrevention widget.)

An additional consideration against the use of iFrames is the inability to set cookies in Internet Explorer 11. Although your customers can unblock third-party cookies, requiring them to do so is not an optimal customer experience.

Configuring security

Clickjacking is an attack on browser security that can mislead your customers into clicking a concealed link. To prevent clickjacking, you cannot let your site be put into an iFrame on another site. If you do not use iFrames, make the following edits to the template file.

Note If you intentionally run your customer portal inside an iFrame, do not use the following procedure.

To configure the template for security

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following first lines of code.

```
<!DOCTYPE html>
<html lang="#rn:language_code#">
<rn:meta javascript_module="standard"/>
<head>
```

3 Immediately after the `<head>` tag you located in step 2, add the following code.

```
<script>
if (top!= self) top.location.href = self.document.location;
if (parent!= self) top.location.href = location.href;
if (top.frames.length!=0) top.location=self.document.location;
if (window!= window.top) top.location.href = location.href;
</script>
```

4 Save *standard.php*.

5 Open the *hooks.php* file in the */customer/development/config* folder.

6 Add the following code to the pre_page_render hook to prevent clickjacking in modern browsers. Refer to Adding hooks.

```
header("X-Frame-Options:deny");
```

7 Save *hooks.php*.

Configuring the navigation tabs

The template for the **reference implementation** includes navigation tabs for the Support Home, Answers, Community, Ask a Question, and Your Account pages. The Your Account tab has a drop-down menu that lets customers navigate directly to the Account Overview, Support History, Account Settings, and Notifications subpages. A visual indicator shows which tab a customer is hovering over. When the tab is selected, it changes color to match the page background.

Note The Community tab is enclosed in a condition that checks to see if **Oracle RightNow Social Experience** (Social Experience) is enabled on your site. By default, it is not enabled so the tab does not appear. For information about this condition tag, refer to Config Setting Check condition.

The following options are available for configuring the navigation tabs.

- Adding navigation tabs, including a Chat tab or tab for a URL
- Defining a URL for the Community tab
- Changing navigation tab labels
- Removing navigation tabs
- Changing the Your Account drop-down menu

Adding navigation tabs

You can add navigation tabs that open a customer portal page, described in the following example of adding a Change Password tab, or you might want to add a tab that opens a URL.

To add a navigation tab for a customer portal page

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following lines of code for the navigation tabs and the Your Account sub-menu.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:SUPPORT_HOME_TAB_HDG#"
link="/app/#rn:config:CP_HOME_URL#"
pages="home, "/></li>
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:ANSWERS_HDG#"
link="/app/answers/list"
pages="answers/list, answers/detail, answers/intent"/></li>
<rn:condition config_check="COMMUNITY_ENABLED == true">
    <li><rn:widget path="navigation/NavigationTab"
    label_tab="#rn:msg:COMMUNITY_LBL#"
    link="#rn:config:COMMUNITY_HOME_URL:RNW##rn:community_token:?#"
    external="true"/></li>
</rn:condition>
```

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:ASK_QUESTION_HDG#"
link="/app/ask"
pages="ask, ask_confirm"/></li>
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:YOUR_ACCOUNT_LBL#"
link="/app/account/overview"
pages="utils/account_assistance, account/overview, account/profile,
account/notif, account/change_password, account/questions/list,
account/questions/detail, account/notif/list, utils/login_form,
utils/create_account, utils/submit/password_changed, utils/submit/
profile_updated"
```

3 Add the following line of code where you want it to be displayed on the template navigation. For example, if you want the tab to appear between the Support Home and Answers tabs, add the code after the Support Home tab code and before the Answers tab code.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="New Tab"
link="/page_to_open"
pages="home, "/></li>
```

a Edit the code you just added to replace `New Tab` with the label you want to appear on the navigation tab.

b Edit the code to replace `page_to_open` with the page that you want to open when the tab is clicked.

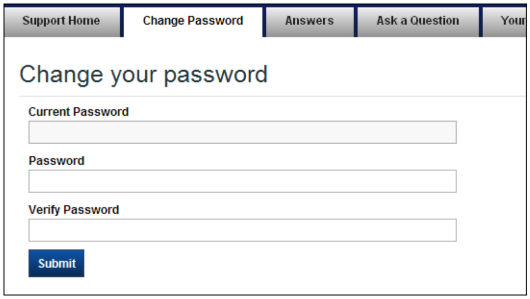
c Edit the code to replace `home` with the page or pages on which the CSS class of the tab should change. In other words, add the page where the tab will appear selected.

Your final edited code might resemble the following.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="Change Password"
link="/app/account/change_password"
pages="account/change_password, "/></li>
```

4 Save *standard.php*.

Click to view



Note In this figure, the Change Password page was also removed from the *page* attribute of the Your Account navigation tab code so that it would remain the same color as the other non-selected tabs when the Change Password tab is clicked. The modified code for the Your Account tab is the following.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:YOUR_ACCOUNT_LBL#"
link="/app/account/overview"
pages="utils/account_assistance, account/overview, account/
profile, account/notif, account/questions/list, account/
questions/detail, account/notif/list, utils/login_form,
utils/create_account, utils/submit/password_changed, utils/
submit/profile_updated"
```

Adding navigation for Chat

When **Oracle RightNow Chat Cloud Service** (Chat) is enabled, customers can request a chat using the Live Chat link in the sidebar, which tells them if agents are available and what the expected wait time is. However, you might also want to add a navigation tab that opens the Live Help page. (Refer to Configuring the Live Help page if you want to make any changes to the page itself.)

To add Live Help navigation

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the code for the navigation tabs. The first line of this code is:

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:SUPPORT_HOME_TAB_HDG#"
link="/app/#rn:config:CP_HOME_URL#"
pages="home, "/></li>
```

3 Add the following code for the Live Help page navigation. Add the code to correspond to the position where you want it to appear. For example, if you want it to be the left most tab, add it before the code for the Support Home tab, and if you want it on the right, add it after the Your Account tab.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:LIVE_HELP_HDG#"
link="/app/chat/chat_launch"
pages="chat/chat_launch"/></li>
```

4 To check that Chat is enabled before displaying the Live Help tab, add condition tags around the code for the tab, as shown here.

```
<rn:condition config_check="MOD_CHAT_ENABLED == true">
    <li><rn:widget path="navigation/NavigationTab"
    label_tab="#rn:msg:LIVE_HELP_HDG#"
    link="/app/chat/chat_launch"
    pages="chat/chat_launch"/></li>
</rn:condition>
```

5 Save *standard.php*.

Adding navigation tabs for URLs

To add a navigation tab for a URL

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the code for the navigation tabs.

3 Using the following sample code, add the navigation tab where you want it to be displayed on the template navigation.

```
<rn:widget path="navigation/NavigationTab"
label_tab="Oracle Service Cloud"
link="http://www.oracle.com/us/products/applications/rightnow/
overview/index.html"
pages="http://www.oracle.com/us/products/applications/rightnow/
overview/index.html"
external="true" /></li>
```

4 Save *standard.php*.

Defining a URL for the Community tab

Note The Community tab is enclosed in a condition that checks to see if **Social Experience** communities are enabled on your site. If they are not, the tab does not appear. For information about this condition tag, refer to Config Setting Check condition.

By default, the URL for the Community tab is void to prevent you from inadvertently linking to a site you don't want to link to. To activate the link, you'll need to specify a URL that takes customers to your community page.

To define a URL for the Community tab

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following code.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:COMMUNITY_LBL#"
link="#rn:config:COMMUNITY_HOME_URL:RNW##rn:community_token:?#"
external="true"/></li>
```

3 Replace `link="#rn:config:COMMUNITY_HOME_URL:RNW#"` with the URL for your community page. Your edited code will resemble the following.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:COMMUNITY_LBL#"
link="http://community.example.com/pages/
home#rn:community_token:?#"
external="true"/></li>
```

4 Save *standard.php*.

Continue configuring navigation tabs or Continue configuring the template.

Changing navigation tab labels

To change navigation labels

1 Open the *standard.php* file in the */views/templates* folder.

2 Change the label for each tab listed in the following table by finding its associated code and replacing the value for the *label_tab* attribute.

Table 365: Editing Navigation Tab Labels

To change this tab's label	Locate the following code	Replace this section with the new label
Support Home	`<li><rn:widget path="navigation/NavigationTab" label_tab="#rn:msg:SUPPORT_HOME_TAB_HDG#" link="/app/#rn:config:CP_HOME_URL#" pages="home, "/></li>`	`#rn:msg:SUPPORT_HOME_TAB_HDG#`
Answers	`<li><rn:widget path="navigation/NavigationTab" label_tab="#rn:msg:ANSWERS_HDG#" link="/app/answers/list" pages="answers/list, answers/detail"/></li>`	`#rn:msg:ANSWERS_HDG#`
Community (if **Social Experience** is enabled)	`<li><rn:widget path="navigation/NavigationTab" label_tab="#rn:msg:COMMUNITY_LBL#" link="#rn:config:COMMUNITY_HOME_URL:RNW##rn:community_token:?#" external="true"/></li>`	`#rn:msg:COMMUNITY_LBL#`
Ask a Question	`<li><rn:widget path="navigation/NavigationTab" label_tab="#rn:msg:ASK_QUESTION_HDG#" link="/app/ask" pages="ask, ask_confirm"/></li>`	`#rn:msg:ASK_QUESTION_HDG#`
Your Account	` <rn:widget path="navigation/NavigationTab" label_tab="#rn:msg:YOUR_ACCOUNT_LBL#" link="/app/account/overview" pages="utils/account_assistance, account/overview, account/profile, account/notif, account/change_password, account/questions/list, account/questions/detail, account/notif/list, utils/login_form, utils/create_account, utils/submit/password_changed, utils/submit/profile_updated"`	`#rn:msg:YOUR_ACCOUNT_LBL#` To change the Your Account drop-down menu labels, click here.

3 Save *standard.php*.

Removing navigation tabs

To remove navigation tabs

1 Open the *standard.php* file in the */views/templates* folder.

2 Remove a tab by finding its associated code, defined in the following table, and deleting it.

Table 366: Deleting Navigation Tabs

To remove this tab	Delete the following code
Support Home	<rn:widget path="navigation/NavigationTab" label_tab="#rn:msg:SUPPORT_HOME_TAB_HDG#" link="/app/#rn:config:CP_HOME_URL#" pages="home, "/>
Answers	<rn:widget path="navigation/NavigationTab" label_tab="#rn:msg:ANSWERS_HDG#" link="/app/answers/list" pages="answers/list, answers/detail"/>
Community (if **Social Experience** is enabled)	<rn:widget path="navigation/NavigationTab" label_tab="#rn:msg:COMMUNITY_LBL#" link="#rn:config:COMMUNITY_HOME_URL:RNW##rn:community_toke n:?#" external="true"/>
Ask a Question	<rn:widget path="navigation/NavigationTab" label_tab="#rn:msg:ASK_QUESTION_HDG#" link="/app/ask" pages="ask, ask_confirm"/>
Your Account	<rn:widget path="navigation/NavigationTab" label_tab="#rn:msg:YOUR_ACCOUNT_LBL#" link="/app/account/overview" pages="utils/account_assistance, account/overview, account/profile, account/notif, account/change_password, account/questions/list, account/questions/detail, account/ notif/list, utils/login_form, utils/create_account, utils/ submit/password_changed, utils/submit/profile_updated"

3 Save *standard.php*.

Changing the Your Account drop-down menu

To change the Your Account drop-down menu

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following code.

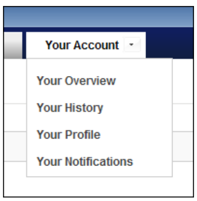
```
subpages="#rn:msg:ACCOUNT_OVERVIEW_LBL# > /app/account/overview,
#rn:msg:SUPPORT_HISTORY_LBL# > /app/account/questions/list,
#rn:msg:ACCOUNT_SETTINGS_LBL# > /app/account/profile,
#rn:msg:NOTIFICATIONS_LBL# > /app/account/notif/list"/></li>
```

3 Change the message base code (`#rn:msg:[subpage name]_LBL#`) to the text you want for the new label. Your code might resemble the following. (Learn about editing message bases here.)

```
subpages="Your Overview > /app/account/overview,
Your History > /app/account/questions/list,
Your Profile > /app/account/profile,
Your Notifications > /app/account/notif/list"/></li>
```

4 Save *standard.php*.

Note If you change the labels on the Your Account drop-down menu, you'll probably also want to change the labels on the Account Overview page as well as the page headings for the affected pages (Support History, Account Settings, and Notifications).



Configuring the sidebar

The default sidebar lets customers ask questions, submit a question to your community (if **Social Experience** is enabled), request a chat session (if **Chat** is enabled), find your organization's phone number, and provide feedback. You can customize the messages that appear in the sidebar. The sidebar also includes a search field on all pages except Support Home, Answers, and Support History, which already contain a main search control.

Note If the CP_DEPRECATED_CORE **configuration setting** is enabled and you are reviewing customer portal pages in the development or **reference implementation** mode, you may see a JavaScript error on the page when you submit site feedback through the Give Feedback sidebar link. This error does not appear in the production mode.

Sidebar configuration includes the following options.

- Defining a URL for the Contact Us link
- Defining a URL for the Ask the Community link
- Removing the search field from the sidebar
- Removing the search field from specific pages
- Removing sidebar elements
- Editing sidebar messages
- Adding the CobrowsePremium widget to the sidebar
- Adding elements to the sidebar
- Removing the sidebar

Defining a URL for the Contact Us link

By default, the URL for the Contact Us sidebar link is void to prevent you from inadvertently linking to a site you don't want to link to. To activate the link, you'll need to specify a URL that takes customers to a web page containing contact information for your organization.

If you prefer to display your phone number in the sidebar, you can change the message base to add the phone number.

To define a URL for the Contact Us link

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following code.

```
<a href="javascript:void(0);">#rn:msg:CONTACT_US_LBL#</a>
```

Note Be sure you select the line for the Contact Us link. The link for the Ask the Community link also begins with `<a href="javascript:void(0);`.

3 Replace `javascript:void(0);` in the second line of code with the URL for your contact page. Your edited code will resemble the following.

```
<a href="http://www.oracle.com/us/products/applications/rightnow/overview/index.html">#rn:msg:CONTACT_US_LBL#</a>
```

4 Save *standard.php*.

Continue customizing the sidebar or Continue configuring the template.

Adding a phone number to the sidebar

To add a phone number to the sidebar

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following code.

```
<a href="javascript:void(0);">#rn:msg:CONTACT_US_LBL#</a>
<span>#rn:msg:CANT_YOURE_LOOKING_SITE_CALL_MSG#</span>
```

3 Edit the code to replace the Contact Us message base with a unique message that includes your phone number. (Learn about editing message bases here.) Your edited code will resemble the following.

```
<a href="javascript:void(0);">#rn:msg:CONTACT_US_LBL#</a>
<span>If you do not see what you want, call us at (406) 555-5555.</span>
```

4 Save *standard.php*.

Continue customizing the sidebar or Continue configuring the template.

Customizing the sidebar

You can customize the sidebar in any of the following ways.

- Define a URL for the Ask the Community link.
- Remove the search field.
- Remove one or more elements.
- Edit one or more of the messages that appear.

- Add the CobrowsePremium widget to the sidebar.
- Add other elements to the sidebar.

When you're finished customizing the sidebar, continue configuring the template.

Defining a URL for the Ask the Community link

Note The Ask the Community link is enclosed in a condition that checks to see if **Social Experience** communities are enabled on your site. If they are not, the link does not appear in the sidebar. For information about this condition tag, refer to Config Setting Check condition.

By default, the URL for the Ask the Community sidebar link is void to prevent you from inadvertently linking to a site you don't want to link to. To activate the link, you'll need to specify a URL that takes customers to the community forum page where they can submit their questions.

You can also add an Ask the Community link to any customer portal page.

To define a URL for the Ask the Community link

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following code.

```
<a href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_LBL#</a>
```

3 Replace `javascript:void(0);` with the URL for your community forum page that lets customers submit questions, being sure to append the community token (`#rn:community_token#`)to the end. Your edited code will resemble the following.

```
<a href="http://community.example.com/resources/b1248fb2a1/
summary#rn:community_token#"> #rn:msg:ASK_THE_COMMUNITY_LBL#</a>
```

4 Save *standard.php*.

Continue customizing the sidebar or Continue configuring the template.

Adding an Ask the Community link to any page

To add an Ask the Community link to any customer portal page

1 Open the file for the page you want to add the Ask the Community link to.

2 Type the following code in the location on the page where you want the link to appear, replacing `community.example.com/resources/b1248fb2a1/summary` with the link to your site.

```
<rn:condition config_check="COMMUNITY_ENABLED == true">
    <div class="rn_Community">
        <a href="http://community.example.com/resources/b1248fb2a1/
        summary#rn:community_token#">
        #rn:msg:ASK_THE_COMMUNITY_LBL#</a>
    </div>
</rn:condition>
```

Note The Ask the Community link in the sidebar is contained within `rn:condition` tags that check to see if **Social Experience** communities are enabled on your site before displaying the link. This example also includes the conditional tags.

3 Save the file.

Continue customizing the sidebar or Continue configuring the template.

Removing the search field from the sidebar

By default, the search field appears in the sidebar on all pages that use the standard template, except for Support Home, Answers, and Support History. The sidebar search field does not appear on these pages because they already have a search field. Best practice recommends only one search field per page.

To remove the search field from the sidebar

1 Open the *standard.php* file in the */views/templates* folder.

2 Delete the following code.

```
<rn:condition hide_on_pages="answers/list, home, account/questions/
list">
<div class="rn_Module" role="search">
    <h2>#rn:msg:FIND_ANS_HDG#</h2>
    <rn:widget path="search/SimpleSearch"/>
</div>
</rn:condition>
```

3 Save *standard.php*.

Continue customizing the sidebar or Continue configuring the template.

Removing the search field from specific pages

To remove the search field from specific pages

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<rn:condition hide_on_pages="answers/list, home, account/questions/
list">
```

3 Edit the *hide_on_pages* attribute to include any other pages where you don't want the search field to appear in the sidebar. As an example, your code would look like the following if you decided not to display the search field on the Ask a Question page in addition to the pages where it already doesn't appear by default.

```
<rn:condition hide_on_pages="answers/list, home, account/questions/
list, ask">
```

4 Save *standard.php*.

Continue customizing the sidebar or Continue configuring the template.

Removing sidebar elements

To remove sidebar elements

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following code. The code for the sidebar elements follows these lines of code.

```
<h2>#rn:msg:CONTACT_US_LBL#</h2>
<div class="rn_HelpResources">
```

3 Use the following table to elect the element you want to remove and delete the associated text.

Table 367: Deleting Sidebar Elements

To remove this element	Delete the following code

Ask a Question	`<div class="rn_Questions">`
	`  <a href="/app/ask#rn:session#">#rn:msg:ASK_QUESTION_LBL#</a>`
	`  <span>#rn:msg:SUBMIT_QUESTION_OUR_SUPPORT_TEAM_CMD#</span>`
	`</div>`

Table 367: Deleting Sidebar Elements (Continued)

To remove this element	Delete the following code

Ask the Community	`<rn:condition config_check="COMMUNITY_ENABLED == true">`
	`  <div class="rn_Community">`
	`    <a`
	`    href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_LBL#<`
	`    /a>`
	`    <span>#rn:msg:SUBMIT_QUESTION_OUR_COMMUNITY_CMD#</span>`
	`  </div>`
	`</rn:condition>`

Live Chat	`<rn:condition config_check="MOD_CHAT_ENABLED == true">`
	`  <rn:widget path= "chat/ConditionalChatLink" min _sessions_`
	`  avail="1"/ >`
	`</rn:condition>`

Contact Us	`<div class="rn_Contact">`
	`  <a href="javascript:void(0);">#rn:msg:CONTACT_US_LBL#</a>`
	`  <span>#rn:msg:CANT_YOURE_LOOKING_SITE_CALL_MSG#</span>`
	`</div>`

Give Feedback	`<rn:condition config_check="CP_CONTACT_LOGIN_REQUIRED`
	`== false" logged_in="true">`
	`  <div class="rn_Feedback">`
	`    <rn:widget path="feedback/SiteFeedback" />`
	`    <span>#rn:msg:SITE_USEFUL_MSG#</span>`
	`  </div>`
	`</rn:condition>`

4 Save *standard.php*.

Continue customizing the sidebar or Continue configuring the template.

Editing sidebar messages

The following procedure shows how to add a phone number to the Contact Us link in the sidebar. Use it as an example for modifying any of the other messages that appear in the side-bar.

To add a phone number to the Contact Us link

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following code.

```
<div class="rn_Contact">
    <a href="javascript:void(0);">#rn:msg:CONTACT_US_LBL#</a>
    <span>#rn:msg:CANT_YOURE_LOOKING_SITE_CALL_MSG#</span>
</div>
```

3 Replace `#rn:msg:CANT_YOURE_LOOKING_SITE_CALL_MSG#` message base with the message you want to add. (Learn about editing message bases here.) Your code may resemble the following.

```
<span>If you cannot find what you are looking for on our site, give us
a call at (406) 555-5555.</span>
```

4 Save *standard.php*.

Continue customizing the sidebar or Continue configuring the template.

Adding the CobrowsePremium widget to the sidebar

The CobrowsePremium widget lets customers share their desktop with agents who are helping them on the phone. Agents direct customers to the location of the link on your customer portal and ask them to click it. After the customer clicks the link, a window opens to display an access code. The customer provides the number to the agent, who enters it on the **Co-Browse** tab of an open incident to begin viewing the customer's desktop. (To learn more, see Co-browsing with customers.)

Note The Co-Browse Premium feature must be enabled before the widget displays. Contact your Oracle account manager to enable Co-Browse Premium.

The incident **workspace** must be customized to add the Co-Browse tab so the agent can use the feature. Refer to Configuring co-browse on incident workspaces.

If you want to allow co-browsing with Chat, refer to Configuring co-browse on chat workspaces and place the ChatCobrowsePremium widget on the Chat page.

You can add the CobrowsePremium widget to any page. The following procedure puts it on the template so it appears at the bottom of every page that uses the standard template.

To add the CobrowsePremium widget to the template

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following lines of code.

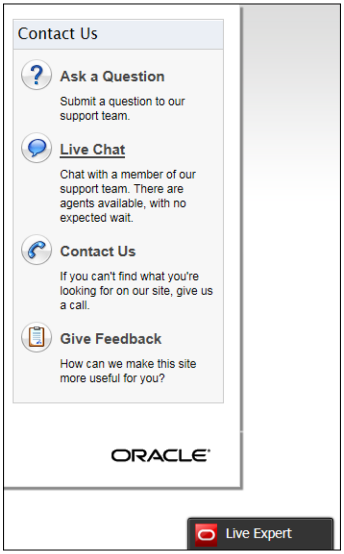
```
    <div class="rn_Feedback">
        <rn:widget path="feedback/SiteFeedback" />
        <span>#rn:msg:SITE_USEFUL_MSG#</span>
    </div>
</rn:condition>
</div>
```

3 Add the following lines of code immediately after the last line you located in step 2.

```
<div>
    <rn:widget path="utils/CobrowsePremium" />
</div>
```

4 Save *standard.php*.

Continue customizing the sidebar or Continue configuring the template.



Adding elements to the sidebar

You can add whatever element you want to the sidebar. Here are two examples.

- Adding an announcement to the template
- Adding the CommunityPosts widget to the template

Removing the sidebar

To remove the sidebar

1 Open the *standard.php* file in the */views/templates* folder.

2 Delete the following code. This code spans approximately 38 lines and includes the <div> classes for the search field and the Ask a Question, Live Chat, Contact Us, and Give Feedback links.

```
<div id="rn_SideBar" role="navigation">
    <div class="rn_Padding">
        <rn:condition hide_on_pages="answers/list, home, account/
        questions/list">
        <div class="rn_Module" role="search">
            <h2>#rn:msg:FIND_ANS_HDG#</h2>
.
.
.
</div>
```

Note Two </div> tags remain in the file immediately below the code you deleted.

3 Save *standard.php*.

Continue configuring the template.

Configuring the header

The header section of the template contains the main heading (Support Center) and login/ logout links.

- Changing the default heading
- Configuring login functionality

By customizing the code, you can also add your organization's logo, a search field, site navigation links, and any other elements you want to appear in the header of every page that uses the template.

When you're finished configuring the header, you can continue configuring other elements of the template.

Changing the default heading

To change the default heading in the header

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<div id="rn_Logo"><a href="/app/
#rn:config:CP_HOME_URL##rn:session#"><span
class="rn_LogoTitle">#rn:msg:SUPPORT_LBL# <span
class="rn_LogoTitleMinor">#rn:msg:CENTER_LBL#</span></span></a></div>
```

3 Edit the code to add the heading text you want to appear, as shown in the following example. (Learn about editing message bases here.)

```
<div id="rn_Logo"><a href="/app/
#rn:config:CP_HOME_URL##rn:session#"><span
class="rn_LogoTitle">Global Wireless <span
class="rn_LogoTitleMinor">Support</span></span></a></div>
```

4 Save *standard.php*.

Configure login functionality or Continue configuring the template.

Configuring the footer

The footer in the **reference implementation** template contains the PageSetSelector widget and the Oracle logo. The PageSetSelector widget lets your customers switch between the standard, mobile, and basic page sets.

By customizing the code, you can also add site navigation links, a copyright statement, contact information, and other elements you want to appear in the footer of every page that uses the template. This example procedure shows you how to add a copyright statement to the footer.

To add a copyright to the footer

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following line of code within the `<div>` tags for `rn_Footer`.

```
<rn:widget path="utils/PageSetSelector"/>
```

3 Add the following code just below the code you located in step 2.

```
<p>&copy Copyright 2014 Global Wireless </p>
```

4 Save *standard.php*.

Continue configuring the template.

Adding an announcement to the template

You might want to add an announcements section to the template's sidebar, where you can provide information for your customers. You can accomplish this by adding the standard AnnouncementText widget to the sidebar. Because you can call whatever file you want, you can change the displayed information at will.

You might want to use this widget when another staff member defines what information should be displayed, but does not (or should not) have access to Customer Portal code. The staff member can modify the file that the AnnouncementText widget calls without modifying any files. Because the widget pulls the file from */cp/customer/assets*, where files are shared between development and production, you are not required to stage and promote your customer portal after editing the file called by the AnnouncementText widget. Instead, its content is immediately available on your production site.

You might also consider setting conditions to determine which file is called by the widget. For example, you could display one announcement to customers who have an SLA and different information to those who do not have an SLA.

- Add an announcement to the sidebar.
- Define conditions for displaying an announcement.

After you've finished adding an announcement, continue configuring the template.

Adding an announcement to the sidebar

To add an announcement to the sidebar

1 First, create the file you want to use as an announcement. For the sake of this procedure, create a custom subfolder called *announcements* in the */cp/customer/assets* folder, and name the file *announcement.html*.

2 Open the *standard.php* file in the */views/templates* folder.

3 Locate the following code.

```
            <div class="rn_Feedback">
                <rn:widget path="feedback/SiteFeedback" />
                <span>#rn:msg:SITE_USEFUL_MSG#</span>
            </div>
        </rn:condition>
        </div>
    </div>
```

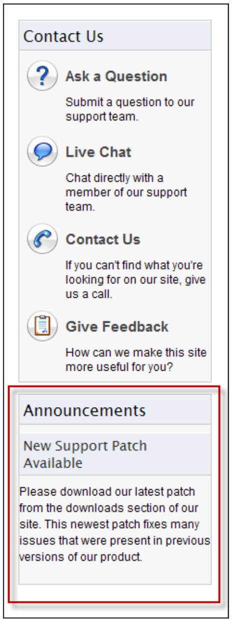
4 Add the following code immediately after the code you found in step 3.

```
<div class="rn_Module">
    <rn:widget path="utils/AnnouncementText"
    file_path="/cp/customer/assets/announcements/announcement.html" /
    >
</div>
```

Note The *file_path* attribute is required for the AnnouncementText widget in order for the announcement to have any content.

5 Save *standard.php*.

Define conditions for displaying the announcement widget or Continue configuring the template.



Defining conditions for displaying an announcement

In this example, we'll assume that you want to show your standard announcement to customers who do not have an SLA. We'll also assume that you have a different announcement, which we'll call *announcement_sla.html*, in the */cp/customer/assets/announcements* folder for customers with an incident SLA.

To define conditions for the AnnouncementText widget

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following code.

```
            <div class="rn_Feedback">
                <rn:widget path="feedback/SiteFeedback" />
                <span>#rn:msg:SITE_USEFUL_MSG#</span>
            </div>
        </rn:condition>
        </div>
    </div>
```

3 Add the following code immediately after the code you found in step 2.

```
<rn:condition sla="incident">
    <div class="rn_Module">
        <rn:widget path="utils/AnnouncementText"
        file_path="/cp/customer/assets/announcements/
        announcement_sla.html" />
    </div>
<rn:condition_else />
    <div class="rn_Module">
        <rn:widget path="utils/AnnouncementText"
        file_path="/cp/customer/assets/announcements/
        announcement.html" />
    </div>
</rn:condition>
```

4 Save *standard.php*.

Continue configuring the template.

Editing the page set from the template

The standard page set included in the Customer Portal **reference implementation** contains a set of standard pages that let your customers search for information in your **knowledge base**, view **answers**, ask a question, and update their **contact** information.

This section helps you configure the page set. It shows you how to remove any of the standard pages that you don't want to display on your customer portal, add other pages, or hide the Ask a Question tab until certain conditions are met. Select one of the following options to configure the page set.

Configuring the page set

- Remove pages
  - ▷ Support Home
  - ▷ Answers
  - ▷ Ask a Question
  - ▷ Your Account
- Add pages
- Require customers to conduct searches or view answers before displaying the Ask a Question tab

See a listing of all Customer Portal pages in the reference implementation, including their file names and descriptions.

When you finish configuring the template, you can return to other configuration options for the template and page set.

Configuring individual pages

To configure a specific page, select the page you want to configure from the following options. These standard pages are highly flexible, so you can configure the pages to meet the specific needs of your organization without having to create custom pages.

- Support Home Page
- Answers Page
- Answer Details Page
- Ask a Question Page
- Your Account Pages
- Log In page
- Live Help page or Chat page

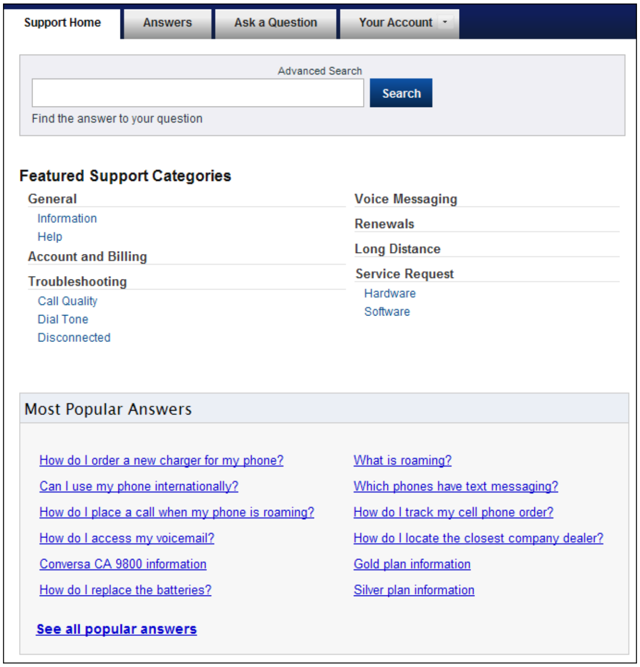
Support Home page

By default, your customers enter your support site through the Support Home page. It contains a search field, a list of featured support categories, and the Most Popular Answers report. If you remove the Support Home page, you'll need to specify another entry point into your customer portal.

Do you want your customers to use the Support Home page to access your customer portal?

- **Yes.** This is the default, so you can continue configuring the page set.

- **No.** Show me how to remove the Support Home page.



Removing the Support Home page

If you remove the Support Home page from your customer portal, you'll want to remove the navigation tab that points to it. You'll also need to go to the **administration interface** and edit the **configuration setting** that defines which page opens by default. The following procedure shows you how to perform these steps.

To remove the Support Home page

1 Delete the *home.php* file from the */views/pages* folder.

2 Edit the *standard.php* file, located in the */views/templates* folder, to delete the following line of code.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:SUPPORT_HOME_TAB_HDG#"
link="/app/#rn:config:CP_HOME_URL#"
pages="home, "/></li>
```

3 Save *standard.php*.

4 Change the configuration setting that determines what page first opens on your customer portal.

   a Log in to Oracle Service Cloud.

   b Use the procedure described in To locate and edit configuration settings to locate CP_HOME_URL under RightNow User Interface > Customer Portal > Pages.

   c In the Value field, type the name of the page you want customers to be directed to when they first access your customer portal. Begin at the */views/pages* folder level and omit the PHP file name extension. For example, to specify the Ask a Question page, type `ask`. To specify the Answers page, type `answers/list`.

   d Click the Save button on the ribbon.

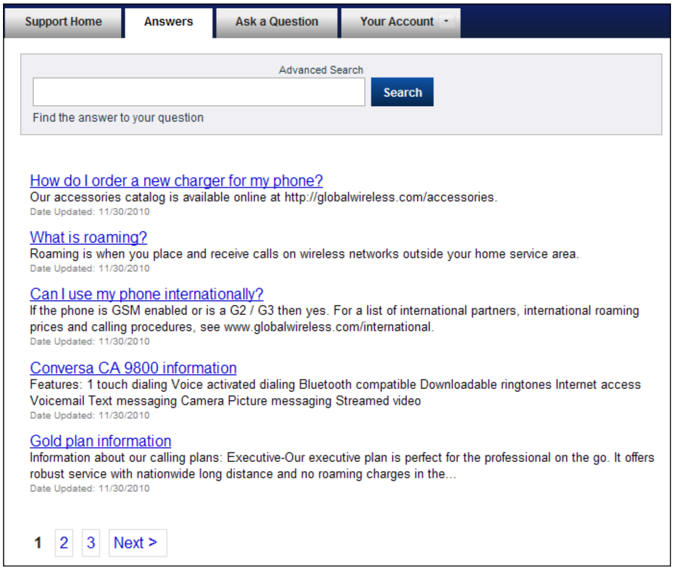
Continue configuring the page set.

Answers page

The Answers page lets your customers search your **knowledge base** using basic and advanced search methods. The search results page displays a list of **answers** that match the customer's search terms. The page contains links to individual answers that are displayed in the **report**.

Do you want your customers to have access to the Answers page?

- **Yes.** This is the default, so you can continue configuring the page set.
- **No.** Show me how to remove the Answers page.



Removing the Answers page

If you're going to remove the Answers page, you'll also want to remove the answer details page, which displays a selected answer, as well as the navigation link to it in the template. The following procedure shows you how to perform these steps.

To remove the Answers page

1 Delete the *list.php* and *detail.php* files from the */cp/customer/development/views/pages/answers* folder.

2 Edit the *standard.php* file, located in the */views/templates* folder, to delete the following line of code.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:ANSWERS_HDG#"
link="/app/answers/list"
pages="answers/list, answers/detail"/></li>
```

3 Save *standard.php*.

It also makes sense to delete the following features that are associated with answers.

- The Search field in the sidebar on pages that don't have another search field
- The Notifications section on the Account Overview page

- The Notifications option on the Your Account tab's drop-down menu

You may want to delete the Support Home page as well, since it includes links to answers.

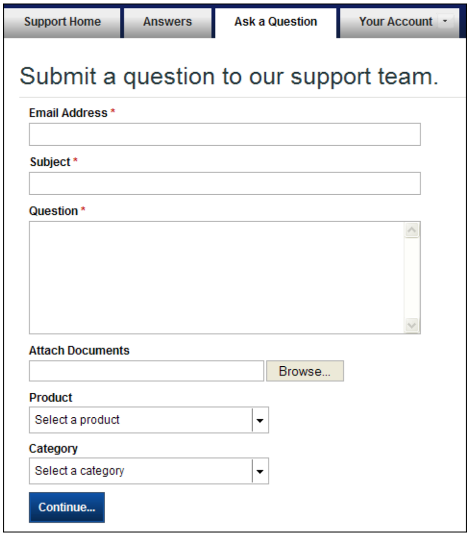
Continue configuring the page set.

Ask a Question page

The Ask a Question page lets your customers submit questions to your support team when they can't find the answer they are looking for. If you want, you can hide the page link until after customers have searched for information or viewed answers in your **knowledge base**.

Do you want your customers to have access to the Ask a Question page?

- **Yes.** This is the default, so you can continue configuring the page set.
- **Yes,** but I want them to first try to find the answer themselves. Show me how to require customers to conduct a search or view an answer before they can access the Ask a Question page.
- **No.** Show me how to remove the Ask a Question page.



Requiring a search or answer view

You might want to encourage your customers toward increased self-service instead of having them automatically submit every question they have to your support team. One way you can accomplish this is by turning off the Ask a Question tab until customers have conducted a specified number of searches or viewed a specified number of answers.

The RN Condition page tag lets you hide part of the page if the condition specified in the tag is not met. Among the attributes of this tag are *searches_done* and *answers_viewed*. You can use one or the other or both.

Note Before you implement this requirement, you should consider the usability issues of conditionally hiding and exposing page navigation. Particularly for customers using screen readers, the presence of a new navigation tab may not be evident when the conditions that trigger its appearance have occurred.

View other uses of the RN Condition tag here.

To display the Ask a Question page based on searches done or answers viewed

1 Open the *standard.php* file in the */views/templates* folder.

2 Select the condition you want to use to determine when the Ask a Question is displayed.

- Answers viewed only
- Searches done only
- Answers viewed or searches done
- Answers viewed and searches done

3 Save *standard.php*.

Continue configuring the page set or Continue configuring the Ask a Question page.

Answers only condition

To use answers only as a condition

1 In the *standard.php* file, locate the following line of code that defines the Ask a Question navigation tab.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:ASK_QUESTION_HDG#"
link="/app/ask" pages="ask, ask_confirm"/></li>
```

2 Add the following code on a separate line above the code for the Ask a Question tab.

```
<rn:condition answers_viewed="3">
```

Note In this example, customers must view three answers before the tab is displayed. Replace `"3"` in the code with the number of answers you want them to view.

3 Add the following code on a separate line below the code for the Ask a Question tab.

```
</rn:condition>
```

Return to the procedure.

Searches only condition

To use searches only as a condition

Note We recommend using the NavigationTab widget *searches_done* attribute instead of the RN Condition *searches_done* attribute if your only criteria for displaying the Ask a Question page is the number of searches your customers perform.

Because the RN Condition tag identifies a search only when a page is turned or refreshed, this is a less ideal option for displaying the Ask a Question page. Assume you set the *searches_done* attribute for RN Condition to 2. Now assume a customer conducts one search, reviews the list but does not click an answer or otherwise leave or refresh the answers list page, and then conducts a second search. In this case, the Ask a Question tab will not be displayed until another page is opened or the current page is refreshed.

To count searches performed by the customer regardless of whether page turns occur (that is, regardless of whether an answer resulting from a search is viewed), use the *searches_done* attribute of the NavigationTab widget rather than the *searches_done* attribute of the RN Condition tag.

1 In the *standard.php* file, locate the following line of code that defines the Ask a Question navigation tab.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:ASK_QUESTION_HDG#"
link="/app/ask"
pages="ask, ask_confirm"/></li>
```

2 Add the *searches_done* attribute to the NavigationTab widget.

```
<li><rn:widget path="navigation/NavigationTab"
```

```
label_tab="#rn:msg:ASK_QUESTION_HDG#"
link="/app/ask"
pages="ask, ask_confirm"
searches_done="2" /></li>
```

Return to the procedure.

Answers or searches condition

To use either answers or searches as a condition

Note This example uses the *searches_done* attribute of the NavigationTab widget instead of the *searches_done* attribute of the RN Condition tag in order to count searches regardless of whether the customer opens an answer after conducting a search.

1 In the *standard.php* file, select the following line of code that defines the Ask a Question navigation tab.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:ASK_QUESTION_HDG#"
link="/app/ask"
pages="ask, ask_confirm"/></li>
```

2 Type the following code to replace the selected line of code.

```
<rn:condition answers_viewed="3">
    <li><rn:widget path="navigation/NavigationTab"
    label_tab="#rn:msg:ASK_QUESTION_HDG#"
    link="/app/ask"
    pages="ask, ask_confirm"/></li>
<rn:condition_else/>
    <li><rn:widget path="navigation/NavigationTab"
    label_tab="#rn:msg:ASK_QUESTION_HDG#"
    searches_done="2"
    link="/app/ask"
    pages="ask, ask_confirm"/></li>
</rn:condition>
```

Return to the procedure.

Answers and searches condition

To use both answers and searches as a condition

1 In the *standard.php* file, select the following line of code that defines the Ask a Question navigation tab.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:ASK_QUESTION_HDG#"
link="/app/ask"
pages="ask, ask_confirm"/></li>
```

2 Type the following code to replace the selected line of code and place conditions on the display of the Ask a Question tab.

```
<rn:condition answers_viewed="3">
    <li><rn:widget path="navigation/NavigationTab"
    label_tab="#rn:msg:ASK_QUESTION_HDG#"
    link="/app/ask"
    pages="ask, ask_confirm"
    searches_done="2"/></li>
</rn:condition>
```

Return to the procedure.

Removing the Ask a Question page

If you want to remove the Ask a Question page, you'll need to perform a couple of steps.

- First, you'll remove the page and edit the template to remove the following elements.
  - ▷ The Ask a Question navigation tab
  - ▷ The Support History option on the Your Account tab's drop-down menu
  - ▷ The Ask a Question link in the sidebar
- Then, you'll remove the Support History section of the Your Account Overview page.

To remove the Ask a Question page and edit the template

1 Delete the *ask.php* and *ask_confirm.php* files from the */cp/customer/development/views/pages* folder.

2 Open the *standard.php* file, located in the */views/templates* folder.

3 Delete the following line of code to remove the page navigation.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:ASK_QUESTION_HDG#"
```

```
link="/app/ask"
pages="ask, ask_confirm"/></li>
```

4 Edit the following line of code to delete `#rn:msg:SUPPORT_HISTORY_LBL# > /app/account/questions/list`. This removes the Support History menu item on the Your Account navigation tab.

```
subpages="#rn:msg:ACCOUNT_OVERVIEW_LBL# > /app/account/overview,
#rn:msg:SUPPORT_HISTORY_LBL# > /app/account/questions/list,
#rn:msg:ACCOUNT_SETTINGS_LBL# > /app/account/profile,
#rn:msg:NOTIFICATIONS_LBL# > /app/account/notif/list"/></li>
```

5 Delete the following lines of code to remove the Ask a Question option from the sidebar.

```
<div class="rn_Questions">
    <a href="/app/ask#rn:session#">#rn:msg:ASK_QUESTION_LBL#</a>
    <span>#rn:msg:SUBMIT_QUESTION_OUR_SUPPORT_TEAM_CMD#</span>
</div>
```

6 Save *standard.php*.

To remove the Support History section from the Account Overview page

1 Open the *overview.php* file in the */views/pages/account* folder.

2 Delete the following lines of code.

```
<h2><a class="rn_Questions" href="/app/account/questions/
list#rn:session#">#rn:msg:QUESTIONS_HDG#</a></h2>
<div class="rn_Questions">
    <rn:widget path="reports/Grid"
    report_id="196"
    per_page="4"
    label_caption="<span class='rn_ScreenReaderOnly'>
    #rn:msg:YOUR_RECENTLY_SUBMITTED_QUESTIONS_LBL#</span>" />
    <a href="/app/account/questions/
    list#rn:session#">#rn:msg:SEE_ALL_QUESTIONS_LBL#</a>
</div>
```

3 Save *overview.php*.

Continue configuring the page set.

Your Account pages

When customers click the Your Account tab, the Log In page opens if they are not logged in. If they are logged in, the Account Overview page opens. The Account Overview page displays the customer's support history in a list of recently submitted questions and a link to a page that displays all their submitted questions. It also provides a link for updating **account** settings and changing the customer's password. Up to four **answer notifications** are displayed on the overview page along with a link for all answer and product/category notifications.

Do you want to give your customers access to the Your Account pages, including Account Overview, Support History, Account Settings, and Notifications?

- **Yes.** This is the default, so continue configuring the page set.
- **Yes,** and I'd like to make some changes to the Account Overview page.
- **Yes,** and I'd like to make some changes to a subpage.
- **No.** Show me how to remove one or more of the Your Account pages.

Removing the Your Account pages

You have the following options for removing Your Account pages.

- Remove all of the Your Account pages, including the Account Overview, Support History, Account Settings, and Notifications.
- Keep the Account Overview page and remove one or more subpages: Support History, Account Settings, or Notifications.

When you're finished removing the pages, continue configuring the page set.

Removing all of the Your Account pages

When you want to remove the Your Account pages, you'll need to remove the pages from the file structure and remove the template navigation to the pages.

To remove all Your Account pages

1. Delete the *overview.php* and *profile.php* files from the */cp/customer/development/views/pages/account* folder.
2. Delete the *list.php* file from the */views/pages/account/notif* folder.
3. Delete the *list.php* file from the */views/pages/account/questions* folder.
4. Edit the *standard.php* file, located in the */views/templates* folder, to delete the following two lines of code.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:YOUR_ACCOUNT_LBL#"
link="/app/account/overview"
pages="utils/account_assistance, account/overview, account/profile,
account/notif, account/change_password, account/questions/list,
account/questions/detail, account/notif/list, utils/login_form,
utils/create_account, utils/submit/password_changed, utils/submit/
profile_updated"
subpages="#rn:msg:ACCOUNT_OVERVIEW_LBL# > /app/account/overview,
#rn:msg:SUPPORT_HISTORY_LBL# > /app/account/questions/list,
#rn:msg:ACCOUNT_SETTINGS_LBL# > /app/account/profile,
#rn:msg:NOTIFICATIONS_LBL# > /app/account/notif/list"/></li>
```

5 Save *standard.php*.

Continue configuring the page set.

Removing Your Account subpages

This example procedure demonstrates removing the Support History subpage and navigation. Use the same steps to remove the Account Settings or Notifications subpages: remove the page from the file structure, change the drop-down menu on the Your Account tab, and remove the section from the Account Overview page.

To remove the Support History subpage

1 Delete the *list.php* file from the */views/pages/account/questions* folder.

2 Open the *standard.php* file, located in the */views/templates* folder.

3 Locate the following line of code.

```
subpages="#rn:msg:ACCOUNT_OVERVIEW_LBL# > /app/account/overview,
#rn:msg:SUPPORT_HISTORY_LBL# > /app/account/questions/list,
#rn:msg:ACCOUNT_SETTINGS_LBL# > /app/account/profile,
#rn:msg:NOTIFICATIONS_LBL# > /app/account/notif/list"/></li>
```

4 Edit the code to delete `#rn:msg:SUPPORT_HISTORY_LBL# > /app/account/questions/list`. The following code shows the edited line.

```
subpages="#rn:msg:ACCOUNT_OVERVIEW_LBL# > /app/account/overview,
#rn:msg:ACCOUNT_SETTINGS_LBL# > /app/account/profile,
#rn:msg:NOTIFICATIONS_LBL# > /app/account/notif/list"/></li>
```

5 Save *standard.php*.

6 Next, you'll remove the Support History section on the Account Overview page. Open the *overview.php* file in the */views/pages/account* folder.

7 Delete the following lines of code.

```
<h2><a class="rn_Questions" href="/app/account/questions/
list#rn:session#">#rn:msg:QUESTIONS_HDG#</a></h2>
<div class="rn_Questions">
    <rn:widget path="reports/Grid"
    report_id="196"
    per_page="4"
    label_caption="<span class='rn_ScreenReaderOnly'>
    #rn:msg:YOUR_RECENTLY_SUBMITTED_QUESTIONS_LBL#</span>"/>
    <a href="/app/account/questions/
    list#rn:session#">#rn:msg:SEE_ALL_QUESTIONS_LBL#</a>
</div>
```

8 Save *overview.php*.

Continue configuring the page set.

Adding pages to your customer portal

You can add any other page to your customer portal and configure the navigation controls to point to the page. For example, you may want to add a Browse page to let your customers **browse** products and categories. This lets them view specific areas of interest without conducting a search.

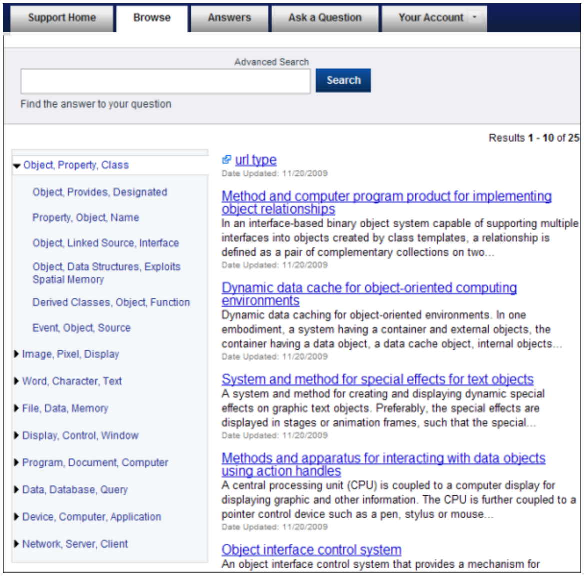
Does the reference implementation contain the pages you want to provide on your customer portal?

- **Yes.** This is the default, so you can continue editing the page set.
- **No,** I want to add a Browse page to the page set.
- **No,** I want to add a different page to the page set.

Adding a Browse page

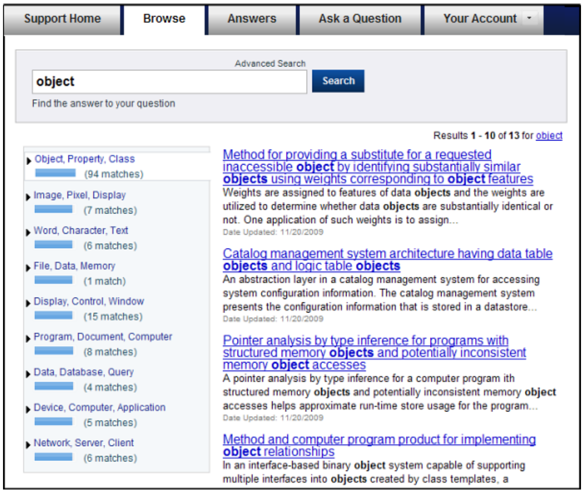
You might want to offer your customers the option of **browsing** for answers by topic rather than searching on the Answers page. If this is the case, you can use the TopicBrowse widget, which displays a topics tree on the left and the answers associated with a selected topic on the right.

Click to view



If customers enter a search term in the search field, the topics associated with the search term are listed.

Click to view



The TopicBrowse widget is not part of the **reference implementation**, and we recommend that you create a separate page for it, which means you'll also need to add a new navigation tab for it on the template.

Note If you want to replace the default Answers page with the Browse page, simply edit the *list.php* file as described in the following procedure, omitting step 2. You will not need to edit the template file to add Browse page navigation because your page can use the existing Answers page navigation tab.

To add a custom Browse page

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Save the file with a new name in the */views/pages/answers* folder. This file will become your Browse page. For the sake of example, name the file *browse.php*.

3 Locate the following line of code and replace `report_id="176"` with `report_id="178"`.

```
<rn:container report_id="176">
```

4 Locate the following lines of code.

```
<div class="rn_SearchInput">
```

```
    <rn:widget path="search/AdvancedSearchDialog"/>
    <rn:widget path="search/KeywordText"
    label_text="#rn:msg:FIND_THE_ANSWER_TO_YOUR_QUESTION_CMD#"
    initial_focus="true" />
</div>
<rn:widget path="search/SearchButton" />
```

5 Add the following line above the first line of code you located in step 4.

```
<fieldset>
```

6 Add the following line below the last line of code you located in step 4.

```
</fieldset>
```

7 Locate the following line of code.

```
<rn:widget path="knowledgebase/TopicWords"/>
```

8 Add the following lines of code below the code you located in step 7.

```
<div class="rn_FloatLeft">
    <rn:widget path="knowledgebase/TopicBrowse" />
</div>
```

9 Save *browse.php*.

To add Browse page navigation

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the block of NavigationTab widgets and add the following line of code where you want it displayed on the template. For example, if you want the tab to appear between the Support Home and Answers tabs, add the code after the Support Home tab code and before the Answers tab code.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="Browse"
link="/app/answers/browse"
pages="answers/browse, answers/detail"/></li>
```

3 Save *standard.php*.

Change the topic labels that are displayed on the Browse page or Continue editing the page set.

Changing topic labels

You may prefer to change the topic labels that are displayed to your customers so they use terminology that is more consistent with what your organization uses. You can edit the labels on the **administration interface**.

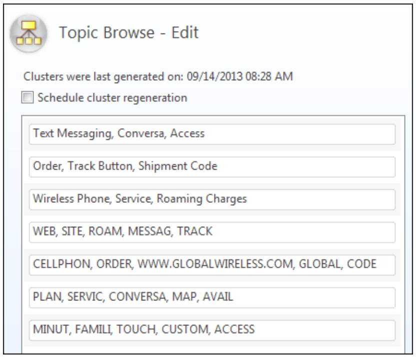
To change topic labels

1 Log in to Oracle Service Cloud.

2 Click the Configuration button on the navigation pane.

3 Double-click Topic Browse under Service > Knowledge Base. The Interfaces tree displays on the content pane.

4 Click the interface in the left column to display the Topic Browse editor.



5 Click the label you want to edit under the Cluster Labels heading. The cursor is placed in the label field.

6 Edit the current label or type a new one.

7 To schedule your changes so they take effect the next time the **Agedatabase** utility runs, select the Schedule Cluster Regeneration check box.

8 Click the Save and Close button on the ribbon.

Return to Adding a Browse page or Continue editing the page set.

Adding other pages

If you want to add a page from the **reference implementation** to your customer portal, you'll simply need to add template navigation to the page. Click here to see an example of adding the Change Password page and navigation tab to the template.

The procedure is similar for any custom page you want to add. After you create the page, add it to the */development/views/pages* folder or one of its subfolders and use that path to call the page. As an example, if you add a page named *new_page.php* to the *utils* folder, define it as */app/utils/new_page* in your code.

Note If your custom page is a PHP file, as it most likely is, it will be compiled during the **staging** process with the rest of the page files in the *development* folder. Non-PHP files are not compiled during staging.

When you edit reference implementation files or create custom pages, we recommend that you don't add PHP to your page and template files. This practice lets non-developers edit the pages without affecting server-side scripting.

Continue editing the page set.

Configuring login functionality

Customers who already have an **account** with your organization can click the Log In link to log in to their account. Customers who do not yet have an account can click the Sign Up link to create an account.

Important Customers must have their browsers set to accept cookies or they will not be able to log in to the customer portal.

You may also want to require that customers log in to some or all of your customer portal pages.

When customers are logged in, the login section of the header displays a welcome message, their full name, organization name if the customer is associated with one, and the Logout link.

Do you want the Log In and Sign Up links to appear in the header?

- **Yes.** This is the default, so you can continue configuring the login section.
- **Yes,** I want to display both links, but I want to change the link labels.
- **No,** I want to display the Log In link, but not the Sign Up link.

- **No,** show me how to remove both links in the header.

Important If pass-through authentication is enabled (that is, if the value of PTA_EXTERNAL_LOGIN_URL is not null), the Log In and Sign Up links will be inactive. You may want to edit them or remove them.

To configure the login dialog that opens when customers click the Log In link, refer to Login-Dialog widget.

Changing link labels

To change the Log In and Sign Up link labels

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<a href="javascript:void(0);" id="rn_LoginLink">#rn:msg:LOG_IN_LBL#</
a> | <a href="/app/utils/
create_account#rn:session#">#rn:msg:SIGN_UP_LBL#</a>
```

3 Edit the code to change the labels. Your code will resemble the following example.

```
<a href="javascript:void(0);" id="rn_LoginLink">New Log In</
a> | <a href="/app/utils/create_account#rn:session#">New
Sign Up</a>
```

4 Save *standard.php*.

Continue configuring the login section.

Removing only the Sign Up link

To remove the Sign Up link

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<a href="javascript:void(0);" id="rn_LoginLink">#rn:msg:LOG_IN_LBL#</
a> | <a href="/app/utils/
create_account#rn:session#">#rn:msg:SIGN_UP_LBL#</a>
```

3 Edit the line to delete the code that begins with the first ` `. The following code is the edited version.

```
<a href="javascript:void(0);" id="rn_LoginLink">#rn:msg:LOG_IN_LBL#</
a>
```

4 Save *standard.php*.

Continue configuring the login section.

Removing the Log In and Sign Up links

To remove the Log In and Sign Up links

1 Open the *standard.php* file in the */views/templates* folder.

2 Delete the following lines of code.

```
<rn:condition_else />
    <rn:condition config_check="PTA_ENABLED == true">
        <a href="javascript:void(0);"
        id="rn_LoginLink">#rn:msg:LOG_IN_LBL#</a> | <a
        href="javascript:void(0);">#rn:msg:SIGN_UP_LBL#</a>
    <rn:condition_else>
        <a href="javascript:void(0);"
        id="rn_LoginLink">#rn:msg:LOG_IN_LBL#</a> | <a
        href="/app/utils/
        create_account#rn:session#">#rn:msg:SIGN_UP_LBL#</a>
        <rn:condition hide_on_pages="utils/create_account, utils/
        login_form, utils/account_assistance">
            <rn:widget path="login/LoginDialog"
            trigger_element="rn_LoginLink"/>
        </rn:condition>
        <rn:condition show_on_pages="utils/create_account, utils/
        login_form, utils/account_assistance">
            <rn:widget path="login/LoginDialog"
            trigger_element="rn_LoginLink"
            redirect_url="/app/account/overview"/>
        </rn:condition>
    </rn:condition>
```

Note Don't delete the last closing condition tag for the `logged_in="true"` condition.

3 Save *standard.php*.

Continue configuring the login section.

Additional login configuration

When a customer is logged in, do you want to display "Welcome [First Name] [Last Name] [Organization]" in the login section?

- **Yes.** This is the default, so you can continue configuring the template.
- **No,** I want to change the welcome message.
- **No,** I want to display only the customer's first name.
- **No,** I want to remove the organization name from the welcome message. (If your contacts are not associated with **organizations**, you do not need to remove the organization name from the template because it won't appear.)
- **No,** I want to remove the entire message.

When you're finished configuring the login, continue configuring the template or return to other configuration options for the template and page set.

Changing the welcome message

To change the welcome message

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
#rn:msg:WELCOME_BACK_LBL#
```

3 Replace the entire line of code with your new welcome message. Your code will resemble the following.

```
New Welcome Message
```

4 Save *standard.php*.

Continue configuring the login section or Return to other configuration options for the template and page set.

Displaying first name only

To display only the customer's first name

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<rn:field name="Contact.LookupName"/><rn:condition language_in="ja-JP">#rn:msg:NAME_SUFFIX_LBL#</rn:condition>
```

3 Edit the field name as shown in the following line of code.

```
<rn:field name="Contact.Name.First"/><rn:condition language_in="ja-
JP">#rn:msg:NAME_SUFFIX_LBL#</rn:condition>
```

4 Save *standard.php*.

Continue configuring the login section or Return to other configuration options for the template and page set.

Removing the organization from the welcome message

If the customer is not associated with an **organization**, no organization name appears in the header even if this code remains in the template file.

To remove the organization

1 Open the *standard.php* file in the */views/templates* folder.

2 Delete the following line of code.

```
    <rn:field name="Contact.Organization.LookupName"/>
```

Note Leaving the `<div>` tags above and below the organization name keeps the Logout link on the line after the welcome message.

3 Save *standard.php*.

Continue configuring the login section or Return to other configuration options for the template and page set.

Removing the welcome message

To remove the welcome message

1 Open the *standard.php* file in the */views/templates* folder.

2 Delete the following lines of code.

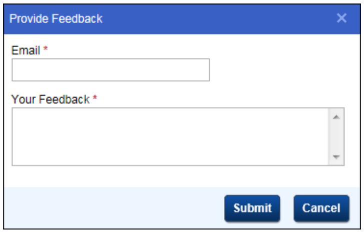
```
#rn:msg:WELCOME_BACK_LBL#
<strong>
    <rn:field name="Contact.LookupName"/><rn:condition
    language_in="ja-JP">#rn:msg:NAME_SUFFIX_LBL#</rn:condition>
</strong>
<div>
    <rn:field name="Contact.Organization.LookupName"/>
</div>
```

3 Save *standard.php*.

Continue configuring the login section or Return to other configuration options for the template and page set.

Configuring the Provide Feedback dialog

The Provide Feedback dialog opens when customers click the Give Feedback sidebar link. If the customer is not logged in, the dialog contains two required fields: the email address and a feedback field. If the customer is logged in, the incident created by the feedback is automatically associated with the customer and only the Your Feedback field appears on the dialog.



Do you want to use the default Provide Feedback dialog?

- **Yes.** This is the default so you can continue configuring the template.
- **No,** I'd like to customize how customers provide feedback.
- **No,** I want to remove the option of providing feedback.

When you're finished with the feedback dialog, return to other configuration options for the template and page set.

Customizing how customers provide feedback

When customers click the Give Feedback sidebar link, the Provide Feedback dialog opens by default. This dialog is generated with the SiteFeedback widget. You can modify the attributes of the widget to change the dialog, or you can open a different page instead of opening the dialog.

- Define the page that should open instead of the feedback dialog.
- Change labels on the dialog. (Cancel button, Your Feedback label, Provide Feedback window header, Email label, feedback confirmation message, Give Feedback, Submit button)

Opening a different feedback page

You can create a different feedback page and use the SiteFeedback widget to point your customers to that page instead of the default Provide Feedback window. The page must be part of your customer portal. You cannot point, for example, to an external URL.

To open a different page instead of the Provide Feedback window

1 Create the page you want to open, name it, and place it in */cp/customer/development/views/pages* folder or a subfolder.

2 Open the *standard.php* file in the */views/templates* folder.

3 Locate the following line of code:

```
<rn:widget path="feedback/SiteFeedback" />
```

4 Edit the code to add a value for the *feedback_page_url* attribute. The value must begin with `/app`. Your code will resemble the following example.

```
<rn:widget path="feedback/SiteFeedback"
feedback_page_url="/app/utils/your_custom_feedback_page" />
```

5 Save *standard.php*.

Edit feedback dialog labels or Return to other configuration options for the template and page set.

Editing feedback labels

To edit feedback labels

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following line of code:

```
<rn:widget path="feedback/SiteFeedback" />
```

3 Edit the code to add a value for the label you want to change.

a To change the label on the Give Feedback link, add `label_link="New Give Feedback Link Label"` to the widget code.

b To change the Provide Feedback header of the window, add `label_dialog_title="New Provide Feedback Header Label"` to the widget code.

c To change the Email label, add `label_email_address="New Email Address Label"` to the widget code.

d To change the Your Feedback label, add `label_comment_box="New Your Feedback Label"` to the widget code.

e To change the Submit button label, add `label_send_button="New Submit Button Label"` to the widget code.

f To change the Cancel button label, add `label_cancel_button="New Cancel Button Label"` to the widget code.

g To change the confirmation message, add `label_feedback_confirmation="New Confirmation Message"` to the widget code.

Your code will resemble the following example.

```
<rn:widget path="feedback/SiteFeedback" label_link="New Give Feedback
Link Label" label_dialog_title="New Provide Feedback Header Label"
label_feedback_confirmation="New Confirmation Message" />
```

4 To change the default message for the Give Feedback sidebar link (“How can we make this site more useful for you?”), locate the following line of code.

```
<span>#rn:msg:SITE_USEFUL_MSG#</span>
```

a Edit the code to replace the **message base** with your new message. (Learn about editing message bases here.) Your code will resemble the following example.

```
<span>Your new text for the Give Feedback sidebar link.</span>
```

5 Save *standard.php*.

Return to other configuration options for the template and page set.

Defining themes

A theme is a collection of files that change the appearance of your customer portal without impacting its functionality. Themes are created from CSS files, which can affect typeface, color, and borders. Themes may also include graphics, JavaScript, flash animations, and other types of files.

All the **reference implementation** theme files are called from the */euf/assets/themes/standard* folder. The */cp/customer/assets/themes/standard* and */cp/customer/assets/themes/mobile* also contain copies of the reference implementation theme files

Note The root */euf/* folder is correct even though you cannot see the */euf/* folder in your WebDAV file structure.

When you create custom themes, you must place them in the */cp/customer/assets/themes* subfolder. If you try to **stage** development files containing theme paths that are not fully qualified with */cp/customer/assets/themes,* you will see a warning in the deployment log.

Important Although all other files in the */cp/customer/assets/* folder are shared between the production and development sites, the files in the *themes* subfolder of */cp/customer/assets/* are used strictly by the development files. When you stage the development pages, these files are copied to a time-stamped folder in the staging directory and called from that folder. This keeps the themes you develop in an isolated sandbox that cannot be accessed by production files. The themes are applied to your production site only when you **promote** the staged files into production.

Any CSS files that are referenced by a theme but which are not located in the *themes* folder will be copied into a special directory in the production copy of the theme when the staged files are promoted into production.

Read-only copies of the reference implementation asset files are available in the */cp/core/assets/default/themes/standard* folder. By selecting Reference Implementation on the View Site menu at the upper right of the Customer Portal Administration site, you can see exactly how the customer portal appears using the default CSS files. You can also copy the files in this folder if you want to overwrite the changes you've made and restore the reference implementation CSS.

Review information about the RN Theme tag.

RN Theme tag

The RN Theme tag is used on a page or template to define what theme should be used. If a page that defines a theme uses a template that defines a different theme, the page theme takes precedence. Pages can specify more than one theme. If this is the case, the page uses the first theme unless the page code indicates otherwise.

You can define multiple themes and write logic to select a theme at run time based on any combination of database variables, web visit variables, URL attributes, or other elements.

Theme tags have two attributes: the location of the theme directory and one or more CSS files to be included on the page. The reference implementation template, *standard.php,* uses the default theme, *site.css,* located in the */euf/assets/themes/standard* folder, as shown in this code.

```
<rn:theme path="/euf/assets/themes/standard" css="site.css,
    {YUI}/widget-stack/assets/skins/sam/widget-stack.css,
    {YUI}/widget-modality/assets/skins/sam/widget-modality.css,
```

```
{YUI}/overlay/assets/overlay-core.css,
{YUI}/panel/assets/skins/sam/panel.css" />
```

Note The root */euf/* folder specified in this code is correct even though you cannot see the */euf/* folder in your WebDAV file structure.

The reference implementation uses a single main CSS file to define basic layout, structural and style rules, fonts, borders, and colors. You can copy this file and modify it to create a variety of themes that can be applied to pages using the RN Theme tag, letting you change the appearance of the template or a page by changing only the theme that is applied to it.

Note Rather than specifying a specific YUI version number, you can substitute the value `{YUI}` at the beginning of the file name to use the current YUI version, as shown in the preceding reference implementation template code.

Widgets have their own CSS files. The base CSS file for a widget controls its functionality, while the presentation for the widget is contained in its own file. This lets you control the appearance of a single widget without impacting any other widgets.

- Create a custom theme.
- Apply a theme to a page or template.

Creating themes

To create a theme

1 Create a folder in */cp/customer/assets/themes*.

2 Copy the files in */cp/customer/assets/themes/standard* and paste them into the folder you created in step 1.

3 Open the *site.css* file in your new custom subfolder.

4 Make whatever edits you want to modify the CSS file.

5 If you want to add images, place them in the */cp/customer/assets/themes/[your_custom_folder]/images* folder.

6 If you want to modify widget presentation CSS to match the changes you made to the *site.css* file, make your changes to the corresponding CSS file in the */cp/customer/assets/themes/[your_custom_folder]/widgetCss* folder.

Simple theme changes

The following example shows you how to make basic changes to the standard theme.

To make simple theme changes

1 Create a new folder in */cp/customer/assets/themes*. This example assumes the new folder is *theme_new*.

2 Copy the files in */cp/customer/assets/themes/standard* and paste them into the *theme_new* folder you created in step 1.

3 In order to check your work as you make edits to the theme, change the template to use the new theme.

a Open the *standard.php* file in the */views/templates* folder.

b Locate the following line of code:

```
<rn:theme path="/euf/assets/themes/standard" css="site.css,
```

c Change the code to the following:

```
<rn:theme path="/euf/assets/themes/theme_new" css="site.css,
```

4 Open *theme_new/site.css*.

5 To change the background color and font, locate the following lines of code, beginning at approximately line 73. Edit the code to change the font family and the color definition described by `#FFF url(images/layout/royalGrayBackground.png)`.

```
html {
    background:#FFF url(images/layout/royalGrayBackground.png)
    repeat-x;
    font-family:Helvetica, Arial, sans-serif;
}
```

Change the code to something that resembles the following:

```
html {
    background:#99FFCC repeat-x;
    font-family:Georgia, Times, serif;
}
```

6 To change the colors of the header, footer, and main column, locate the following lines of code and change the color definitions. These lines are not sequential and are located at approximately these lines: 217, 224, 281, and 293.

```
#rn_Header {
#rn_Header a {
#rn_Footer, #rn_Body {
```

```
#rn_MainColumn {
```

7 To change the style of headings, locate the following lines of code (approximately line 88).

```
h2, h3, h4, h5, h6 {
    font-family:Arial, sans-serif;
    font-weight:bold;
}
```

Change this code to something that resembles the following:

```
h2, h3, h4, h5, h6 {
    font-family:Georgia, Times, serif;
    font-style:italic;
}
```

8 To change the relative widths of the main column and sidebar, locate the following code (starting around line 293) and replace the width percentages so that the total is 97% (to account for padding).

```
#rn_MainColumn {
background:#CCFFFF;
float:left;
margin-right:8px;
min-height:650px;
height:auto !important;
height:650px;
overflow:visible;
padding:0px 0px 10px 6px;
width:74%;
}
#rn_SideBar {
float:right;
margin-right:12px;
width:23%;
}
```

9 To change the way widgets are displayed, open the widget's presentation file in your new themes folder, */cp/customer/assets/themes/theme_new,* and edit to make your changes. The following code changes the color of the button and the text on the SearchButton widget.

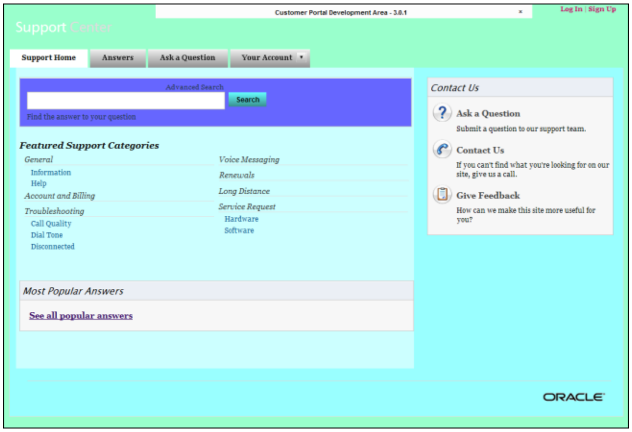
```
.rn_SearchButton .rn_SubmitButton {
    background-color:#66FFFF;
    color:#000000;
    cursor:pointer;
```

```
font-weight:bold;
```

10 To learn more about the wide variety of CSS changes you can make to your customer portal template, pages, and widgets, [review one of the websites listed here](#).

11 Save *site.css*.

Click to view



[Apply a theme to a page or template](#) or [Return to other configuration options for the template and page set.](#)

Applying themes

To apply a theme to a template

Note The root */euf/* folder specified in this code is correct even though you cannot see the */euf/* folder in your WebDAV file structure.

1 Open the page or template file you want to apply a custom theme to.

2 Locate the following line of code.

```
<rn:theme path="/euf/assets/themes/standard" css="site.css,
```

3 Edit the *path* attribute for the RN Theme tag to specify the new theme. If you want to specify a different CSS file for the theme to use, change the *css* attribute as well. Your code will resemble the following.

```
<rn:theme path="/euf/assets/themes/custom_01" css="site_01.css,
```

4 Save the file.

Return to other configuration options for the template and page set.

Using page tags

The Customer Portal offers page tags and page meta tags that let you control functionality through tags instead of writing PHP code. (We recommend that you don't add PHP to your page and template files. This lets non-developers edit the pages without affecting server-side scripting.) Page meta tags control page options, such as the template, whether **SLAs** are required to view the page, and if customers need to be logged in to access the page. Page tags control specific sections of the page, with one particularly useful tag that lets you display or hide page content based on specific conditions.

- Learn about page meta tags.
- Learn about page tags and how to use conditions to control visibility of page content.

Page meta tags

The following page meta tags are available. To use them, add the attributes to the <rn:meta…> code for the page. The following is an example of a page that uses the standard template, includes a chat application, and displays an error message to customers who do not have a chat SLA.

```
<rn:meta title="Gold Service Chat Customers"
template="standard.php"
clickstream="chat_request"
include_chat="true"
sla_required_type="chat"
sla_failed_page="/app/error/error_id/2" />
```

Table 368: Page Meta Tag Descriptions

Page Meta Tag	Description	Attribute Name
Account Session ID Required	Allows the page to be accessed only by logged-in staff accounts. This meta tag is used on the **Guided Assistant** page so guides can be previewed by staff members who are designing guides on the **administration interface**. Refer to Previewing guides. This tag can also be used to create a custom tab with a browser on an agent desktop workspace. When the browser points to a customer portal page, the page requires a valid ID to ensure that only logged-in staff members can access the page.	account_session_required
Answer Details	Defines the page as an answer details page, displaying it only if customers have the required permissions.	answer_details
Clickstream Tag	Defines the type of page for clickstream and page statistics collection.	clickstream
Force HTTPS	Forces the page to use HTTPS when CP_-FORCE_PASSWORDS_OVER_HTTPS is enabled.	force_https
Include Chat	Denotes whether the page contains a **Chat** application, which defines whether the page includes all required Chat JavaScript files.	include_chat
JavaScript Module	Defines the JavaScript module that should be loaded on the page.	javascript_module
Login Required	Specifies whether customers must be logged in to view the page.	login_required
Page Title	Defines the title that appears on the page.	title
Redirect If Logged In	Specifies the page where customers will be redirected if they are already logged in.	redirect_if_logged_in

Table 368: Page Meta Tag Descriptions (Continued)

Page Meta Tag	Description	Attribute Name
SLA Failed Page	Indicates where customers are redirected if they do not have the kind of **SLA** specified in the SLA Required Type page meta tag.	sla_failed_page
SLA Required Type	Defines the type of SLA a customer must have to view the page.	sla_required_type
Template	Identifies the template the page uses.	template

Use page meta tags to perform the following tasks.

- Require customers to log in
- Require customers to have an SLA

Define page tags or return to the other configuration options for the template and page set.

Requiring customers to log in

You can require your customers to log in before they can access any or all of your customer portal pages. By default, the Account Overview page, accessed by clicking the Your Account tab, requires login, but you may also want to require customers to log in before they can view answers in your **knowledge base**. Or you may decide to require login for your entire customer portal page set.

Note If you want to keep the answers in your knowledge base from being available to the general public, you must require login on both the Answers and the answer details pages. If both pages do not have the same login requirement, a warning will appear when you stage and promote your customer portal. The most secure way to do this is to require login on all pages of your customer portal.

Do you want your customers to be able to visit your site without logging in?

- **Yes.** This is the default, so you can decide if you want to set other page meta tags.
- I want them to log in only to specific pages. Show me how to change a page to require login.
- **No,** I want them to log in to every page. Show me how to change the template to require login on all pages.

Set additional page meta tags or
Set page conditions or
Return to other configuration options for the template and page set.

Requiring login on specific pages

This example uses the Ask a Questions page, but the steps are the same for requiring customers to log in to any other page as well. By default, the *login_required* attribute is false, so setting it to true requires you to add the attribute to the page code. After you've completed the following procedure, customers who click the Ask a Question tab when they're not logged in will be redirected to the Login page. After logging in, the customer is directed back to the Ask a Question tab.

Note The Ask a Question confirmation page should have the same value for the *login_required* page meta tag as the Ask a Question page. Set *login_required* to `"true"` on both pages or to `"false"` on both pages.

To require login on the Ask a Question page

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code at the top of the file.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#"
template="standard.php"
clickstream="incident_create"/>
```

3 Edit the code to add the *login_required* page meta tag.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#"
template="standard.php"
clickstream="incident_create"
login_required="true" />
```

4 Save *ask.php*.

Set additional page meta tags or
Set page conditions or
Return to other configuration options for the template and page set.

Requiring login on all pages

The simplest and most reliable way to require login on a site is to handle it with a configuration setting. This protects all your answers and answer file attachments, as well as prevents access to the other pages of your customer portal. (You can also require login on the customer portal template.)

The CP_CONTACT_LOGIN_REQUIRED configuration setting requires customers to be logged in to access most customer portal pages and controllers. Even with this setting enabled, login is not required on the Log In, Reset Your Password, Finish Account Creation, Create an Account, and error pages because those pages have the page meta tag *login_required* set to false by default. Login is also not required when pass-through authentication is used.

If your site is password protected, you should enable this setting. You should also enable it if only the answer pages are password protected. If you enable this setting, you can override the setting for individual pages by setting the page meta tag *login_required* attribute to false.

To require login with a configuration setting

1 Log in to Oracle Service Cloud.

2 Use the procedure described in To locate and edit configuration settings to locate CP_-CONTACT_LOGIN_REQUIRED under RightNow User Interface > Customer Portal > Login.

3 Click CP_CONTACT_LOGIN_REQUIRED.

4 Click the drop-down menu in the Value field and select Yes.

5 Click the Save button on the ribbon.

Important This setting is now enabled for your development pages. You must **stage** and **promote** the customer portal before this setting takes effect on your production site.

Requiring login on the template

By setting the *login_required* attribute on the template to true, all pages that use the template will also require login. However, you don't want to require customers to log in before they open the Login page. To prevent requiring login when it doesn't make sense, the default Log In, Reset Your Password, Finish Account Creation, Create an Account, and error pages have the *login_required* page meta tag set to false, which overrides the template setting.

To require login on all customer portal pages

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the `<rn:page_content/>` line and add the following line of code immediately above it.

```
<rn:meta login_required="true"/>
```

3 Save *standard.php*.

Set additional page meta tags or
Set page conditions or
Return to other configuration options for the template and page set.

Requiring customers to have an SLA

You can require that your customers have an **SLA** (service level agreement) before they can access any or all of your customer portal pages.

Do you want your customers to be able to visit your site without an SLA?

- **Yes.** This is the default, so you can decide if you want to set other page meta tags.
- **No,** I want to require SLAs on specific pages. Show me how to change a page to require an SLA.

Set additional page meta tags or
Set page conditions or
Return to other configuration options for the template and page set.

Requiring an SLA on specific pages

This example uses the Ask a Questions page, but the steps are the same to require customers to have an **SLA** before accessing any other page. When a customer without an SLA of the required type clicks the Ask a Question tab, the Permission Denied page opens.

To require an SLA on the Ask a Question page

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code at the top of the file.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#"
template="standard.php"
clickstream="incident_create"/>
```

3 Edit the code to change the *login_required* page meta tag to "true" and add the *sla_required_type* and *sla_failed_page* meta tags.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#"
template="standard.php"
login_required="true"
clickstream="incident_create"
sla_required_type="incident"
sla_failed_page="/app/error/error_id/2" />
```

4 Save *ask.php*.

Set additional page meta tags or
Set page conditions or
Return to other configuration options for the template and page set.

Page tags

You'll use page tags to position information on a page, output information from the **database**, define themes for a page, and hide or display page content conditionally.

Pound tags (`#rn:`) are also included in page tags and let you display or output language codes, message base labels, visit parameters, configuration setting values, session parameters, community tokens, URL parameters and parameter values, and widget attribute PHP code.

Select from the following procedures that use page tags.

- Position page titles, head content, and page content
- Output data fields
- Apply a theme to a page
- Applying common attributes to multiple widgets
- Set page conditions to display or hide content based on:
  - ▷ The customer's login status
  - ▷ Whether the customer is logged in with pass-through authentication
  - ▷ The specific page where content is placed
  - ▷ The number of answers viewed by a customer
  - ▷ The number of searches performed by a customer
  - ▷ The amount of time that has elapsed since an incident was solved
  - ▷ The customer's SLA
  - ▷ The language of the interface
  - ▷ The value of a configuration setting
  - ▷ The value of a URL parameter
  - ▷ Chat availability

Note When you use page tags, do not try to comment them out with HTML commands. Comments do not stop widgets from rendering and may cause rendering problems. They may also stop other tags from being converted. If you want to test a page without a page tag, remove it instead of commenting it out.

Return to other configuration options for the template and page set.

Positioning information on a page

The following page tags let you position information on a page.

- **Page Title**—Place this tag where you want the page's title to be inserted when the page and template are merged. Use this format:

```
<title>
    <rn:page_title/>
</title>
```

- **Head Content**—Place this tag between the opening and closing head tags where the page's head content will be inserted. This content is a combination of widget CSS files, page CSS files, no-cache meta tags, and any other content added to the head by widgets (using the $this->addHeadContent function). When the page is rendered, global CSS is loaded first, followed by any other page/widget level CSS. As a result, the correct CSS hierarchy is preserved. Use this format:

```
<head>
    <rn:head_content/>
</head>
```

- **Page Content**—Place this tag where you want the page's content to be inserted when the page and template are merged. Use this format:

```
<div>
    <rn:page_content/>
</div>
```

Apply other page tags.

Outputting database fields

When you want a page to display information from the database, you can use the Field page tag to output the value. (Also see Input and output widgets.) The Field tag has two attributes: Highlight for highlighting content that matches the keyword parameter in the URL and Name to identify the business object type and field to be displayed. Click Business Objects on the Customer Portal Administration site to find the names of the fields you can use and how to label them in the code.

For example, the answer details page, *detail.php* in the */views/pages/answer* folder, uses the following code to display information about the answer being viewed. (The Field tags are highlighted. They display the answer summary, the created and updated dates, and the answer description.)

```
<div id="rn_PageTitle" class="rn_AnswerDetail">
    <h1 id="rn_Summary"><rn:field name="Answer.Summary"
    highlight="true"/></h1>
    <div id="rn_AnswerInfo">
        #rn:msg:PUBLISHED_LBL# <rn:field name="Answer.CreatedTime" />
          |   
        #rn:msg:UPDATED_LBL# <rn:field name="Answer.UpdatedTime" />
    </div>
    <rn:field name="Answer.Question" highlight="true"/>
</div>
```

Apply other page tags.

Applying common attributes to multiple widgets

The RN Container page tag lets you create a set of widget attributes that can be referenced by multiple widgets. For example, when a page combines search navigation with an answers report (as the Answers page does), all of the related widgets—the search field, button, and filters as well as the report and its display options—must use the same *report_id* attribute. You could just add the attribute to each line of widget code, but the RN Container tag offers a more efficient method of coding.

You can use this tag in one of two ways. The first way is to use the container tags as a wrapper around a group of widgets. The tag defines the values for one or more widget attributes that all of the enclosed widgets share. Here's an example of its use on the Answers page. Each one of the highlighted widgets use report ID 176 because they are all enclosed within the `<rn:container report_id="176">` tags.

```
<rn:container report_id="176">
<div id="rn_PageTitle" class="rn_AnswerList">
    <div id="rn_SearchControls">
        <h1 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_CMD#</h1>
        <form onsubmit="return false;">
            <div class="rn_SearchInput">
                <rn:widget path="search/AdvancedSearchDialog" />
                <rn:widget path="search/KeywordText"
                label_text="#rn:msg:FIND_THE_ANSWER_TO_YOUR_QUESTION_CMD#
                " initial_focus="true"/>
            </div>
            <rn:widget path="search/SearchButton"/>
        </form>
        <rn:widget path="search/DisplaySearchFilters"/>
```

```
    </div>
</div>
<div id="rn_PageContent" class="rn_AnswerList">
    <div class="rn_Padding">
        <h2 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_RESULTS_CMD#</h2>
        <rn:widget path="reports/ResultInfo" />
        <rn:widget path="knowledgebase/TopicWords"/>
        <rn:widget path="reports/Multiline"/>
        <rn:widget path="reports/Paginator"/>
    </div>
</div>
</rn:container>
```

The second way you can use the RN Container tag is as a widget attribute that references the attribute-value definitions of the container. That is, you assign the container an ID value and then define attributes within the container. All widgets that reference the container ID then inherit the other attributes defined in the container. For example, you could use the following code to define the container.

```
<rn:container rn_container_id="1" report_id="196" per_page=2"/>
```

Note Although the value for the *rn_container_id* is an integer in this example, it does not have to be an integer. Instead, it can be any string except those that begin with `rnc_` because that prefix is used by the Customer Portal.

When a container is defined this way, any widget on the page can then use the *rn_container_id* attribute as a shortcut for assigning all the attributes defined in the container to the widget that calls the container in its code. For example, each of the following widgets uses a *report_id* value of 196 and a *per_page* value of 2 because those are the values assigned to the attributes in the container definition.

```
<rn:widget path="reports/Multiline"
label_text=""
initial_focus="true"
rn_container_id="1"/>
<rn:widget path="reports/Paginator"
icon_path="images/icons/search.png"
rn_container_id="1"/>
```

Note If the widget code specifically defines an attribute that is defined in the container, the value for the attribute in the widget code overrides the value in the container.

Applying page conditions

You may want to hide or display content on the template or on an individual page based on whether certain conditions apply. For example, you might want to hide the Ask a Question tab on the template until the customer has viewed a certain number of answers or conducted a certain number of searches. Or maybe you want to prevent part of a page from being displayed unless the customer is logged in or has an **SLA** (service level agreement).

Note You should consider the usability issues of conditionally hiding and exposing page navigation before implementing page conditions. Particularly for customers using screen readers, the presence of a new navigation tab may not be evident when the conditions that trigger its appearance have occurred.

The code structure for the RN Condition page tags looks like this.

```
<rn:condition attribute="value">
[Content is displayed when condition attribute is met]
</rn:condition>
```

The content between the condition tags is displayed only if the specified condition is met. Otherwise it is hidden. The following situations can control whether information is displayed or not.

- Is the customer logged in?
- Did the customer log in from an external site?
- Is the page defined as one on which the content should be displayed or hidden?
- How many answers has the customer viewed?
- How many searches has the customer performed?
- How much time has elapsed since the customer's incident was closed?
- Does the customer have the required type of SLA?
- What language is being used on the customer portal?
- Does a specified configuration setting match a defined value?
- Does a specified URL parameter match a defined value?
- Is the current time within Chat operating hours?

The conditional page tag also includes an RN Condition Else tag to provide if/then logic for displaying or hiding content. Learn how to use the Else condition page tag.

Set additional page conditions or Return to other configuration options for the template and page set.

Logged In condition

If the customer is logged in (`<rn:condition logged_in="true">`), the content within the condition tags is displayed on the page. The template uses the Logged In page condition tag to display the Welcome Back message and customer's name in the upper right corner of the page.

Note Although you can use the Logged In page condition tag to show or hide the entire contents of a page, it might be more efficient to use the Login Required page meta tag instead. Learn about the Login Required page meta tag here.

Return to page conditions overview.

External Login Used condition

When customers log in to your customer portal using pass-through authentication (PTA), the input fields on the Account Settings page are set to read-only by default. If you want to let PTA customers change just one or two fields, you can add an attribute to the widget code for the individual input fields.

However, if you have a block of input fields that you want to let customers edit, you can enclose them in condition tags rather than editing each widget's code separately. Use the following condition code before the first input widget in the block of input fields, and add the closing condition tag (`</rn:condition>`) after the last widget.

```
<rn:condition external_login_used="true">
```

Return to page conditions overview.

Hide on Pages/Show on Pages conditions

The Hide on Pages tag lets you specify the pages on which the content between the tags is hidden. The Show on Pages tag lets you specify the pages where the content appears.

The **reference implementation** template uses these pages to control page redirection after login. After customers log in by clicking the Log In link, they are redirected to the page they originally tried to access. However, if they log in from Create an Account, Login, or Account Assistance, they are redirected to the Account Overview page since it doesn't make sense for them to land back on the original page.

The template also uses the Hide On page condition to prevent the navigation tabs from appearing on the Search Tips page and to prevent the sidebar search widget from appearing on pages that already have a search field, namely Support Home, Answers, and Support History.

Return to page conditions overview.

Answers Viewed condition

The Answers Viewed tag lets you hide content until the customer has viewed the number of answers you specify. You might want to use this tag to hide the Ask a Question tab to require your customers to first view existing answers instead of automatically submitting a question to your support team.

Learn how to use this page condition tag to hide the Ask a Question tab.

Return to page conditions overview.

Searches Done condition

This page condition tag works the same way that the Answers Viewed tag does: It hides content until the customer has conducted the specified number of searches. If you want to use this for displaying the Ask a Question tab, however, it's better to use the Searches Done attribute of the NavigationTab widget.

Use the Searches Done page tag to hide specific content on a page.

Return to page conditions overview.

Using the Searches Done page condition tag

The following example assumes you want to hide the **Live Chat** link in the sidebar until the customer has conducted two searches.

To hide the Live Chat link in the sidebar unless searches have been conducted

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following section of code.

```
<rn:condition config_check="MOD_CHAT_ENABLED == true">
    <rn:widget path= "chat/ConditionalChatLink"
    min _sessions_ avail="1"/ >
</rn:condition>
```

3 Add the following line of code immediately above the first line of the section you found.

```
<rn:condition searches_done="2">
```

4 Add the following line of code immediately below the last line of the section you found.

```
</rn:condition>
```

5 Save *standard.php*.

Note The RN Condition tag identifies a search only when a page is turned or refreshed. For example, assume a customer conducts one search and reviews the list but does not click an answer or otherwise leave or refresh the answers list page. When the second search is made, the Live Chat link will not be displayed in the sidebar until another page is opened or the current page is refreshed.

Return to page conditions overview.

Incident Reopen Deadline Hours condition

This page condition tag lets you define how many hours after an **incident** is closed that the content within the tags remains visible. For example, the default question details page (the page that customers access by clicking one of their questions on the Support History page) hides the section of the page that lets the customer update the question after one week (168 hours). After that time has elapsed, the content is hidden and the Condition Else tag is used to display a message that the question can no longer be updated.

Learn how to hide the update field immediately after an incident is closed.

Return to page conditions overview.

SLA condition

Use this page condition tag to hide content on the page unless the customer has the type of **SLA** (service level agreement) specified on the page. When you want to control access to an entire page based on the customer's SLA, use the SLA Required Type page meta tag.

- Use the SLA condition tag to hide navigation tabs.
- Use the SLA condition tag to hide specific content on a page.

Return to page conditions overview.

Hiding navigation tabs with the SLA condition

You might want to restrict access to certain pages of your customer portal to only those customers who have a specific type of **SLA**. The following procedure displays the Answers navigation tab only if customers have a self-service SLA.

To restrict the Answers navigation tab to customers with SLAs

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the code for the Answers navigation tab.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:ANSWERS_HDG#"
link="/app/answers/list"
pages="answers/list, answers/detail"/></li>
```

3 Add the following code directly above the line for the Answers tab code.

```
<rn:condition sla="selfservice">
```

4 Add the following code directly below the line for the Answers tab code.

```
</rn:condition>
```

5 Save *standard.php*.

Return to page conditions overview.

Hiding page content with the SLA condition

The following example assumes you want to hide the Most Popular Answers section on the Support Home page unless customers have an SLA.

To hide Most Popular Answers for customers without an SLA

1 Open the *home.php* file in the */views/pages* folder.

2 Find the following line of code.

```
<div class="rn_Module">
```

3 Add the following code on a separate line immediately above the code you found in step 2.

```
<rn:condition sla="incident" >
```

4 Add the following code on a separate line immediately above the last line of the file, which is `</div>`.

```
</rn:condition>
```

5 Save *home.php*.

Return to page conditions overview.

Language In condition

You can display content based on the language defined in the page's content-language meta tag. For example, the default Account Settings page on an English-language page displays the address fields in this order: Street, City, Country, State/Province, and Postal Code. On pages that use Japanese, Korean, and Chinese languages, the order is Postal Code, Country, State/Province, City, and Street. The use of this condition is demonstrated in this code from the *profile.php* page.

```
<rn:condition language_in="ja-JP,ko-KR,zh-CN,zh-HK,zh-TW">
    <rn:widget path="input/FormInput"
    name="Contact.Address.PostalCode"
    label_input="#rn:msg:POSTAL_CODE_LBL#" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.Country" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.StateOrProvince"
    label_input="#rn:msg:STATE_PROV_LBL#" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.City" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.Street" />
<rn:condition_else />
    <rn:widget path="input/FormInput"
    name="Contact.Address.Street" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.City" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.Country" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.StateOrProvince"
    label_input="#rn:msg:STATE_PROV_LBL#" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.PostalCode"
    label_input="#rn:msg:POSTAL_CODE_LBL#"/>
</rn:condition>
```

Return to page conditions overview.

Config Setting Check condition

You may want to display content based on the value of a configuration setting that was defined on the **administration interface**. For example, the **reference implementation** template uses this tag to hide the Community navigation tab and the Ask the Community sidebar link if **Social Experience** communities are not enabled on your site. It also hides the Live Chat sidebar link if **Chat** is not enabled.

The attribute for this condition is more complex than most other conditions. The format is:

```
{CONFIG_BASE:CONFIG_SLOT} {OPERATOR} {VALUE}
```

The elements of the attribute include the following.

- CONFIG_BASE—One of the following configuration bases in Oracle Service Cloud. The CONFIG_BASE element is not case sensitive.

- ▷ Common (which corresponds to the Common folder on the Configuration Settings editor)
- ▷ RNW (RightNow Common folder)
- ▷ RNW_UI (RightNow User Interface folder)
- ▷ RNL (Chat folder)
- ▷ MA (Outreach and Feedback)

- CONFIG_SLOT—The name of the configuration setting as it appears in the Configuration Settings editor. These names are case sensitive.
- OPERATOR—The logical operator. Acceptable values are == (equals), != (not equal), > (greater than), < (less than), >= (greater than or equal to), and <= (less than or equal to).
- VALUE—The value to compare the parameter to. Values include true, false, null, an integer, or a quoted string.

For example, to set a condition that Chat is enabled, the attribute is the following.

```
<rn:condition config_check="MOD_CHAT_ENABLED == true">
```

Return to page conditions overview.

URL Parameter Check condition

The URL Parameter Check condition lets you display or hide content based on the value of a parameter in the page URL. For example, you might want to display a specific message base to customers who enter the search term you define in the condition. The standard Ask a Question confirmation page uses this condition to retrieve the incident's reference number.

The attribute for this condition is more complex than most other conditions. The format is:

```
{URL_KEY} {OPERATOR} {VALUE}
```

The elements of the attribute include the following.

- URL_KEY—The parameter key to be checked in the URL. For example, to check the keyword URL parameter, type `kw` for this value.
- OPERATOR—The logical operator. Acceptable values are == (equals), != (not equal), > (greater than), < (less than), >= (greater than or equal to), and <= (less than or equal to).
- VALUE—The value to compare the parameter to. Values include true, false, null, an integer, or a quoted string.

For example, to set a condition if the keyword parameter is "roaming," the attribute is the following.

```
"<rn:condition url_parameter_check="kw == 'roaming'">
```

Return to page conditions overview.

Chat Available condition

The conditional page tag also includes an Chat Available tag that can be used to determine whether the current time is within the chat operating hours and not currently a holiday. Used primarily on the launch page for displaying the chat session request form, it could be used in conjunction with an Else condition tag to display alternate content during hours when chat is unavailable, as described in the following procedure.

To display alternate content when chat is unavailable

1. Open the *chat_launch.php* file in the */views/pages/chat* folder.
2. Locate the following code.
```
</rn:condition>
<rn:widget path="chat/ChatStatus"/>
<rn:widget path="chat/ChatHours"/>
```
3. Add the following code directly above the code you found in the previous step.
```
<rn:condition_else/>
[Content to be displayed when chat hours are not available]
```
4. To remove the chat availability status text, delete the following line of code.
```
<rn:widget path="chat/ChatStatus"/>
```
5. Save *chat_launch.php*.

Return to page conditions overview.

Using the Else condition tag

The conditional page tag also includes an RN Condition Else tag to provide if/then logic for displaying or hiding content. The RN Condition Else tag has no attributes and requires no closing tag. The code will follow this structure.

```
<rn:condition attribute="value">
[Content to be displayed if condition is met]
<rn:condition_else/>
[Other content to be displayed when condition is not met]
</rn:condition>
```

Return to page conditions overview.

Standard page files

Each standard customer portal page has a title that appears in your browser when the page is displayed, and each page is also defined by its page name. The following table lists each page file name and its corresponding page title and description.

Table 369: Description of Page Files

Page File Name	Page Title and Description
account/change_password	**Change Your Password page**—Allows customers to change their password. Refer to the Change Your Password page.
account/overview	**Account Overview page**—Provides an overview of **account** information, where customers can view the questions they have submitted, the notifications they have subscribed to, and their service contracts. The Account Overview page also lets customers link to their account settings and the Change Your Password page.
account/profile	**Account Settings page**—Allows customers to change their user name and enter contact information. Refer to the Account Settings page.
account/reset_password	**Reset Your Password page**—Contains a form where customers can reset their password. The page is accessed only through an email link sent to their primary email address when they request account assistance to reset their password. The link expires after a specified period of time (24 hours by default). If customers do not have a complete **contact** record, they are taken to the Profile page when they are finished on this page so they can finish setting up an account.
account/setup_password	**Finish Account Creation page**—Displays a page with a link to the Account Assistance page. This page is displayed when customers click an email link to reset their password and the link has already expired or when a customer wants to create an account using an email address that is already in the knowledge base.
account/notif/list	**Notifications page**—Displays all answers customers have subscribed to as well as product/category notifications they have subscribed to. The page allows customers to delete and renew notifications and add product/category notifications. Refer to the Notifications page.

Table 369: Description of Page Files (Continued)

Page File Name	Page Title and Description
account/notif/unsubscribe	**Your Notification Requests: Unsubscribe Results page**—Displays a message to customers who have clicked an email link to unsubscribe to an **answer notification**. This page can be accessed only through the email link.
account/questions/detail	**Question details page**—Displays the details of a specific question submitted by a customer and allows the question to be updated. This page also contains a print button. Refer to the question details page.
account/questions/list	**Support History page**—Displays all questions submitted by a customer, including the subject, reference number, status, and date created. Selecting an incident in the list opens the details of the customer's question. Refer to the Support History page.
agent/guided_assistant	**Guided assistant page**—Displays a guide on the **guided assistance** designer of the administration interface as it will appear on the customer portal.
agent/polling_preview	**Polling preview page**—Displays a preview of the polling widget to the staff member creating a survey to show how it will appear on the customer portal.
answers/detail	**Answer details page**—Displays details about a specific answer and includes options for sharing, printing, emailing, and subscribing to the answer. The default page also lets customers submit answer feedback and view **related** and previously viewed answers. Refer to the Answer Details Page.
answers/list	**Answers page**—Displays a list of answers that meet the customer-entered search criteria. The page contains a search field with advanced search options. Refer to the Answers Page.
ask	**Ask a Question page**—Allows customers to submit a question. Refer to the Ask a Question Page.
ask_confirm	**Ask a Question confirmation page**—Confirms the submittal of a customer's question and displays the reference number of the incident that was created. Refer to the Configuring the confirmation page.

Table 369: Description of Page Files (Continued)

Page File Name	Page Title and Description
basic/ask	**Basic Email Us page**—Lets customers submit a question using their basic device. Refer to the basic Email Us page.
basic/ask_confirm	**Basic question confirmation page**—Confirms the submittal of a customer's question and displays the reference number of the incident that was created. Refer to the description of the basic confirmation page.
basic/error404	**Basic error 404 page**—Displays a Page Not Found error. Refer to the Error 404 page.
basic/error	**Basic error page**—Displays one of several error messages, depending on the circumstances that caused the error. The `error_id` parameter is passed in the error page URL. Refer to Error codes and messages.
basic/home	**Basic home page**—The entry point for customers using basic devices to access the customer portal. It includes the top popular answers and support categories. Refer to this description of the basic home page.
basic/account/change_password	**Basic change password page**—Lets customers change their password using a basic device. Refer to the basic change password page.
basic/account/overview	**Basic account overview page**—Provides an overview of **account** information, where customers can view the questions they have submitted. The account overview page also lets customers link to their account settings and the change password page.
basic/account/profile	**Basic account settings page**—Lets customers change their account information using a basic device. Refer to the basic account settings page.
basic/account/reset_password	**Basic reset password page**—Contains a form where customers can reset their password. The page is accessed only through an email link sent to their primary email address when they request account assistance to reset their password. The link expires after a specified period of time (24 hours by default). If customers do not have a complete contact record, they are taken to the account settings page when they are finished on this page so they can finish setting up an account.

Table 369: Description of Page Files (Continued)

Page File Name	Page Title and Description
basic/account/setup_password	**Basic finish account creation page**—Displays a page with a link to the basic account assistance page. This page is displayed when customers click an email link to reset their password and the link has already expired or when a customer wants to create an account using an email address that is already in the knowledge base.
basic/account/questions/detail	**Basic question details page**—Displays the details of a specific question submitted by a customer and allows the question to be updated using a basic device. Refer to the basic question details page.
basic/account/questions/list	**Basic questions list page**—Displays all questions submitted by a customer, including the subject, reference number, status, and date created. Selecting an incident in the list opens the details of the customer's question. Refer to the basic questions list page.
basic/answers/detail	**Basic answer details page**—Displays the details of an answer to customers using a basic device. Refer to this description of the basic answer details page.
basic/answers/list	**Search results page**—Includes a multiline report that has been optimized for basic devices and product and category search filters. Refer to this description of the basic search results page.
basic/answers/submit_feedback	**Submit feedback page**—Lets customers submit feedback regarding specific answers on the basic page set. Refer to the answer feedback page.
basic/utils/account_assistance	**Basic account assistance page**—Displays a page that lets customers using a basic device request an email containing either their user name or a link to a page for resetting their password. If the customer is logged in, the email address field is populated. Refer to the description of the account assistance page.
basic/utils/create_account	**Basic create account page**—Displays a page that lets customers using a basic device create an account (which creates a contact record in the knowledge base) by entering their email address, user name, password, and first and last names. Refer to the basic create account page.

Table 369: Description of Page Files (Continued)

Page File Name	Page Title and Description
basic/utils/login_form	**Basic login page**—Displays the login page where customers using a basic device can enter their user name and password. Refer to the basic login page.
basic/utils/submit/password_changed	**Basic password change confirmation**—Displays a message that a customer's password change was successful.
chat/chat_landing	**Chat page**—When a customer is waiting for an agent, this page displays position in queue and estimated and average wait times, along with a search field. When an agent is available, the Chat window opens. Refer to the Chat page.
chat/chat_launch	**Live Help page**—Lets customers request customer support using **Chat**. Refer to the Live Help page.
error404	**Error 404 page**—Displays a Page Not Found error. Refer to the Error 404 page.
error	**Error page**—Displays one of several error messages, depending on the circumstances that caused the error. The `error_id` parameter is passed in the error page URL. Refer to Error codes and messages.
home	**Support Home page**—Serves as customers' main entry into the customer portal. Refer to the Support Home Page.
mobile/ask	**Mobile ask a question page**—Lets customers submit a question using their mobile device. Refer to the mobile ask a question page.
mobile/ask_confirm	**Mobile ask question confirmation page**—Confirms the submittal of a customer's question and displays the reference number of the incident that was created. Refer to the description of the mobile confirmation page.
mobile/error404	**Mobile error 404 page**—Displays a Page Not Found error. Refer to the Error 404 page.
mobile/error	**Mobile error page**—Displays one of several error messages, depending on the circumstances that caused the error. The `error_id` parameter is passed in the error page URL. Refer to Error codes and messages.

Table 369: Description of Page Files (Continued)

Page File Name	Page Title and Description
mobile/home	**Mobile home page**—The entry point for customers using mobile devices to access the customer portal. It includes the top six most popular answers and the top-level support categories. Refer to this description of the mobile home page.
mobile/account/change_-password	**Mobile change password page**—Lets customers change their password using a mobile device. Refer to the mobile change password page.
mobile/account/profile	**Mobile account settings page**—Lets customers change their account information using a mobile device. Refer to the mobile account settings page.
mobile/account/reset_password	**Mobile reset password page**—Contains a form where customers can reset their password. The page is accessed only through an email link sent to their primary email address when they request account assistance to reset their password. The link expires after a specified period of time (24 hours by default). If customers do not have a complete contact record, they are taken to the mobile account settings page when they are finished on this page so they can finish setting up an account.
mobile/account/setup_password	**Mobile finish account creation page**—Displays a page with a link to the mobile account assistance page. This page is displayed when customers click an email link to reset their password and the link has already expired or when a customer wants to create an account using an email address that is already in the knowledge base.
mobile/account/questions/detail	**Mobile question details page**—Displays the details of a specific question submitted by a customer and allows the question to be updated using a mobile device. Refer to the mobile question details page.
mobile/account/questions/list	**Mobile support history page**—Displays all questions submitted by a customer, including the subject, reference number, status, and date created. Selecting an incident in the list opens the details of the customer's question. Refer to the mobile support history page.

Table 369: Description of Page Files (Continued)

Page File Name	Page Title and Description
mobile/answers/detail	**Mobile answer details page**—Displays the details of an answer and allows customers to provide answer feedback using a mobile device. Refer to this description of the mobile answer details page.
mobile/answers/list	**Mobile answers list page**—Includes a multiline report that has been optimized for mobile devices and product and category search filters. Refer to this description of the mobile answers list page.
mobile/chat/chat_landing	**Mobile chat page**—Displays chat wait information and a transcript of the chat on a mobile device. Refer to the mobile chat page.
mobile/chat/chat_launch	**Mobile chat launch page**—Lets customers request customer support using Chat on their mobile device. Refer to the mobile chat launch page.
mobile/utils/account_assistance	**Mobile account assistance page**—Displays a page that lets customers using a mobile device request an email containing either their user name or a link to a page for resetting their password. If the customer is logged in, the email address field is populated.
mobile/utils/create_account	**Mobile create account page**—Displays a page that lets customers using a mobile device create an account (which creates a contact record in the knowledge base) by entering their email address, user name, password, and first and last names. Refer to the mobile create account page.
mobile/utils/guided_assistant	**Mobile guided assistant page**—Opens the page containing a guide that asks customers using a mobile device a series of questions designed to lead them to a solution specific to their situation. Refer to the mobile guided assistance page.
mobile/utils/login_form	**Mobile login page**—Displays the login page where customers using a mobile device can enter their user name and password or click a button to create an account. Refer to the mobile login page.
mobile/utils/submit/password_changed	**Mobile password change confirmation**—Displays a message that a customer's password change was successful.
mobile/utils/submit/profile_updated	**Mobile profile update confirmation**—Displays a message that the customer's profile was successfully updated.

Table 369: Description of Page Files (Continued)

Page File Name	Page Title and Description
utils/account_assistance	**Account Assistance page**—Displays a page that lets customers request an email containing either their user name or a link to a page for resetting their password. If the customer is logged in, the email address field is populated.
utils/create_account	**Create an Account page**—Displays a page that lets customers create an account (which creates a contact record in the knowledge base) by entering their email address, user name, password, and first and last names. Refer to the Create an Account page.
utils/help_search	**General Search Tips page**—Displays a page of search tips to help customers understand the best way to conduct a search. Refer to Editing the Search Tips page.
utils/login_form	**Log In page**—Displays the Log In page where customers can enter their user name and password or click a button to create an account. Refer to the Log In page.
utils/submit/pass-word_changed	**Password Change Succeeded page**—Displays a message that a customer's password change was successful.
utils/submit/profile_up-dated	**Profile Update Succeeded page**—Displays a message that the customer's profile was successfully updated.

Error codes and messages

Depending on the parameter passed in the error page URL, various error messages are displayed to the customer. For example, the URL http://<your_site>/app/error/error_id/2 displays, "We're sorry. Your account doesn't have the service level agreement required to view this document." The following table lists the error codes and their corresponding messages.

Also refer to the Error 404 page.

Table 370: Error Codes and Messages

Error Code	Error Heading and Message
1	**Not available** This answer is no longer available.

Table 370: Error Codes and Messages (Continued)

Error Code	Error Heading and Message
2	**Not available** We're sorry. Your account doesn't have the service level agreement required to view this document.
3	**File Download Error** Sorry, there was an error downloading the file.
4	**Permission Denied** You do not have permission to access this document.
5	**Operation Failed** Submission Failed. The page could not be submitted and the operation timed out. Use the Back button to return to the page. Then refresh the page so that you can resubmit the information.
6	**Permission Denied** Illegal parameter.
7	**Cookies are required** You'll need to enable cookies in your browser before you can continue.
sso9	**Incomplete Account Data** Sorry, to create an account within the community, you must specify an email address. Please update your account.
sso10	**Incomplete Account Data** Sorry, to create an account within the community, you must specify a first and last name. Please update your account.
sso11	**Duplicate Email** Sorry, the email address you specified already exists within the community. You might already have an account with that email address. Please visit the account assistance page for further help.

Table 370: Error Codes and Messages (Continued)

Error Code	Error Heading and Message
sso13 sso14 sso15 sso16 sso17	**Authentication Failed** The link you clicked contained an authentication parameter that failed to authenticate. This might have happened because: 1 – The link was intended for you, but has expired. Refresh the previous page and try the link again. 2 – This authentication parameter has already been used by you. Refresh the previous page and try the link again. 3 – The link you clicked was not intended for you, but was meant for another user and was given to you erroneously.
404	**Not found** Page not found.

Error 404 page

The CP_404_URL configuration setting has a default value of *error404*, which is the page that opens if customers try to access a non-existent page. The page content is loaded without modifying the URL, so any incorrect characters in the URL can be replaced instead of requiring the entire URL to be re-entered. You can also add conditions, widgets, or other customer portal elements to the page to help the customer.

If the value for CP_404_URL is blank, the browser's generic error page opens instead.

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Customer Portal Widgets

A widget is an element of the Oracle RightNow Customer Portal Cloud Service (Customer Portal) that performs a specific function. The Customer Portal contains more than one hundred widgets in its standard widget collection. A few examples of standard widget functionality include the following.

- An information field for input of customer information
- A button that launches a search or submits customer information
- A report that returns all answers containing a customer's search terms
- A dialog for customer feedback
- A topics tree for browsing specific topics
- A link to let customers share their desktop with an agent on the phone
- A panel that displays posts from your **community** site
- An offer to chat with an agent

You can configure the functionality of standard widgets by editing their attributes to achieve different results. A standard widget on one page may function differently than the same widget on a different page, depending on the attribute settings.

You can also create custom widgets by extending the functionality of a standard widget, or you can create custom widgets from scratch. Both processes use the Customer Portal's widget builder.

By their nature, widgets are highly diverse elements, and we won't be going into all the details of each one. For widget-specific information, first type `https://<your_site>/ci/admin/docs/widgets/standard` in your web browser. (Or select Browse Widgets on the Widgets tab of the Customer Portal Administration site and select Standard Widgets on the page that opens.) Then you can select a folder and widget to see its definition, including a preview, description, default code, attributes, and all other relevant information about configuring it.

You'll find the following information about widgets in this section.

General widget information

- Review widget code and file structure.
- Manage widget versions.
- Edit widget attributes, including changing the report ID.
- Review the widget information page.
- Learn how to build a new widget or extend an existing one.

Standard widgets

- Learn which standard widgets are used in the reference implementation and how they're used on the page.
- Review standard widgets that are not part of the reference implementation.

Special case widgets

- Define input and output widgets.
- Display a challenge on form submission to verify a valid user.
- Let your customers search the Oracle knowledge base from an external page.
- Offer customers a survey.

Widget accessibility

The Customer Portal widgets have been designed to comply with Oracle Accessibility Guidelines. For current information regarding our approach to accessibility, refer to Oracle's Accessibility Program.

When you create custom widgets, you are responsible for ensuring that your changes do not impact accessibility. Labels require particular attention. Input labels support accessibility by providing content for screen readers, and they should be used. However, if you choose to use an empty string for a label, the following widgets will not include the asterisk that indicates the input field is required. even if you set the required attribute to true.

- chat/ChatAttachFileButton
- input/ChannelAllInput
- input/DateInput
- input/FileAttachmentUpload
- input/MobileProductCategoryInput
- input/PasswordInput

- input/ProductCatalogInput
- input/ProductCategoryInput
- input/SelectionInput
- input/TextInput
- notifications/ProdCatNotificationManager
- search/AdvancedSearchDialog
- search/ProductCatalogSearchFilter
- search/ProductCategorySearchFilter

Widget files and code

A widget is simply a collection of files that work together to provide a specific functionality. Widgets communicate with the Oracle **database** and the server through AJAX requests. They also communicate with other widgets through events. When you add a widget to a page or a template, you add code that resembles the following example.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
initial_focus="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
```

Note All standard widgets and pages in the Customer Portal reference implementation conform to the HTML5 specification.

The widget code contains the following elements.

- **rn:widget**—Identifies the object as a widget to be rendered on the page. The `rn:` prefix identifies the widget as a standard Customer Portal element.
- **path**—Locates the widget in the file structure by specifying the folder and widget name (`input/FormInput` in the example). For information about specifying standard and custom folders, click here.
- **attributes**—Defines widget parameters that control appearance and function. The attributes in the example are *name, required, initial_focus,* and *label_input.*

Widget files are stored in widget group subfolders (*chat, feedback, input,* etc.) in the */cp/core/widgets/standard* folder. Under the widget group, each widget has its own subfolder containing all the files for that widget. A widget may contain some or all of the following files:

- *info.yml*—Provides information about a widget's dependencies, requirements, attributes, and URL parameters. Every widget has a YAML file. Refer to YAML file.
- *controller.php*—Constructs the widget and calls the data it needs. Refer to Controller file.
- *view.php*—Contains the HTML required to display the widget. Refer to View file.
  - **.html.php*—Defines a view partial, which is a subset of the widget's view and is called from the *view.php* file. Refer to Multiple view partials within one widget.
- *logic.js*—Contains the display logic and events the widget subscribes to or fires. This file also contains logic for updating the widget's HTML when new information is received from an event. Refer to Logic file.

Note The *controller.php, view.php,* and *logic.js* files for each standard widget identify the originating release in the first line of code.

- **.ejs*—Embedded JavaScript template files that combine variables and the template to produce HTML. Refer to Embedded JavaScript files.
- *base.css*—Provides the non-editable CSS for a widget. Refer to Widget CSS files.
- *presentation.css*— Controls the stylistic elements that determine how the widget displays on a page. Refer to Widget CSS files.

Note The presentation CSS files are located in the */cp/core/assets/defaults/themes/standard (or mobile)/widgetCss* folder and include the widget name, for example, *AdvancedSearchDialog.css.*

- *preview/preview.png*—Displays an example of what the widget will look like when it is added to a page.

YAML file

Every widget has an information file written in YAML format, which contains no executable code. The following example is the *info.yml* file for the KeywordText widget.

```
version: "1.0.2"
requires:
    framework: ["3.0", "3.1", "3.2"]
    jsModule: [standard, mobile]
attributes:
    report_id:
        name: rn:msg:REPORT_LBL
```

```
        type: STRING
        description: rn:msg:ID_RPT_DISP_DATA_SEARCH_RESULTS_MSG
        default: rn:def:CP_NOV09_ANSWERS_DEFAULT
    source_id:
        name: rn:msg:SOURCE_ID_LBL
        type: STRING
        description: rn:msg:NAMED_SRC_WIDGET_FIRE_SRCH_EVENTS_LBL
    label_text:
        name: rn:msg:LABEL_LBL
        type: STRING
        description: rn:msg:STRING_LABEL_DISP_WARN_MODIFICATION_LBL
        default: rn:msg:SEARCH_BY_KEYWORD_CMD
    initial_focus:
        name: rn:msg:INITIAL_FOCUS_LBL
        type: BOOLEAN
        description: rn:msg:SET_TRUE_FIELD_FOCUSED_PAGE_LOADED_MSG
info:
    description: rn:msg:WIDGET_DISP_INPUT_TXTBOX_ALLOWS_MSG
    urlParameters:
        kw:
            name: rn:msg:KEYWORD_LBL
            description: rn:msg:SETS_TXT_KEYWORD_BOX_URL_PARAM_VAL_LBL
            example: kw/roam
```

The elements of this file include the following:

- **version**—Defines the widget's version number. Custom widgets must have a major and minor version specified, while standard widgets also include a nano version. Refer to Widget version management.
- **requires**—Defines the required framework version number, the required JavaScript module, and any YUI modules that need to be loaded for widget functionality. (The Customer Portal Framework Version 3.2 uses the YUI 3.13 library. Several standard YUI modules are available on every page, and any module is available to widgets that declare dependency on that module. Refer to YUI.)
- **attributes**—Defines the widget's attributes and their values. Note that if a custom widget inherits attributes of a standard widget when it is created, only the inherited attributes that have been removed or edited are listed in *info.yml*. The others are implied because the custom widget was created by extending the standard widget.
- **extends**—Identifies the standard widget that was used as the parent widget if this widget was created by extending another.

- **info**—Provides a description of the widget's functionality and an array of URL parameters the widget gets information from, including name, description, an example, and whether the parameter is required.

Note The Widget Info page, accessed at https://<your_site>/ci/admin/docs/widgets/info, is an additional source of information about the *info.yml* file when you're on the Customer Portal Administration site.

Controller file

The *controller.php* file renders and previews the widget. Its functions are constructing the widget and getting the data it needs. The get data function of *controller.php* instantiates the widget. In the KeywordText widget, for example, the get data function loads a report model that gets report data, creates other functions, gets data, and then returns data and passes it to the view file.

Note The controller files of standard widgets have been intentionally written to omit the closing PHP tag (`?>`). Additionally, code has been added to automatically remove the closing PHP tag from the end of widget controllers during the **staging** operation. If you add a closing tag to a widget controller file, the widget will display and work properly on the development site, but parsing errors might occur on the staging site.

View file

The *view.php* file contains blocks of code that indicate the elements of the code that you can edit. Every block in a widget has a unique ID that describes its context. Although standard widgets don't actually use the block tags, the tags identify where the code is editable. They serve as customization hook points where you can add custom code to the standard widget to create a custom widget. (Not every element of every widget is exposed as a block if modifying the element would cause problems with the standard code.)

Only the code within blocks can be edited. If you add code outside of block tags, your code will be ignored. If you don't specify the ID of a standard block or if the ID you specify doesn't exist in the standard widget's view, your code will also be ignored.

When a standard widget undergoes a nano change, that is, a fully backward compatible change, the change is automatically applied to the widget in your customer portal files so that you can take advantage of the bug fix or enhanced functionality. Additionally, any custom widgets that were created by extending that standard widget will also be updated. This benefit of automatic updating of custom code is possible whenever you extend a standard widget's view instead of overriding it when you create a custom widget. For additional information, refer to Extending and overriding the view.

View partials

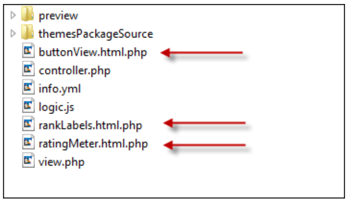
Many widget *view.php* files include duplicate sections of code that are used throughout the widget. Other widgets share sections of code, and each widget calls out the same code section. In an effort to avoid code duplication within and among widgets, the Customer Portal includes view partials, which are sections of code that can be used multiple places within a widget or shared across multiple widgets.

The *Partials* folder contains these view partial files that can minimize code duplication by letting you reuse common view elements, such as the red asterisk and screen reader label to indicate a field is required.

If a widget is within a view partial, the widget is rendered in the view.

Multiple view partials within one widget

Rather than a single large *view.php* file, some widgets now have partial view files that are smaller subsets of the view. The *view.php* is still the main widget view, but it renders the partial view files, which also appear in the widget's folder. For example, the AnswerFeedback widget was split into three view partials. These view partials use the `*.html.php` naming convention.



The *view.php* file for the AnswerFeedbackWidget contained 79 lines of code in Framework Version 3.2.1, while the same file in Version 3.2.5 contains only 40 lines, including three lines that call the widget's view partials to render the various feedback options: Yes/No buttons, up to five stars, and a numerical ranking scale.

When you extend a standard widget and choose to extend its view, the extended widget contains the standard widget's *view.php* file and all of its view partial files. When you do not change the standard widget's view (both View questions are answered No) or when you override the view instead of extending it (by answering Yes to "Does this widget modify the parent widget's view?" and selecting the Override radio button), the standard widget's view partials are not included in the view of the extended widget.

The view partials within a single widget have all the functionality of regular views. They can reference other widgets with the `$this` context, and they can use `<rn:block>` and `#rn:#` tags.

Multiple widgets sharing the same partial

The Customer Portal provides view partials that can be used by any widget. For example, the SiteFeedback widget contains the following code.

```
<label for="rn_<?=$this->instanceID?>_FeedbackTextarea">
    <?= $this->data['attrs']['label_comment_box'] ?>
    <?= $this->render('Partials.Forms.RequiredLabel') ?>
</label>
```

This code calls the view partial *RequiredLabel.html.php* in the */cp/core/framework/views/Partials/Forms* folder, which contains the following code:

```
<span class="rn_Required"><?= $requiredLabel ?:
\RightNow\Utils\Config::getMessage(FIELD_REQUIRED_MARK_LBL) ?></span>
<span class="rn_ScreenReaderOnly"> <?= $screenReaderLabel ?:
\RightNow\Utils\Config::getMessage(REQUIRED_LBL) ?></span>
```

Instead of duplicating the same HTML across different widgets to create the red asterisk and screen reader label to indicate a required field, this single shared view partial can be reused by any widget that needs it by simply calling:

```
$this->render('Partials.Forms.RequiredLabel')
```

If you want to override contents of a standard view partial, you must register a custom view in */cp/customer/development/config/extensions.yml* by adding the following text to the file.

```
partialViewExtensions:
    - Partials.Forms.RequiredLabel
```

Then whenever the Required.Label view partial is called, the custom file located in */cp/customer/development/views/Partials* will be used instead of the standard one in the *core* folder.

Unlike view partials within a single widget, which have the same functionality as regular view files, view partials that are shared among several widgets have limited functionality. They cannot render widgets or use `rn:` tags. Nor can they use the `$this` context to access widget properties.

Overriding standard view partials

If you want different functionality for a standard view partial (if, for example, you want to use two blue asterisks instead of a single red one to indicate that a field is required or you want to use a different screen reader label for a required field), you can create a custom view partial file with the same name as the standard. Using the Required.Label view partial as an example, you would create the new view file, name it *RequiredLabel.html.php*, and place it in */cp/customer/development/views/Partials/*.

After creating the custom view and placing it in the */cp/customer/development/views/Partials* folder, you must register the view. You do that by adding the following text to the */cp/customer/development/config/extensions.yml* file.

```
viewPartialExtensions:
    - Partials.Forms.RequiredLabel
```

Now, calling the RequiredLabel view partial will call the custom view from your development site instead of the standard view partial.

Creating custom view partials

To create a new view partial that can be shared among widgets, create the file and add it to */cp/customer/development/views/Partials*. If your new file is named *mySharedPartial.html.php*, for example, you would add the following code to the custom widget's *view.php* file.

```
<?=$this->render('Partials.MySharedPartial') ?>
```

Because you are not overriding a standard view partial, you do not have to register your custom view partials in the *extensions.yml* file as you do when you want to replace a standard view partial.

Logic file

The *logic.js* file contains the display logic and events for the widget. The widget may subscribe to or fire custom events to and from the event controller. This file also calls any JavaScript templates the widget might use. The logic file is optional.

Embedded JavaScript files

The *ejs* files in a widget folder are embedded JavaScript templates that produce HTML by using the variables that the view expects. It then can loop, perform conditions, or output variable data.

Widget CSS files

Some widgets have a base CSS file, others have a presentation CSS file, and many standard widgets have both. The base CSS file for a widget controls its functionality, while the presentation CSS controls the appearance of a widget. By having separate presentation files, you can control the appearance of one widget without impacting the appearance of any other widgets.

You cannot edit the base CSS files for standard widgets, which are stored in the folders with the other files that make up each widget, for example, */cp/core/widgets/standard/chat/ChatAttachFileButton*.

Widgets that have a corresponding CSS file in the */cp/customer/assets/themes/standard/widgetCss* folder use that CSS file to control the presentation, or appearance, of the widget when it is rendered on a page. This file contains the rules for adding stylistic elements to the widget. (The presentation CSS files for widgets that can be used on your mobile customer portal are in */cp/customer/assets/themes/mobile/widgetCss*. Refer to Mobile widgets.) The file name is *[WidgetName].css*, for example, *AdvancedSearchDialog.css*. The changes you make to presentation CSS files are sandboxed in the *themes* folder, so you can view them on your development site, but you must **stage** and **promote** the customer portal before you can see those changes on your production site. Click here for more information about how the files in the */cp/customer/assets/themes/* folders are sandboxed.

Standard and custom widget folders

All of the standard widgets that are part of the Customer Portal **reference implementation** are stored in the */cp/core/widgets/standard* folder, and all custom widgets that you create should be stored in the */cp/customer/development/widgets/custom* folder.

Note Although it's best practice to add custom widget folders to */widgets/custom folder*, you can add a widget to the root directory.

The page code of the standard reference implementation files defines widgets without specifying whether they are in the *standard* or *custom* folder. (Because the reference implementation uses only standard widgets, they are all stored in the *standard* folder.)

When you modify page code to add or edit a widget, you do not have to specify a folder for the widget path. If you explicitly indicate either the *standard* or *custom* widget folder, the code will call the widget from that folder. If you do not specify a folder, the *custom* widget folder is searched first. If no widget with that name exists in the *custom* folder, the *standard* folder is searched.

If you want to create a custom widget that replaces a standard widget everywhere on your customer portal where the standard one appears, you have two options for doing so. The hard way is to find every instance of the standard widget in the code for all pages and replace each instance with the name of the new custom widget.

However, there's an easier way. Because the *custom* folder is searched before the *standard* folder, you can replace a standard widget with a custom one that uses the same name without having to find and replace all calls to the new widget in all customer portal pages.

Important When you give a custom widget the same name as a standard widget, the custom path must be the same as the standard path. For example, if you create a custom AdvancedSearchDialog widget, you must create a subfolder called *search* under the *custom* widget folder and place the widget in that subfolder so the relative path for the custom widget is the same as that of the standard widget. In other words, the path for the standard widget is *standard/search/AdvancedSearchDialog*. Therefore, the path for the custom widget must be *custom/search/AdvancedSearch-Dialog*.

When you give a custom widget the same name as a standard widget, you must be aware of controller issues, described in the following section. The standard widgets that are comprised of multiple widgets (such as ChannelAllInput, ContactNameInput, and CustomAllInput) reference the FormInput widget in their *view.php* files. If two input widgets use different controllers that have the same class name, such as FormInput or DataDisplay, deployment failures will occur.

Custom widget controllers

A deployment failure will occur if two different widgets on the same page use the same widget folder name. When that happens, the widgets have the same class name in the controller. If you copy a widget and use the same widget name for the custom widget (for example, you create a custom input widget, name it FormInput, and put it in the *widgets/custom/input* folder, the custom widget uses the custom controller. However, because it has the same name as the standard widget's controller, a failure occurs if both widgets are placed on the same page. The error message lists the two widgets using different controllers that have the same class name and identifies the page where they are found. This lets you correct the problem by copying the *view.php* files of the custom widget to the appropriate folders.

Widget AJAX requests

When widgets require data, they make an AJAX request to the server. You define where a widget's request goes by setting a value for a specifically named AJAX endpoint attribute. For example, the ConditionalChatLink widget has an attribute called *get_chat_info_ajax* that lets you define where the request for chat availability will be sent. The default value is */ci/ajax_Request/getChatQueueAndInformation*. All requests are sent to */ci/ajaxRequest/*, which loads the ajaxRequest controller so it can execute the specified function, which is getChatQueueAndInformation in this example.

For a detailed explanation of AJAX requests, refer to Making AJAX requests to the server.

YUI

The Customer Portal uses YUI 3.13, but you can substitute the value `{YUI}` at the beginning of a file name to use the most current YUI version. The following default YUI modules are included on each page, so you don't need to call them out specifically in the widget code.

- anim-base
- anim-easing
- escape
- event-base
- history
- node-core
- node-event-delegate
- node-screen
- node-style

You can also use the following YUI requirements in jsModule.

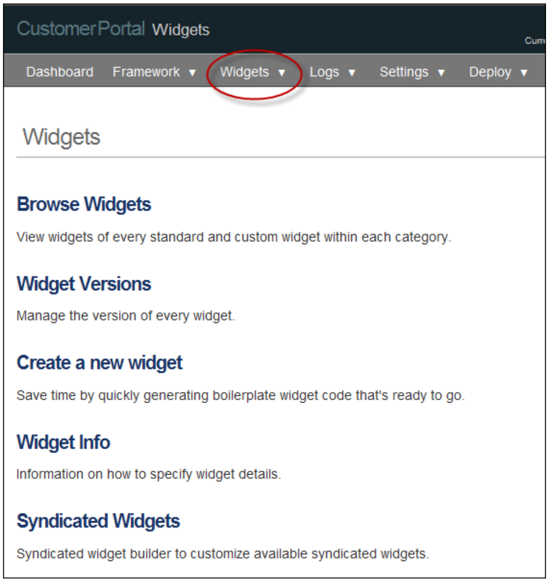
- `yui: [panel, autocomplete, autocomplete-highlighters]`
- ```
  yui:
     standard: [overlay]
  ```
  ```

Managing widgets

You can open the Widgets page of the Customer Portal Administration site by typing http://<your_site>/ci/admin/docs/widgets. You must log in with your user name and password, so make sure your profile includes the CP Edit permission. (Learn how to assign permissions here.)

You can also access this page from anywhere on the Customer Portal Administration site (http://<your_site>/ci/admin) by clicking the Widgets tab.

Click to view



The Widgets page lets you select the following options.

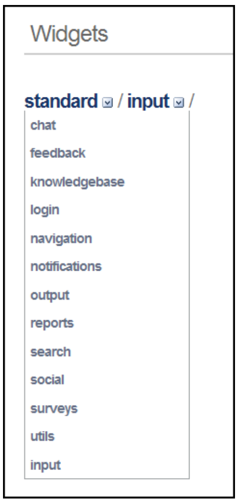
- **Browse widgets**—Opens a page where you can select standard and custom widgets to view all widget categories. Refer to Navigating folders and searching for widgets.

- **Widget versions**—Displays a page that lets you select a widget in the left column and open detailed information for that widget, including a preview image, documentation, where the widget is used, and any version changes. You can also deactivate or delete the widget on this page. Refer to Widget version management and Widget information page.
- **Create a new widget**—Opens the widget builder where you can create a custom widget by extending an existing standard widget or building a new one. Refer to Widget builder.
- **Widget info**—Defines the elements of the *info.yml* file. Refer to YAML file.
- **Syndicated widgets**—Lets you select and modify syndicated widgets, those widgets that let you add Customer Portal functionality to pages that are not part of your support site. Refer to Syndicated widgets.

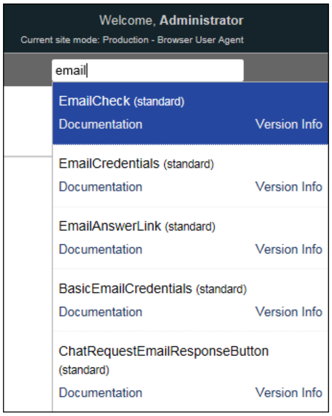
Learn how to navigate the widget folders and search for widgets.

Navigating folders and searching for widgets

You can quickly navigate among the different widget folders. After you click Browse Widgets, select Standard Widgets, and select a folder, you can click the drop-down menu associated with the folder level and select a different folder.



Or, if you know the widget's name, you can type the first few letters or any part of the name in the Search Widgets field in the upper right corner of the page to display a menu of widgets that match your entry.



Widget version management

Every widget in Customer Portal Framework Version 3.2 has a version number. When a widget is changed, for example, by the addition of a new attribute that increases functionality, you'll be able to incorporate only that widget without being required to use an entire widget set or a new Customer Portal framework version.

The version level system for widgets includes major, minor, and nano changes.

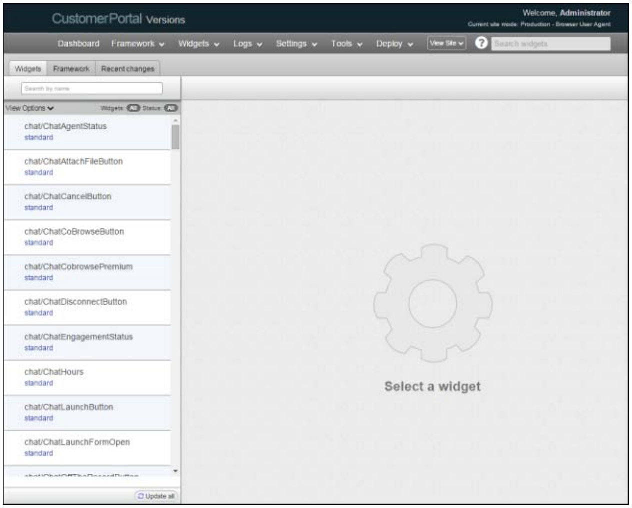
- **major**—A significant change to a widget's functionality, which you may or may not choose to adopt.
- **minor**—A widget change that is not backward compatible.
- **nano**—A fully backward-compatible change that will be applied automatically to your widget files with no impact.

The Customer Portal Administration site provides a comprehensive overview of widgets and their versions.

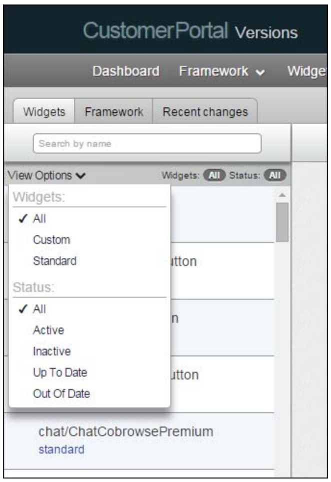
To display and manage widget versions

1 Type `https://<your_site>/ci/admin` to log in to the Customer Portal Administration site. You will be asked for your Oracle Service Cloud user name and password.

2 Click Widgets, and then select Widget Versions. The Customer Portal Versions page opens with the Widgets tab on top and the list of widgets in the left column.



3 To filter the list of widgets by widget type, click the View Options drop-down menu and select one of the widget type filters. The options include all widgets, custom widgets only, and standard widgets only.



4 To filter the list of widgets by widget status, click the View Options drop-down menu and select one of the widget status filters.

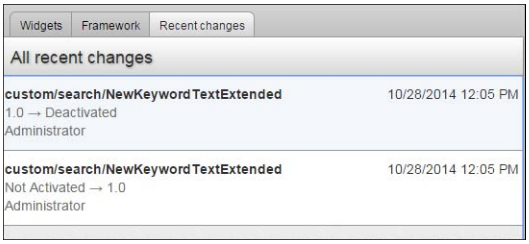
a To display all widgets that are currently activated on your customer portal, select Active.

b To display all widgets that have been deactivated, select Inactive.
c To select all widgets being used in their most current version, select Up To Date.
d To select all widgets for which newer versions are available, select Out Of Date.

5 To search for a specific widget, type the first few letters of the widget name in the Search field above View Options. A list of matching results is displayed. Refer to Available Versions tab for a discussion about a widget's different versions.

6 To update all widgets to their most recent version for the Customer Portal framework being used by your site, click the Update All button at the bottom right of the column.

7 To see all recent version changes, click the Recent Changes tab. Recent actions related to widgets and frameworks are shown in a list. Information includes whether a different version is now being used or if a widget was activated or deactivated. It also includes the staff member who made the change and the date and time the change occurred.



Deploying widget versions

If you migrate versions for multiple widgets on your development site and then decide to stage and promote your customer portal, you are required to deploy every migrated widget during the process. In other words, you cannot selectively deploy widget versions during the staging and promoting processes.

Additionally, if you migrate a widget when a newer version is available because you want to use it on a page, the new version will be used for every instance of that widget on your customer portal.

Widget information page

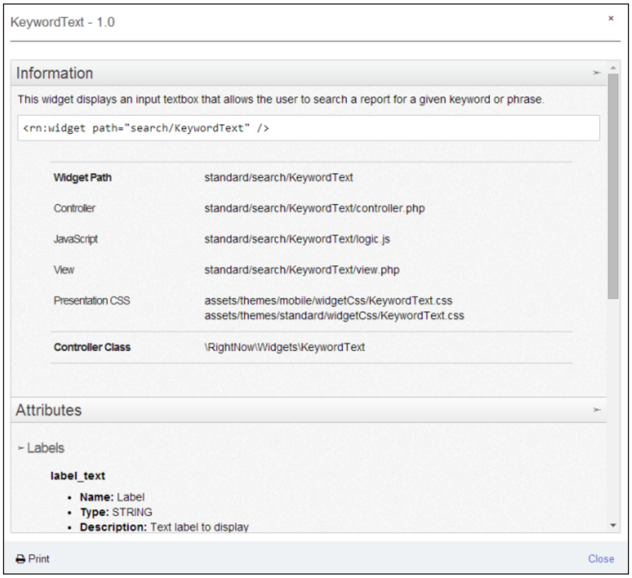
All of the information you need for each widget is defined in detail when you select the widget on the Customer Portal Administration site.

To select a widget

1 Type https://<your_site>/ci/admin to log in to the Customer Portal Administration site. You will be asked for your Oracle Service Cloud user name and password.

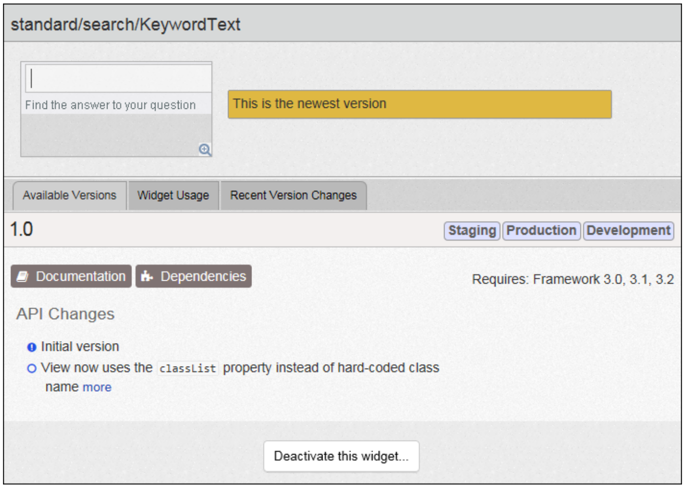
2 Click the Widgets tab. The Widgets page opens.

3 Select Browse Widgets, select Standard Widgets or Custom Widgets, select the widget folder, and then select the widget name. The widget page opens with the Documentation view opened.



Or

Select Widget Versions and select the widget you want to open from the list on the left. The description and overview of the widget opens.

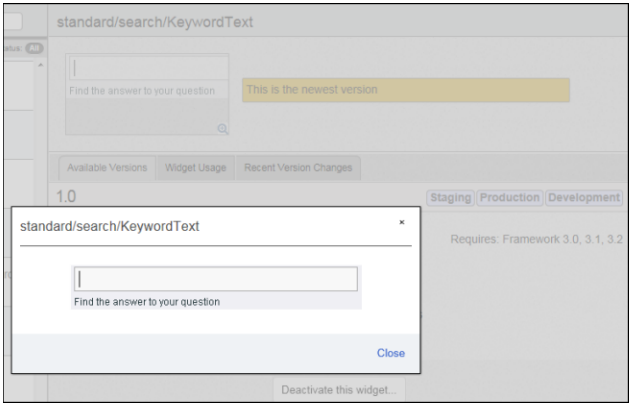


Or

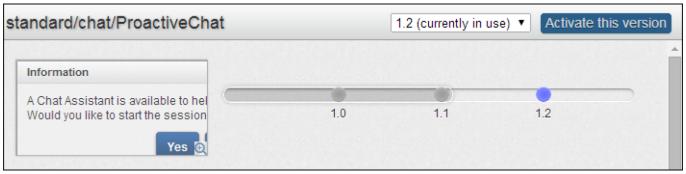
Type the widget name in the Search Widgets field on any page of the Customer Portal Administration site. The description and overview of the widget opens.

Three tabs appear on the widget information page: Available Versions, Widget Usage, and Recent Version Changes. The following elements appear on the page regardless of the selected tab.

- **Preview**—The preview shows you an example of what the widget looks like on a page. If the widget is larger than the preview window and the display provides only a partial view, you can click the preview window to display an expanded view of the widget, as shown here. Close the expanded preview window by clicking the Close link in the lower right corner of the window or the X in the upper right corner. (To add a preview to a custom widget, click here.)



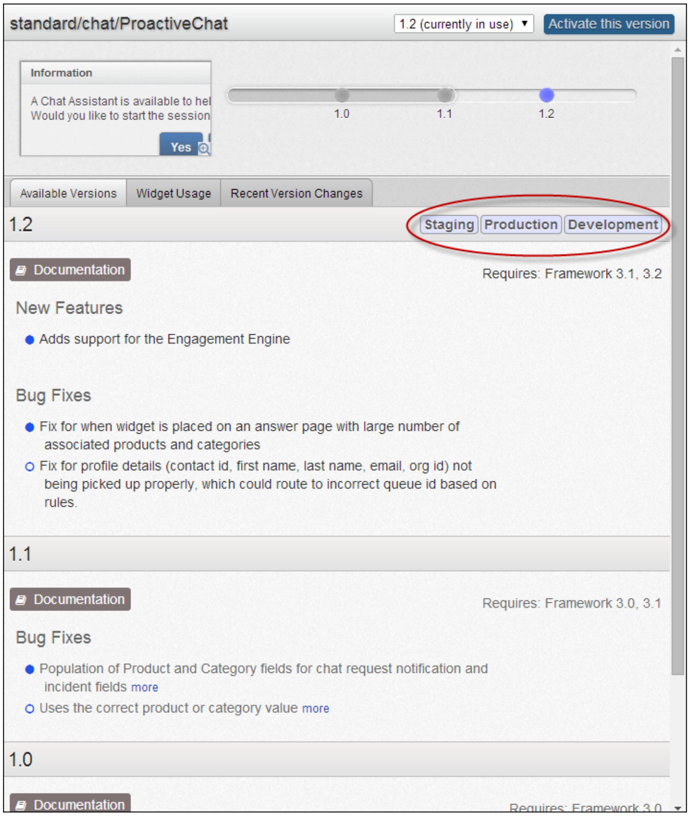
- **Widget history timeline**—A timeline at the top of the page shows the available versions of the widget and the version currently in use. If the widget version is 1.0, the message says, "This is the newest version."



Available Versions tab

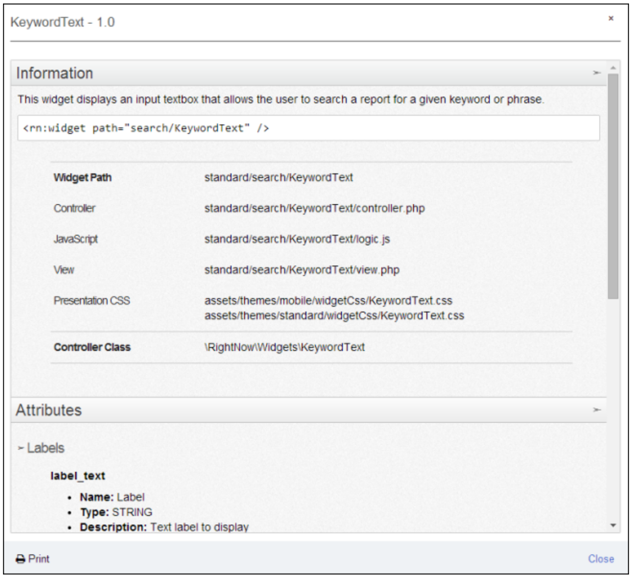
The following elements appear on the Available Versions tab of the widget information page.

- **Staging/Production/Development**—When multiple versions of the widget exist, the areas using each version are noted. In the following figure, the development, staging, and production areas are all using version 1.2 of the widget.

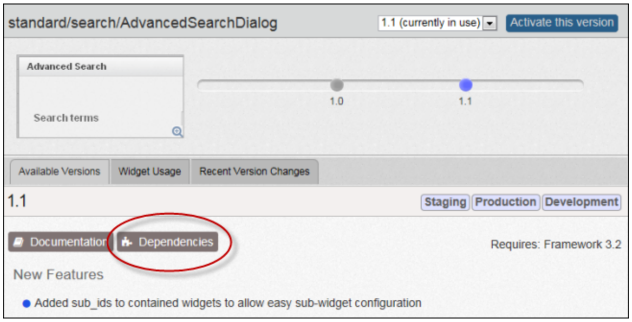


- **Framework requirements (dependency information)**—The page includes the framework version that must be installed to support the widget version.
- **Widget version information**—Each version of the widget is listed on the page, with the newest listed first. The version section describes the changes that were made from the previous version. The changes are categorized as likely impact, possible impact, or no impact to custom code, determined by hovering over the bullet for each change. Changes are further classified as new features, removal of functionality, API changes that impact the widget, or bug fixes.
- **Documentation**—Clicking Documentation opens a page of information specific to the widget, including description, default code, attributes by category (such as labels, image paths, and AJAX endpoints), the controller class, path information, and URL

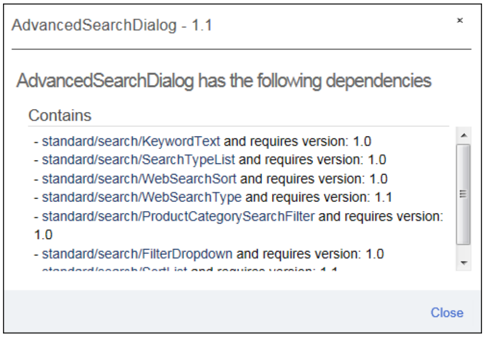
parameters. (If the page describes a custom widget that was extended from another widget, it will also list the parent widget.) Print this page by clicking the Print link at the bottom of the window.



- **Dependencies**—When a standard or custom widget has dependencies, the Dependencies button appears on the widget information page next to the Documentation button. Dependencies include the following:
  - ▷ A widget contains other widgets (for example, AdvancedSearchDialog contains KeywordText and other widgets)
  - ▷ A widget is extended from another widget (for example, ChatAttachFileButton extends from FileAttachmentUpload)
  - ▷ A widget is the parent of a widget (FileAttachmentUpload is the parent of ChatAttachFileButton)

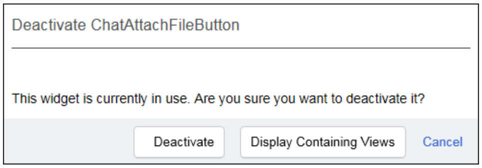


Clicking the Dependencies button opens a window that displays the dependencies to other widgets.

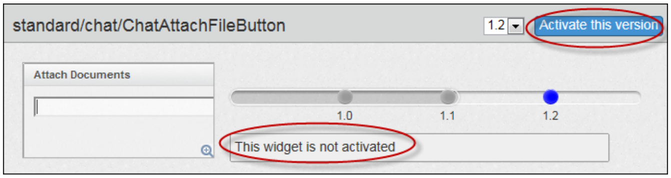


- **Deactivate this widget**—When you click this button at the bottom of the page, the widget is no longer available for use on your site. Then, when you filter on only the Active widgets, your list displays only the activated widgets. (Even deactivated widgets will appear in the list of widgets if you do not select the Active filter.) For example, if you do not use Oracle RightNow Chat Cloud Service (Chat), you may want to deactivate each of the chat widgets. When you click the button for a widget that is currently in use on your site, you are asked to verify that you want to deactivate the widget and offered a chance to see where it is being used.

Note In this example, even though you are not using Chat, the reference implementation includes Chat pages that use the chat widgets.



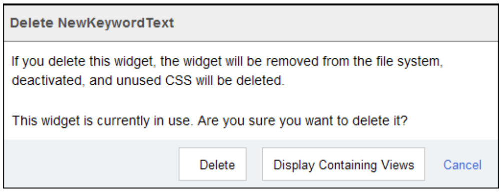
Widgets are not actually removed from the code when you deactivate them, but they are made unavailable for use. After you have deactivated a widget, it does not appear in the list of widgets when you use the Active filter. It does appear in the list when no filter is used, but it is grayed out to indicate that it is deactivated. If you click a deactivated widget, you can reactivate it. An Activate This Version button appears, and you can select the version you want from the drop-down menu.



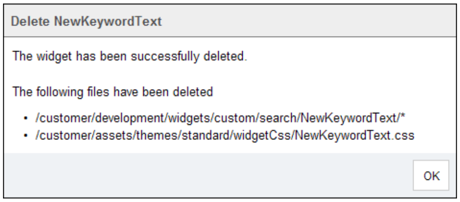
After selecting the version and clicking the button, the widget is activated once again.

Important When new widgets are added in future releases, they are not automatically activated. Instead, you'll need to specify which version of the widget you want when you decide to start using it. This prevents the possibility of using a widget that was activated earlier but hadn't been used yet if a newer version becomes available before you decide to use it on your customer portal.

- **Delete this widget**—The Delete This Widget button appears only for custom widgets. When you click the button, a confirmation message appears. If the widget is being used on your customer portal, a Display Containing Views button appears on the confirmation message. Click the button to display a list of pages and/or widgets that use the widget you want to delete.

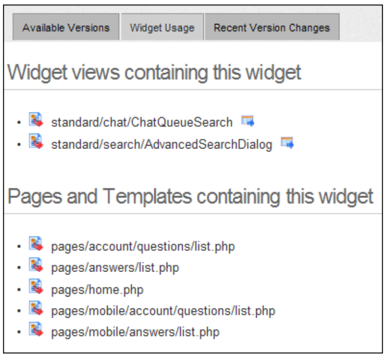


When you click Delete in the confirmation message, the widget is deactivated and deleted from the left panel that contains a list of all the widgets. All of the widget's associated files are also deleted from the file structure, so they no longer appear in the WebDAV file structure. The deleted files are listed in the message that tells you the widget was deleted. You cannot reactivate the widget after deleting it.



Widget Usage tab

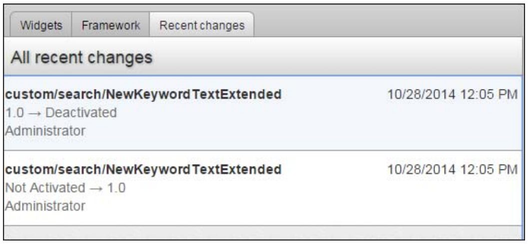
Selecting the Widget Usage tab displays the widgets, pages, and templates that use the widget.



Select a widget or page from the list to view the snippet of page code where the widget appears, highlighted for easy location. Click the Close link or X to close the snippet.

Recent Version Changes tab

Selecting the Recent Version Changes tab displays a list of recent updates to the widget. Information includes whether a different version is now being used or if the widget was activated or deactivated. It also includes the staff member who made the change and the date and time the change occurred.



Widget attributes

Each widget has properties, or attributes, that are specific to the instance of the widget. A widget can look or behave one way on one page and differently on another. You might even have two instances of the same widget on one page with different attributes. For example, you could add a second ProductCategoryList widget to the Support Home page to display a list of featured support products in addition to the featured support categories list that appears on the page by default.

When a widget contains other widgets, you can use the attributes of the contained widgets in the widget definition. For example, the DataDisplay widget contains, among other widgets, the FileListDisplay widget. The code for the DataDisplay widget can include attributes of the FileListDisplay widget, even if those attributes are not available on the DataDisplay widget. The attribute value specified in the DataDisplay widget code is passed on to the FileListDisplay widget. See an example here.

Additionally, you can create an RN Container page tag to define a set of attributes and their values that are common to multiple widgets. Then, instead of having to add every attribute to the code for each of the affected widgets, you can use the container to define the attributes. Refer to Applying common attributes to multiple widgets.

Note If the widget code specifies an attribute that is also defined in the container, the value for the attribute in the widget code overrides its value in the container.

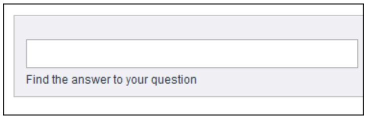
The page for each widget on the administration site lists and explains the attributes of the widget and tells you how to define the attribute in the widget's code.

For example, here is the code for the standard search widget KeywordText.

```
<rn:widget path="search/KeywordText"/>
```

And here is the KeywordText widget code on the Support Home page.

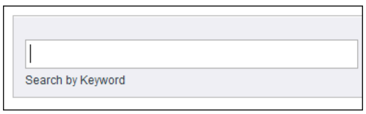
```
<rn:widget path="search/KeywordText"
label_text="#rn:msg:FIND_THE_ANSWER_TO_YOUR_QUESTION_CMD#"
initial_focus="true" />
```



(For clarity, the AdvancedSearchDialog and SearchButton widgets that usually appear with the KeywordText widget have been removed in the widget figures on this page.)

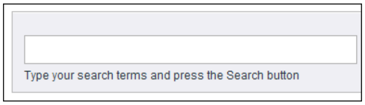
In the widget definition, you can see that the default text for the *label_text* attribute is "Search by Keyword." But the widget code on the Support Home page uses a message base to replace the default label. If you want to use the default label, you can simply delete the attribute from the code since all attributes are automatically assigned to their default unless the widget code changes it.

```
<rn:widget path="search/KeywordText"
initial_focus="true" />
```



Or you can define a new label.

```
<rn:widget path="search/KeywordText"
label_text="Type your search terms and click the Search button"
initial_focus="true" />
```



Sub-widgets and attributes

Several Customer Portal widgets contain other widgets. For example, the DataDisplay widget contains the FileListDisplay, ProductCategoryDisplay, IncidentThreadDisplay, FieldDisplay, and ProductCatalogDisplay widgets.

Often a widget that is contained in a parent widget has attributes with the same name as the attributes of another contained widget. The AdvancedSearchDialog widget, for example, contains two instances of the ProductCategorySearchFilter, one for products and one for categories. Because you want to be able to specify unique labels for each, both instances of the ProductCategorySearchFilter widget have their own ID value to let you use the widget's *sub_id* attribute to accomplish this, as shown in the example procedure below. Before you follow the example, review the Containing Widgets section of the documentation page for the AdvancedSearchDialog widget at https://<your_site>/ci/admin/versions/manage/#widget=standard%2Fsearch%2FAdvancedSearchDialog&docs=true&version=1.1 (or select the widget, click Documentation, and scroll down to the Containing Widgets section. Notice that each of the widgets that are part of the AdvancedSearchDialog widget now contains a *sub_id* attribute.


Containing Widgets

The following widgets are used within this widget view. Selecting a widget name from the list below will take you to the detailed documentation for that widget.

To set any of the contained widget's attributes, you can use the 'sub_id' attribute specified in the widget tag. The convention for addressing these attributes is:
sub:{sub_id}:{contained_widget_attribute}="Value being set"
For example, with the AdvancedSearchDialog widget, to set the label_input attribute for the Product field, you would use:
sub:prod:label_input="Custom Product Label"

```
<rn:widget path="search/KeywordText"
          label_text="#rn:msg:SEARCH_TERMS_UC_CMD#"
          sub_id="keywordText"/>

<rn:widget path="search/SearchTypeList"
          filter_list="#rn:php:$this->data['searchTypeFilters']#"
          sub_id="searchTypeList"/>

<rn:widget path="search/WebSearchSort"
          sub_id="webSearchSort"/>

<rn:widget path="search/WebSearchType"
          sub_id="webSearchType"/>

<rn:widget path="search/ProductCategorySearchFilter"
          filter_type="products"
          sub_id="prod"/>

<rn:widget path="search/ProductCategorySearchFilter"
          filter_type="categories"
          sub_id="cat"/>
```

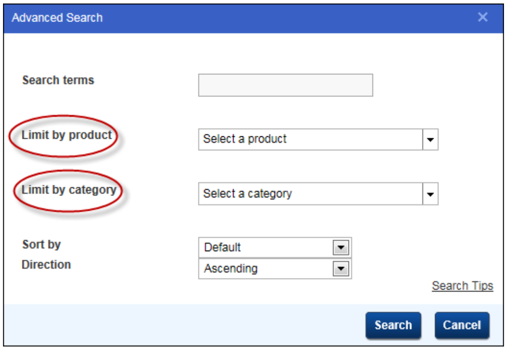
Setting a sub-widget's attribute requires the format:

```
sub:{sub_id}:{widget_attribute}="Value being set"
```

For example, the following procedure uses this syntax to set the label_input attribute for the Product field:

```
sub:prod:label_input="Your Product"
```

The following procedure provides an example of how you can use sub-widgets for greater flexibility and reduced code duplication. The example assumes you want to change the “Limit by product” and “Limit by category” labels that appear on the AdvancedSearchDialog widget. Those labels and their associated drop-down menus are created using the sub-widgets for ProductCategorySearchFilter.



To configure the AdvancedSearchDialog widget with sub-widgets

1 Open the *home.php* file in the */views/pages* folder.

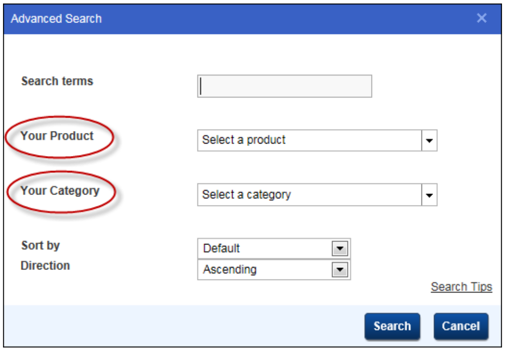
2 Locate the following code.

```
<rn:widget path="search/AdvancedSearchDialog"
report_page_url="/app/answers/list"/>
```

3 Edit the code you located in step 2 as follows.

```
<rn:widget path="search/AdvancedSearchDialog"
report_page_url="/app/answers/list"
sub:prod:label_input="Your Product"
sub:cat:label_input="Your Category" />
```

4 Save *home.php*.



Affected widgets

This release of the Customer Portal assigns sub_id values to widgets that are contained in other parent widgets. The following widgets that contain other widgets now have assigned values for each of their sub-widgets.

- AdvancedSearchDialog (*search*)
- BasicCustomAllInput (*input*)
- BasicFormInput (*input*)
- BasicResetPassword (*login*)
- ChannelAllDisplay (*output*)
- CustomAllDisplay (*output*)
- ChannelAllInput (*input*)
- CustomAllInput (*input*)
- DataDisplay (*output*)
- ProdCatNotificationManager (*notifications*)
- FormInput (*input*)
- ResetPassword (*login*)

Other sub-widget examples

When several of a widget's sub-widgets have the same attribute, you can set the attribute for all of them in the widget code, as you could before. Now, however, you can make an exception based on a specific sub-widget. In the following example, the default hint value is used for all custom fields except the Priority custom field, which has its own hint.

```
<rn:widget path="input/CustomAllInput"
hint="hint for every field except Priority"
```

```
sub:input_Incident.CustomFields.c.priority:hint="Priority hint"/>
```

FormInput examples

The CustomAllInput contains the FormInput widget, and the FormInput widget contains the SelectionInput, DateInput, TextInput, and PasswordInput widgets. Because there are different types of input widgets in FormInput, each sub-widget has its own ID, which you can use to set attributes for all sub-widgets of that particular type, similar to the example shown here.

```
<rn:widget path="input/CustomAllInput"
hint="hint for every field except date fields"
sub:date:hint="hint for all date fields"/>
```

If the code sets an attribute based on type (text, selection, date) and that attribute is set to a specific value by default, you should explicitly override the attribute using the sub-widget code format:

```
sub:<id>:<attribute_name>="attribute_value"
```

This ensures that the value you specify takes precedence over attributes set in the widget's view. For example

```
<rn:widget path="input/CustomAllInput" table="Incident"
sub:text:required="true"
sub:input_Incident.CustomFields.c.text1:text:required="false"
sub:selection:hint="Hint for selection field"
sub:input_Incident.CustomFields.c.priority:selection:hint="Hint for
Priority field" />
```

Notice that you must include the type after the field name only if the code also has an attribute with sub:type:<attribute_name>. That is, you can set specific attributes such as the required or hint value for a specific field using the format below.

```
<rn:widget path="input/CustomAllInput" table="Incident"
sub:input_Incident.CustomFields.c.text1:required="true"
sub:input_Incident.CustomFields.c.priority:hint="Hint for Priority
field" />
```

ChannelAllDisplay and ChannelAllInput examples

The ChannelAllDisplay and ChannelAllInput widgets work similarly, where you can use sub-widgets to define custom labels for each channel, as shown in this example.

```
<rn:widget path="output/ChannelAllDisplay"
sub:display_FACEBOOK:label="Custom Facebook username"
sub:display_TWITTER:label="Custom Twitter username"
sub:display_YOUTUBE:label="Custom YouTube username" />

<rn:widget path="input/ChannelAllInput"
sub:input_FACEBOOK:label_input="Custom Facebook input field"
```

```
sub:input_TWITTER:label_input="Custom Twitter username"
sub:input_YOUTUBE:label_input="Custom YouTube input field" />
```

Reports in widget attributes

You might have noticed that several widgets include a *report_id* attribute. This attribute defines the **report** to be displayed by the widget. When you reference a report (for example, the Answers report for the KeywordText widget), you must know the report's ID number. The following procedure tells you how to find the report ID.

Important Answers reports that are used on the Customer Portal must contain the answers.special_settings filter. All **standard answers reports** include this filter, but you must be sure any custom answers reports you want to use also include it. One way to be sure the special_settings filter is included in a custom answers report is to copy one of the standard answers reports and edit the copy to create your custom report. Refer to Checking for the answers.special_settings filter in an answers report.

To find report IDs

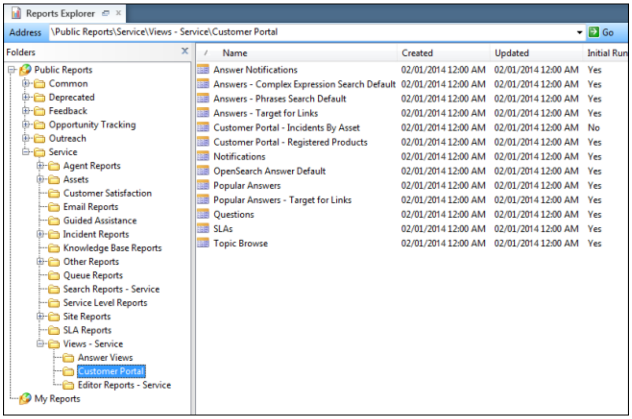
1 Log in to Oracle Service Cloud.

2 Click the Analytics button on the **navigation pane**.

3 Double-click Reports Explorer.

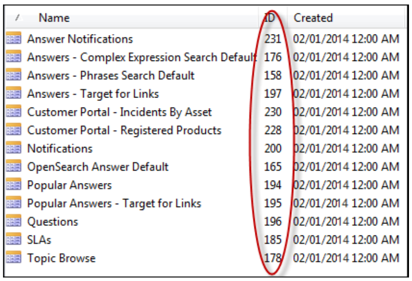
4 Drill down through the reports in the tree until the report you want is displayed in the list on the right. (Alternately, you can search for the report by clicking Find on the report ribbon, selecting Name or other field, and typing what you're looking for in the search field.)

Note You can find Customer Portal reports under \Public Reports\Service\Views – Service\Customer Portal.



5 On the report ribbon, click the Choose Details button in the Display group. The Hide or Display Details window opens.

6 Select the check box for ID and click OK. The report ID now appears in the list of reports.



Editing widgets to change reports

When a page includes search navigation with an answers report, multiple widgets are used to control the functionality. On the Answers page, for example, these widgets include the following.

- Elements of the search tool:
  - ▷ Link to the advanced search dialog
  - ▷ Search field

  - ▷ Search button
  - ▷ Search filters
- Elements of the returned search results:
  - ▷ The report itself
  - ▷ The display of total number of results
  - ▷ Pagination control

In all, seven widgets on the Answers page make up the search field and report, and each of these widgets must call the same report in order for the page to display meaningful information. The reference implementation uses a container page tag to define this report ID as 176, which is the Answers–Complex Expression Search Default report.

Important If you change the default report on the Answers page, you must also change the answers report in the Contact Visible Answers Report field on the **administration interface**.

The same thing is true for any other customer portal page that uses the combination of search field and report, whether it is a page of the **reference implementation** or a custom page that you've created. That is, all widgets that make up these elements must call the same report using one of the following methods.

- Use the RN Container page tag to identify one or more common attribute values and then embed a group of widgets within the container tags or specify the container as a widget attribute. Refer to Applying common attributes to multiple widgets. The reference implementation uses this method.
- Edit every search and report widget on the page by adding the *report_id* attribute to the widget code and setting its value to the ID of the report you want to use. The attribute format resembles the following.

```
report_id="194"
```

Changing the answers report

When your customers conduct a search, the answers are returned in the report that is identified in the code for the Answers page (*/answers/list.php*). By knowing what report is being used, Oracle Service Cloud can correctly use answer **clustering**, **SmartAssistant**, and external document indexing to return the appropriate answers.

However, the report you specify in Customer Portal code is not stored where the **knowledge base** can use it. As a result, you need to identify the report on the Interfaces editor so the knowledge base knows what report you want to use on your customer portal.

If you use the standard Answers page, the default report is Answers–Complex Expression Search Default, which is also the default report on the Interfaces editor. If that's the case, you don't need to change anything. But if you change the report used on your customer portal, you must also change the Contact Visible Answers Report on the Interfaces editor so the knowledge base returns the correct answers.

[Learn how to change the answers report in the Answers page code.]

To change the answers report on the Interfaces editor

1 Log in to Oracle Service Cloud.

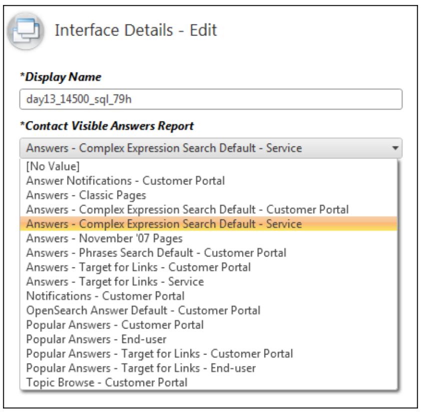
2 Click the Configuration button on the navigation pane.

3 Double-click Interfaces under Site Configuration. The Interfaces tree displays on the content pane.

4 Click the interface you want to edit in the tree. (You may have just one interface.) The Interfaces editor opens.

5 Click the Contact Visible Answers Report drop-down menu, and select the report you are using from the menu options.

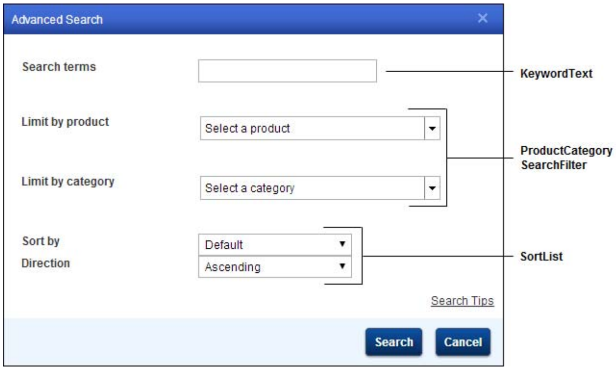
6 Click Save and Close.



Specifying additional report filters

By default, the standard filters defined in a report are displayed when the AdvancedSearchDialog widget is opened. If you have added custom filters to custom reports, you may want those filters to display on your customer portal as well. (To add filters to a custom report, refer to [Creating report filters](#).)

The AdvancedSearchDialog widget includes an *additional_filters* attribute that lets you define a comma-separated list of additional run-time filters to add to the report. Menu-type filters are added in the order you specify in the attribute below the ProductCategorySearchFilter widgets and above the SortList widget, shown in the default configuration here. Text and integer filters display as drop-down menus immediately below the KeywordText widget.



To add custom filters to the AdvancedSearchDialog widget, add code resembling the following to the Support Home page, Answers page, or any other page where you've placed the AdvancedSearchDialog widget.

```
<rn:widget path="search/AdvancedSearchDialog"
additional_filters="Custom Menu, Custom Integer, Custom Text, Status"
/>
```

The widgets appear on the AdvancedSearchDialog widget in the order you list them.

If any of the filters you have added in the *additional_filters* attribute are text or integer filters, the AdvancedSearchDialog widget outputs the SearchTypeList widget, which also lets you define a list of report filters that appear in a drop-down menu on the report. These filters are specified in the *filter_list* attribute of the SearchTypeList widget. If no filters are specified in the attribute, the widget uses the filters defined in the report.

Important If you are using multiple reports on a page, each with its own runtime filter, the reports seen by customers who access the page using an older browser (including Internet Explorer 8 and Internet Explorer 9) will be filtered by the combination of all selected filters. To avoid this situation when searching is intended for only one of the reports, edit the remaining reports to remove any runtime filters.

Hiding reports when no results are returned

Several report widgets include a *hide_when_no_results* attribute that prevents the widget from displaying if no search results match the entered terms. These widgets include Multiline, Grid, MobileMultiline, and CommunitySearchResults. To hide the widget, simply add the attribute and set its value to true. Here's an example of adding the attribute to the Multiline widget.

```
<rn:widget path="reports/Multiline" hide_when_no_results="true"/>
```

Date and time formats in reports

The Multiline, Grid, MobileMultiline, and CommunitySearchResults reports let you format the output of date columns in the report. The following table shows the output for each allowable value of the *date_format* attribute for the reports.

Table 371: Values for the *date_format* Attribute of Report Widgets

Value	Format	Example
short (default value)	m/d/Y	09/14/2012
date_time	m/d/Y h:i A	09/14/2012 11:08 AM
long	l, M d, Y	Wednesday, Sep. 14, 2012
raw	unformatted UNIX time stamp	1347620880

Defining the number of search results

You can define the number of displayed search results when the report is created on the Service Console, as shown in Adding row limits and page breaks. You can also limit report results by adding the *per_page* attribute, for example, as shown in the following code.

```
<rn:widget path="reports/Multiline" per_page="5" />
```

If the report definition on the Service Console includes row limits and the report widget defines the *per_page* attribute, the widget attribute overrides the report definition.

Widget builder

The Customer Portal widget builder can create a new widget by extending the functionality and attributes of an existing widget and generating custom code files for the new widget. The code contains placeholders that you can modify to achieve the behavior you want for the new widget.

When functional changes or bug fixes are added to a standard widget, the widget undergoes a nano versioning change. As you would expect, the standard widget on your customer portal automatically migrates to the new nano version. Additionally, any custom widgets that have been extended from that standard widget are also modified to incorporate the enhancement or fix.

The widget builder generates custom widget code when you answer a series of questions about the widget you want to create. By creating placeholders for additional code you'll add to further define the custom widget, it reduces the amount of code you must write and minimizes the possibility of errors because it creates the widget's basic code structure.

Building custom widgets

Using the Customer Portal's widget builder, you can create custom widgets to suit your own business needs. Each custom widget can be designed from scratch as a standalone widget, or it can inherit and extend the functionality and attributes of another widget (referred to as the parent widget).

When you create a new widget from scratch, the widget builder creates the files you need based on your responses to the questions it poses. The files may contain placeholders where you'll need to add content, or they may be blank.

Important You can also create code for a custom widget and add it to your customer portal through WebDAV without using the widget builder. The widget will appear in the list on the Widget Versions page, but you must manually activate it by selecting it and then clicking Activate This Version in the upper right section of the page.

When you create a new widget by extending the functionality of an existing standard or custom widget, you can define whether the new widget will have its own controller, view, CSS, and JavaScript files or whether it will extend the corresponding file from the existing widget that the new widget is being extended from.

To define the behavior of a custom widget, you can include or modify attributes for the following components.

- **Controller**—Initializes and processes data required for widget output. Controllers can also contain AJAX-handling functions.
- **View**—Displays the PHP output generated by a controller, rendered as HTML. The file contains a top level div to simplify your coding work.
- **CSS**—Defines the style and appearance of the view.
- **JavaScript**—Produces specific behavior and renders dynamic HTML views.
- **YUI**—Defines the YUI modules to be used with the new widget.
- **Additional widget details**—Lets you add a widget definition, specify inherited URL parameters, and define JavaScript framework compatibility.

To simplify the process of creating a new widget, the widget builder steps you through a series of basic questions about your widget. Once complete, the utility generates the widget information file along with all of the necessary supporting files based on your responses, which you then edit to meet your needs. Refer to Customizing widget behavior.

Extending and overriding the view

If you indicate that the new widget will modify the parent widget's view, you'll be asked if you want to extend the view or override it. This is an important question, and you should think carefully before selecting the override option.

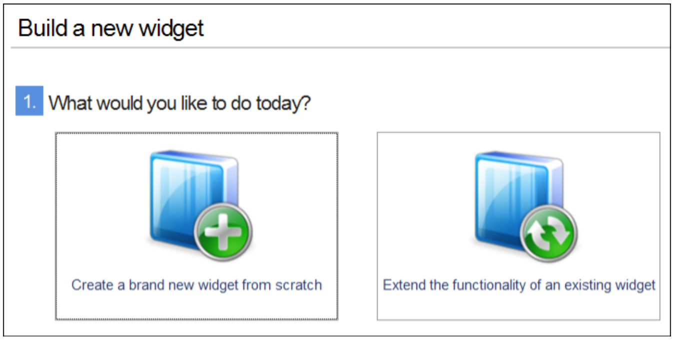
We highly recommend that you choose to extend the parent's widget view instead of overriding it. When you extend a standard widget's view, any future changes to the standard widget will be automatically applied to the custom widget that was created by extending it. If you choose to override the view instead of extending it, your custom code will not be updated. Refer to View file for a discussion of blocks, which make the automatic updates to custom widgets possible.

Note You can extend widget views past the child level. For example, if you extend widget A's view to create the view for custom widget B, you can also extend the view of widget B to create widget C's view. The parent widget's view can be extended in the child's view, which can be extended for the grandchild, and then the great-grandchild.

To create a widget from scratch

1 Type `https://<your_site>/ci/admin` to log in to the Customer Portal Administration site. You will be asked for your Oracle Service Cloud user name and password. Refer to Opening the Customer Portal Administration page.

2 Click the Create a New Widget shortcut. (Or, click the Widgets tab and select Create a New Widget.) You'll be asked if you want to create a new widget or extend an existing standard widget.



3 Click Create a Brand New Widget From Scratch. The widget summary area on the right is updated to indicate you are creating a new widget, and the Naming section appears.

4 Type the name of the custom widget in the What Is Its Name field. (The name cannot contain spaces.)

5 Type the name of the custom widget's parent folder in the And Its Parent Folder field.

6 Click the Continue button. The widget summary is updated with the widget naming information, and the Components section displays questions about the new widget's components.

7 To enable specific widget components, select the Yes radio button for the corresponding question.

Table 372: Components Description for New Custom Widgets

Question	Description
Does this widget have a controller?	Select the Yes radio button if you will create a controller file for the widget.

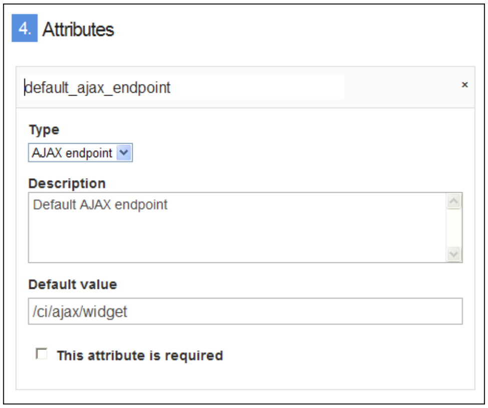
Table 372: Components Description for New Custom Widgets (Continued)

Question	Description
Will it be doing any AJAX-handling?	Select the Yes radio button if the widget's controller will handle AJAX requests. **Note:** You can respond to this question only if you answered Yes to the preceding widget controller question. Otherwise the question is disabled.
Does this widget have a view?	Select the Yes radio button if the widget will display HTML from the controller file's PHP.
Does this widget have JavaScript?	Select the Yes radio button if the widget will contain JavaScript. **Note:** This option is automatically enabled when the AJAX-handling option is enabled.
YUI Modules	If you have selected Yes for the preceding JavaScript question, the Add Module link is active. Click Add Module and begin typing the name of the YUI module you want to have loaded on the page containing the widget and passed to the widget's constructor. A list of modules that match the text you enter appears so you can select the one you want. To add more YUI modules, click Add Module and type the name. **Note:** By default, several YUI modules are already included on each page. Click here to view the list.
JavaScript templates too?	Select the Yes radio button if the widget will display dynamic HTML content rendered by JavaScript. **Note:** You can respond to this question only if the preceding widget JavaScript question is marked Yes.

Note A custom widget must include at least one of the listed components. A widget without any of these components is nonfunctional and therefore invalid.

8 Click the Continue button. The widget summary is updated with the widget component information, and the Attributes section appears.

9 If you answered Yes to the question about AJAX handling, you can define the *default_ajax_endpoint* attribute by editing the name, selecting AJAX for the type, creating a description, and setting a default value.



10 To add another attribute, click the Add an Attribute button at the bottom of the attributes section and enter the following field information.

Note Attribute names cannot contain uppercase characters.

Table 373: Custom Widget Attributes Description

Attribute	Description
Header	Type the name of the attribute in the header field.
Type	Select the type of attribute you want to define. Available types include string, Boolean, AJAX endpoint, option, file path, and integer.
Description	Type a description for the attribute. **Note:** This text describes the attribute when you click Documentation on the custom widget page.
Options	Click Add Option and type an option value to add one or more values to an option-type attribute. **Note:** This field is available only when the attribute Type is set to Option.
Default Value	Type a default value for the attribute. **Note:** By default, a Boolean-type attribute is set to true. Select the False check box if you want the value to default to false.
This Attribute Is Required	Select this check box to make the attribute required.

11 To add more attributes, repeat step 10.

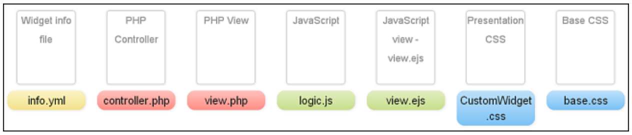
12 When you are finished adding attributes, click Continue. You now have the option of adding details to the widget or creating the widget without adding details.

13 To add details to the widget, click Add Additional Details and enter the following field information.

Table 374: Additional Custom Widget Details

Field	Description
Widget description	Type a description for the widget that appears in the *info.yml* file and on the widget's definition page.
URL Parameters	To add a URL parameter, click Add a URL Parameter and complete the Name, Description, and Example fields. (The Name field cannot contain spaces or forward or backward slashes.) To remove a parameter you added, click the X to the right of the parameter header.
Compatibility	If you want the widget to work with a specific Customer Portal JavaScript framework, select Standard or Mobile or both. Or select No Framework JavaScript is Required. **Note:** This section does not appear if the widget does not have a JavaScript component.

14 Click the Create Widget button. The widget summary is updated with attribute information, and the Generated Widget section displays links to the parent directory and files created for the widget. The widget is now active and available for use in Development mode.



15 Edit the files that were generated so that the custom widget looks and performs as you intend it to. Refer to Customizing widget behavior.

Important To use the new widget in the staging environment, you must not only be sure you select Copy to Staging in the first step of the staging process, but you must also push the widget version change in the second step of the staging process, Version Changes. Refer to To stage your customer portal pages.

To create a custom widget by extending the functionality of another widget

Note Remember that if you want to modify only the appearance of a widget, you do not need to create a custom widget by extending the original widget. Instead, you can change the appearance of the original widget by editing its CSS file.

1 Type `https://<your_site>/ci/admin` to log in to the Customer Portal Administration site. You will be asked for your Oracle Service Cloud user name and password. Refer to Opening the Customer Portal Administration page.

2 Click the Create a New Widget shortcut. (Or, click the Widgets tab and select Create a New Widget.) You'll be asked if you want to create a new widget or extend an existing standard widget.

3 Click Extend the Functionality of an Existing Widget.

Important If the existing widget is a custom widget that has already extended the view of a standard widget, you will receive a staging error if your new widget extends the view of the existing widget.

4 Start typing the name of the widget you want to extend in the Which Widget Shall It Extend From field. A drop-down menu lists the names of all standard and custom widgets that match what you have typed.

5 Select the widget you want to extend. The field is populated with the widget's full path and name.

6 Type the name of your new custom widget in the What Is Its Name field. (The name cannot contain spaces.)

7 Type the name of the custom widget's parent folder in the And Its Parent Folder field.

Note If you're creating the custom widget to substitute for a standard widget, you'll want to be sure the name and folder match the widget you want to replace. Refer to Standard and custom widget folders.

8 Click the Continue button. The widget summary is updated with the widget naming information, and the Components section displays questions about the new widget's components.

9 To enable specific widget components, select the Yes radio button for each correlating question.

Table 375: Custom Widget Components Description

Question	Description
Does this widget have a controller of its own?	Select the Yes radio button if you will include a controller file for the widget. **Note:** The new widget is not required to have its own controller. However, you can extend the parent widget's controller so the new widget can inherit and modify the behavior of its parent.
Will it be doing any of its own AJAX-handling?	Select the Yes radio button if the widget's controller will handle its own AJAX requests. **Note:** The widget will automatically inherit any AJAX-handling functionality of its parent. This option allows you to add new AJAX-handling capabilities or modify the functionality inherited from the parent.
Does this widget modify the parent widget's view?	Select the Yes radio button if the widget will modify or override blocks of content within the view of its parent.
Extend the view	**This is the recommended option.** By extending the view of a standard widget, the custom widget you create will be automatically updated when nano changes are made to the standard widget in the future. No effort will be required on your part to consume the new functionality or bug fix.
Override the view	**Important:** Selecting this option means that you will be required to manually update the custom widget to take advantage of any future changes to the parent widget. Refer to View file for a discussion about code blocks and automatic widget updates.

Table 375: Custom Widget Components Description (Continued)

Question	Description
Include the parent widget's CSS?	Select the Yes radio button if you want the widget to include the CSS style attributes defined for its parent.
Does this widget have its own JavaScript?	Select the Yes radio button if the widget will extend the JavaScript functions defined for its parent.
YUI Modules	If you have selected Yes for the preceding JavaScript question, the Add Module link is active. Click Add Module and begin typing the name of the YUI module you want to have loaded on the page containing the widget and passed to the widget's constructor. A list of modules that match the text you enter appears so you can select the one you want. To add more YUI modules, click Add Module and type the name. **Note:** By default, several YUI modules are already included on each page. Click here to view the list.
JavaScript templates too?	Select the Yes radio button if the widget will modify blocks of content within the parent's JavaScript view.

Note A custom widget must include at least one of the listed components to be a valid, functional widget.

10 Click the Continue button. The widget summary is updated with the widget component information. The Attributes section lists all attributes inherited from the parent and a form for creating new attributes.

11 To edit an inherited attribute, scroll down to the attribute and modify its type, description, default value, or whether it is required.

12 To remove an inherited attribute, click the X on the right side of the header that includes the attribute name.

13 To add an attribute, click the Add an Attribute button at the bottom of the list of inherited attributes and enter the following field information.

Note Attribute names cannot contain uppercase characters.

Table 376: Custom Widget Attributes Description

Attribute	Description
Header	Type the name of the attribute in the header field.
Type	Select the type of attribute you want to define. Available types include string, Boolean, AJAX endpoint, option, file path, and integer.
Description	Type a description for the attribute. **Note:** This text describes the attribute when you click Documentation on the custom widget page.
Options	Click Add Option and type an option value to add one or more values to an option-type attribute. **Note:** This field is available only when the attribute Type is set to Option.
Default Value	Type a default value for the attribute. **Note:** By default, a Boolean-type attribute is set to true. Select the False check box if you want the value to default to false.
This Attribute Is Required	Select this check box to make the attribute required.

14 To add another attribute, repeat step 13.

15 When you are finished adding attributes, click Continue. You now have the option of adding details to the widget or creating the widget without adding details.

16 To add details to the widget, click Add Additional Details and enter the following field information.

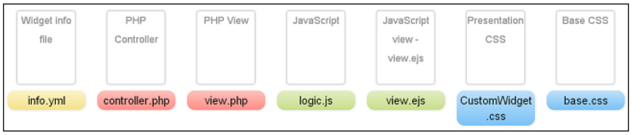
Table 377: Additional Custom Widget Details

Field	Description
Widget description	Type a description for the widget that appears in the *info.yml* file and on the widget's definition page.

Table 377: Additional Custom Widget Details (Continued)

Field	Description
URL Parameters	**Note:** If the parent widget contains URL parameters, they will be listed in this section as inherited parameters for the new widget. To remove an inherited parameter or one you added, click the X to the right of the parameter header. To add a URL parameter, click Add a URL Parameter and complete the Name, Description, and Example fields. (The Name field cannot contain spaces or forward or backward slashes.)
Compatibility	If you want the widget to work with a specific Customer Portal JavaScript framework, select Standard or Mobile or both. Or select No Framework JavaScript is Required. **Note:** This section does not appear if the widget does not have a JavaScript component.

17 Click the Create Widget button. The widget summary is updated with attribute information, and the Generated Widget section displays links to the parent directory and files created for the widget. The widget is now active and available for use in Development mode.



18 If necessary, edit the files that were generated. For example, if CSS files are created, they include the placeholders for code but contain no style definitions. Refer to Customizing widget behavior.

Important To use the new widget in the staging environment, you must not only be sure you select Copy to Staging in the first step of the staging process, but you must also push the widget version change in the second step of the staging process, Version Changes. Refer to To stage your customer portal pages.

Customizing widget behavior

When you create a custom widget using the widget builder, some or all of the following files are stored in the parent folder that you defined in the */widgets/custom* folder. Each file is used to enable certain functionality within the widget, which can vary based on whether the widget is a standalone widget or if it extends the functionality of another widget. Refer to Creating custom widgets.

Table 378: Widget Builder Output Description

File	Description
info.yml	Contains information about the widget, including its version and attribute values. If the widget extends the functionality of another widget, this file also contains the name of that widget and any components that are extended. **Note:** By default, the *info.yml* file does not include a framework dependency. As a result, the widget's information page on the Customer Portal Administration site has the notation "This widget supports all framework versions." If you want to require a framework dependency, add the following code under the `Requires:` line in *info.yml*. `framework: ["3.0" , "3.1"]` When you migrate to a new Customer Portal framework, test your custom widgets to be sure no unintended framework dependency exists.
controller.php	Initializes and processes the data required for the widget output. This file can also contain AJAX-handling functions or modify AJAX functionality inherited from the parent, if any exists.
view.php	Receives the PHP output generated by the controller and renders it as HTML. If the widget extends the functionality of another widget, this file modifies or overrides blocks of content within the view of the parent.
logic.js	Defines JavaScript functions used by the widget to produce dynamic behavior.
view.ejs	Defines JavaScript functions used by the widget to render dynamic views.
<widget_name>.css	Defines the style and appearance of the view.

Table 378: Widget Builder Output Description (Continued)

File	Description
base.css	Contains any style information that extends the CSS of the parent widget, if applicable.

Displaying custom widget previews

The Customer Portal Administration site describes the custom widgets you create as well as the standard widgets. Follow this procedure to include a screen capture of a custom widget in the widget definition.

To display a preview of a custom widget

1. Add a new subfolder called *CustomWidget/preview* to the */cp/customer/development/widget/custom* folder, where *CustomWidget* is the name of the widget you want to add a preview for.
2. Add a *.png, .jpg, .jpeg,* or *.gif* file to the subfolder you created in step 1 and name it *preview.png* (or *preview.jpg, preview.jpeg,* or *preview.gif*). When you select the widget on your *ci/admin/versions/manage* page, the associated preview file will be rendered.

Input and output widgets

Although many of the input and output widgets are described when we tell you how to edit the pages on which they appear, it might be helpful to review the common characteristics of these widgets in this overview.

When you put input widgets on a page, your customers can enter and update information that gets stored in incidents and contact records. Output widgets are used to display information about incidents, contacts, and answers in read-only form.

You can help your customers enter the information you request by defining field lengths, adding hints to input widgets, and displaying the format that should be used. This section also defines how to input and output custom fields, discusses using widget attributes, URLs, and POST parameters to define default values, and describes a page tag that can also be used for outputting field values.

The fields you can use for input and output widgets and the Field page tag are listed on the Business Objects page of the Customer Portal Administration site (Framework > Business Objects). The page lists the names for the answer, contact, and incident fields as they are defined in the Connect PHP API. For additional information, refer to Business objects.

The following table shows code samples for widgets using the fields.

Table 379: Code Samples for Widgets Using Data Fields

Widget	Data Field	Code Sample
FormInput	Incident.Subject	`<rn:widget path="input/FormInput" name="Incident.Subject" required="true" />`
DataDisplay	Answer.Products	`<rn:widget path="output/DataDisplay" name="Answer.Products" />`
Field page tag	Contact	`<rn:field name="Contact.LookupName"/>`

Note You will see an error in development mode if your code for an input widget includes a primary sub-object, that is, if you try to use an input widget on a primary object that is the child of another object. For example, the following code will display an error message in the development area:

```
<rn:widget path="input/FormInput"
name="Incident.PrimaryContact.Name.First" />
```

The exceptions to this limitation include Incident.Product, Incident.Category, and Contact.Address.Country.

Note When you create a custom object with custom menu attributes (refer to Creating menu-only custom objects), the attributes can be used with FormInput and DataDisplay widgets and the `rn:field` tags for Contact and Incident objects. Custom menu attributes can be used with the DataDisplay widgets for Answer objects. All custom menu attributes appear on the Business Objects page of the Customer Portal Administration site.

The following topics apply to input and output widgets.

- Defining field lengths
- Adding hints
- Displaying mask characters
- Requiring field validation
- Custom fields input and output
- Defining input field values
- Outputting field values with the Field page tag

- Allowing customer edits after PTA and open login
- Using system attributes

Input widgets

The following widgets are used to enter information for contacts or incidents.

- **ChannelAllInput**—Adds Twitter, YouTube, and Facebook fields where customers can enter their user names for those channels.

Note You can also define input fields for single channels. Type `<rn:widget path="input/FormInput" name="Contact.ChannelUsernames.TWITTER.Username" />` to add the Twitter channel. Change the *name* attribute to `Contact.ChannelUsernames.YOUTUBE.Username` for YouTube and `Contact.ChannelUsernames.FACEBOOK.Username` for Facebook.

- **ContactNameInput**—Adds First Name and Last Name fields.
- **CustomAllInput**—Displays all contact custom fields on customer entry forms. Also displays incident custom fields on the Ask a Question page. You must specify the data table (*Contact* or *Incident*) for the custom fields you want to display. You can also add individual custom fields by deleting this widget and adding only the ones you want using the FormInput widget.
- **DateInput**—Displays a date drop-down menu where customers can enter date information you have requested.
- **FileAttachmentUpload**—Displays a field and Browse button where customers can enter or select files to attach to an incident.
- **FormInput**—Displays a field that can be used to input system fields listed under Business objects on the Customer Portal Administration site. You must add the *name* attribute to this widget.

Note The exceptions are Incident.FileAttachments, which is input with the FileAttachmentUpload widget, and Incident.Category and Incident.Product, which are input with the ProductCategoryInput widget.

- **FormSubmit**—Generates the button on an input form that submits customer entries. On the reference implementation, labels for this button include Submit, Continue, Save Changes, and Create Account.

- **MobileProductCategoryInput**—Displays product and category menus for customer selection on the **mobile customer portal**.
- **ProductCategoryInput**—Displays product and category menus for customer selection on the standard reference implementation.
- **SelectionInput**—Functions like the FormInput widget for menu and yes/no fields.
- **SmartAssistantDialog**—Displays a list of suggested answers and includes the Finish Submitting Question button for customers to submit the question they entered on the Ask a Question page.
- **TextInput**—Functions like the FormInput widget for text, text area, and integer fields.

Output widgets

The following widgets display read-only fields on the customer portal.

- **ChannelAllDisplay**—Displays Twitter, YouTube, and Facebook user names that were entered by customers.

Note You can also define output fields for single channels. Type `<rn:widget path="output/FieldDisplay" name="Contact.ChannelUsernames.TWITTER.Username" />` to add the Twitter channel. Change the *name* attribute to `Contact.ChannelUsernames.YOUTUBE.Username` for YouTube and `Contact.ChannelUsernames.FACEBOOK.Username` for Facebook.

- **ContactNameDisplay**—Displays the customer's first and last names.
- **CustomAllDisplay**—Displays the data entered into any of the contact or incident custom fields being displayed on the page. You can also add individual custom fields by deleting this widget and adding only the ones you want using the DataDisplay widget.
- **DataDisplay**—Displays the label and value of the field defined by the *name* attribute in the widget code.
- **FieldDisplay**—Displays the label and value of the field defined by the *name* attribute in the widget code. This widget cannot display File Attachment, Hiermenu, or Thread data types.
- **FileListDisplay**—Displays file attachments for an incident or answer.
- **IncidentThreadDisplay**—Displays all correspondence associated with an incident.
- **ProductCategoryDisplay**—Displays the product or category hierarchy associated with the answer, incident, or contact.

For a list of all table and field names you can use for defining input and output widgets, refer to Business objects.

Defining field lengths

You can use the *maximum_length* and *minimum_length* attributes of the TextInput widget to restrict the number of characters entered in a text field. Because the TextInput widget is contained in the FormInput widget, you can also add these attributes to the FormInput widget even though they aren't listed as attributes of that widget.

Note Many fields have a maximum field size defined in their database definitions, which you can view by clicking the field name on the Business Object page of the Customer Portal Administration site (Framework > Business Objects). If you set the maximum_length attribute of a TextInput or FormInput field to a value larger than the database maximum field size, the attribute value will be ignored.

Setting the *minimum_length* attribute to a value greater than 0 automatically makes the field required.

Edit the widget code to add the *maximum_length* or *minimum_length* attribute to the widget, as shown in this example.

```
<rn:widget path="input/FormInput"
name="Incident.Subject"
required="true"
maximum_length="200" />
```

Adding hints

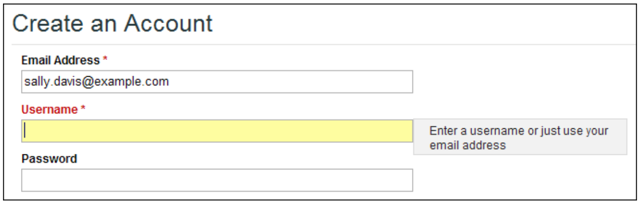
You can add a hint to help customers complete a field that is created using the CustomAllInput, DateInput, FormInput, ProductCategoryInput, SelectionInput, or TextInput widget. By default, the hint appears when the cursor is in the input field. (To display the hint regardless of cursor location, set the *always_show_hint* attribute of the FormInput widget to true. To hide the hint, set the *hide_hint* to true.) If you add the *hint* attribute to a widget that calls a **custom field**, the customer portal hint overrides any hint that was defined for the field on the **administration interface**. The *hide_hint* attribute can be used with CustomAllInput and CustomAllDisplay widgets.

Note The *always_show_hint* attribute is not supported on the mobile page set.

You can also define and display product and category selection hints by using the *hint* and *always_show_hint* attributes for the ProductCategoryInput widget.

Edit the widget code to add the *hint* attribute to the widget, as shown in this example.

```
<rn:widget path="input/FormInput"
name="Contact.Login"
required="true"
validate_on_blur="true"
label_input="#rn:msg:USERNAME_LBL#"
hint="Enter a username or just use your email address" />
```



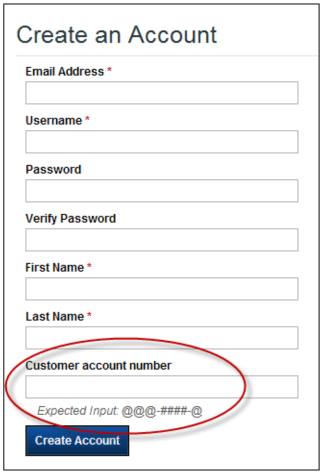
Depending on the length of your hints, you may want to consider editing your page to accommodate them. You can also edit the width of the hint box by changing the `max-width` definition in the CSS files for the DateInput, SelectionInput, and TextInput widgets. As an example, the default *base.css* file for the TextInput widget uses the following code.

```
.rn_TextInput .rn_HintBox {
    border:1px solid #DBDBDB;
    max-width:200px;
    padding:4px 16px 2px;
    word-wrap:break-word;
}
.rn_TextInput .rn_HintBox.rn_AlwaysVisibleHint {
    max-width:300px;
    opacity:1.0;
    z-index:0;
}
```

Displaying mask characters

Custom fields may have **masks** that define their format for correct data entry. For example, you might want to ensure that serial numbers have the correct sequence of letters, numbers, and formatting characters. The system phone number and postal code fields can be defined on the Countries editor of the **administration interface** to use masks as well. (Refer to Input masks.)

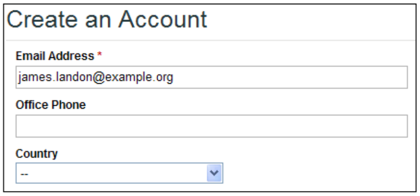
On the reference implementation, the CustomAllInput, FormInput, and TextInput fields have an *always_show_mask* attribute that displays the expected (and allowable) input format to help the customer enter the value correctly. By default, the attribute is set to true.



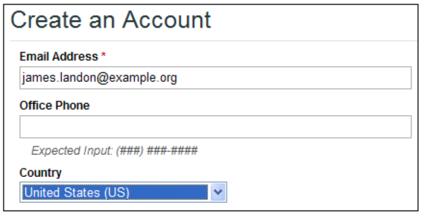
To hide the mask, set the attribute to false as shown in this code.

```
<rn:widget path="input/CustomAllInput"
table="Contact"
always_show_mask="false"/>
```

Important If you add a phone number or postal code input field to a page and set the *always_show_mask* attribute to true, you must also include the Country field on the page. Without a customer selection in the Country field, the phone number and postal codes fields have no way to be associated with the correct mask.



Office Phone field with no country selection:
mask information is not displayed



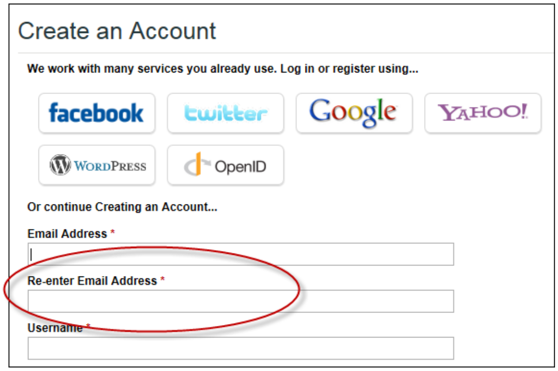
Office Phone field with country selected:
mask information appears

Requiring field validation

You may want your customers to validate a field entry by re-entering their information. For example, it's not uncommon to require customers to add their email address a second time as a way of verifying it. Rather than placing a second FormInput widget on the page for the email address confirmation, you can add the *require_validation* attribute to the first widget. (The *require_validation* attribute is an attribute of the TextInput widget, which is contained in the FormInput widget. That's why you can add the attribute to the FormInput widget even though it isn't listed as one of the FormInput widget's attributes.)

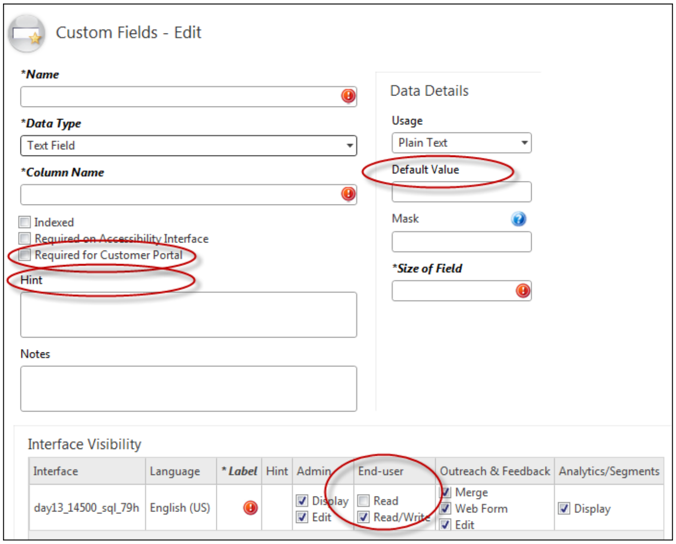
The following code is an example of its use on the Create an Account page.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
validate_on_blur="true"
initial_focus="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"
require_validation="true" />
```



Custom fields input and output

Contact, incident, and answer **custom fields** can be input and displayed on the customer portal. Custom fields are defined on the **administration interface**, and they can be defined as read-only (which means they can only be displayed as an output widget) or they can be marked Read/Write, meaning they can be used for both input and output fields. They can also be set to be required on the customer portal, and a hint can be added to the custom field to provide information to customers who are entering data in the field. When the custom field data type is integer, menu, text area, text field, yes/no, or opt-in, you can also set a default value that automatically populates the field. (Refer to Adding and editing custom fields to work with custom fields on the administration interface.)



These four elements of a custom field—hint, default value, customer portal read-only or read/write visibility, and whether it's required—that are defined on the administration interface can be modified through attributes of the input widget used to display the custom field.

- **Hints**—If you define the *hint* attribute of an input widget for a custom field, the hint attribute definition defined in the widget code will override whatever hint was defined on the administration interface.
- **Default value**—If you define the *default_value* attribute of an input widget for a custom field, that attribute value will override whatever value was defined on the administration interface.
- **Visibility**—Custom fields marked Read can be used with output widgets, but you will get a widget error message on the page if you try to use them with an input widget. Custom fields marked Read/Write can be used for both input and output widgets.

Note If you don't want any custom input fields to be visible on a page, delete the code for the CustomAllInput widget on the page.

- **Required**—If you set the *required* attribute of an input widget for a custom field to false in the widget code when the custom field is marked as required on the administration interface, you cannot override the requirement with Customer Portal code. If the custom field is not defined as required on the administration interface, you can require it on your customer portal if you set the *required* attribute of the input widget to true. In other words, the *required* widget attribute can only make a non-required field required, but it cannot make a required field not required.

Defining input field values

When a page containing any of the following input widgets opens, the input field is either blank or populated with a value, depending on how you defined it.

- DateInput
- FormInput
- MobileProductCategoryInput
- ProductCategoryInput
- SelectionInput
- TextInput

Customers can enter data in blank input fields, and they can override default values in fields that are already populated. (If you don't want customers to change the value of a field, use one of the read-only output widgets instead of an input widget.)

There are multiple ways the value of an input widget can be set.

- If the input widget is used with a custom field, the field's default value may be set on the **administration interface** when the custom field is added. See To add or edit a custom field.
- The value can be defined using the *default_value* attribute of the input widget when you add the widget code to a page. In this case, the input field always contains the defined default value when the page opens. If the field is a custom field with a default value that was defined when it was created, the widget's *default_value* attribute overrides the value set on the administration interface. Refer to Setting the default value with widget code.
- You can pass the input field's value in the URL that opens the page. You might want to use this option if you have multiple ways to open a page. Here's a simple example: Assume your organization sells printers and monitors. You have one web page just for printers and another for monitors, each with a link to the Ask a Question page on your customer portal. You want to populate the Product field to identify whether customers accessed the Ask a Question page from the printer page or the monitor page. You can define the product type in the page's URL so that the Product field is populated correctly based on which link was clicked to open the page. Refer to Setting default values with URL parameters.

If you pass a field's value through the page URL when the field's value was already defined with the input widget's *default_value* attribute, the URL value overrides the widget attribute.

You can also pass the default value of the input field through a POST parameter. Refer to Setting default values with POST parameters.

- The customer enters a value for the field. This value overrides any other predefined value.

Setting the default value with widget code

Use these procedures to set default values for input widgets when you always want the value to be the same, regardless of how the page is accessed.

To populate the Subject field

This example populates the Subject field on the Ask a Question page.

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following lines of code. These lines are not sequential.

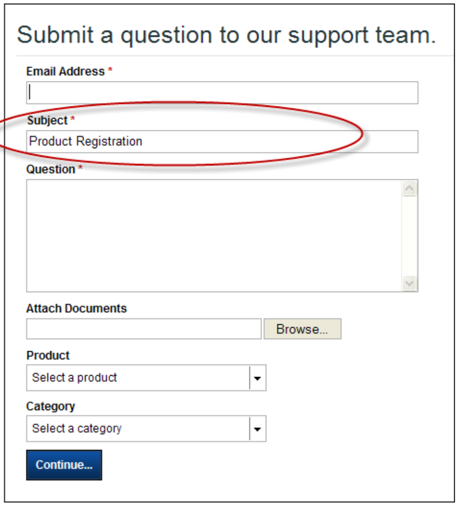
Note One FormInput field is defined for the condition when customers are not logged in, and the second is for logged-in customers.

```
<rn:widget path="input/FormInput"
name="Incident.Subject"
required="true" />
<rn:widget path="input/FormInput"
name="Incident.Subject"
required="true"
initial_focus="true"/>
```

3 Add the *default_value* attribute to the FormInput widget to define the value in the Subject field. Your code will resemble the following.

```
<rn:widget path="input/FormInput"
name="Incident.Subject"
required="true"
default_value="Product Registration" />
<rn:widget path="input/FormInput"
name="Incident.Subject"
required="true"
initial_focus="true"
default_value="Product Registration"/>
```

4 Save *ask.php*.



To populate default product and category values

This example populates the product and category fields on the Ask a Question page. If you need help finding the ID numbers for products and categories, use this procedure, omitting step 6.

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="input/ProductCategoryInput" />
```

3 Add the *default_value* attribute to the ProductCategoryInput widget to define the value for the product drop-down menu. Your code will resemble the following.

```
<rn:widget path="input/ProductCategoryInput"
default_value="21,47" />
```

4 Locate the following line of code.

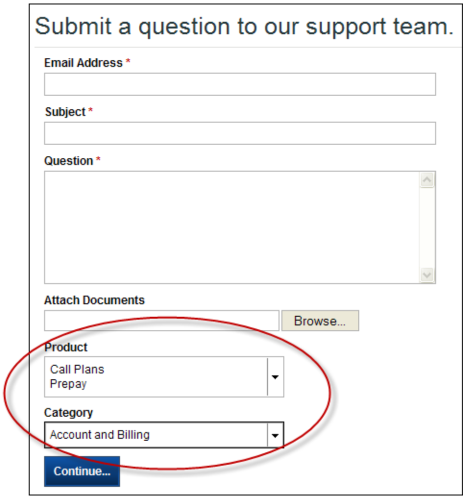
```
<rn:widget path="input/ProductCategoryInput"
data_type="Category" />
```

5 Add the *default_value* attribute to the widget to define the value for the category drop-down menu. Your code will resemble the following.

```
<rn:widget path="input/ProductCategoryInput"
```

```
data_type="Category"
default_value="98"/>
```

6 Save *ask.php*.



Setting custom field values

By default, all incident custom fields are displayed on the Ask a Question page. If custom fields have been created on the administration interface of the Oracle Service Cloud application and set with end-user visibility (refer to Adding and editing custom fields), they will appear automatically on the page. If you want to set values for custom fields through the code for *ask.php*, you may want to delete the following line of code and then add individual lines for each custom widget as described in these procedures. (Because only incident custom fields are displayed, you will need to add a widget for any contact custom field you want to add to the Ask a Question page.)

```
<rn:widget path="input/CustomAllInput"
table="Incident" />
```

To set a date/time value

You can set a value for a custom date or date/time field. (The standard date/time fields are read-only, so you cannot set values for those.) The following example assumes you've added a custom Answer Needed By field to the Ask a Question page using this procedure. If you want to set a default value for the field, add code that resembles the following to the Ask a Question page.

```
<rn:widget path="input/DateInput"
name="Incident.CustomFields.c.answer_needed"
default_value="1355853091"/>
```

Note The value can be generated using a UNIX date/time stamp converter.

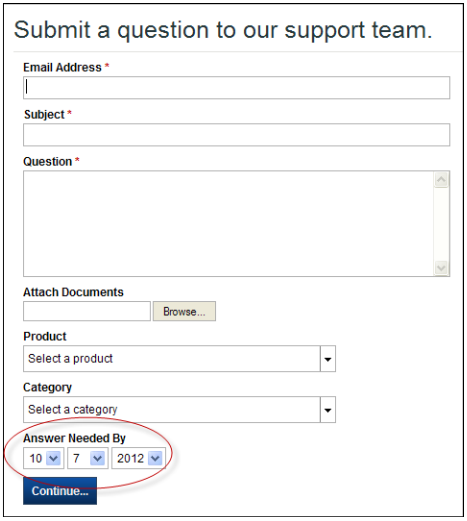
You can also enter absolute and relative dates, which will be converted to a UNIX time stamp format using the PHP strtotime( ) function. Absolute dates must be entered using the English date format of dd/mm/yyyy, **not** the United States date format of mm/dd/yyyy. If, for example, you specify a default value of 3-7-2014, the date is July 3, 2014.

Any of the following values for the *default_value* attribute of a DateInput widget are valid, and more examples can be found in the PHP strtotime( ) documentation.

- Now
- 18-12-2014
- December 18, 2014
- Tomorrow
- Today + 2 months
- First day of next month
- Next Wed + 4 days

If you want the value of a custom field to be populated automatically relative to the current date/time, use code that resembles the following when adding the custom field to the page.

```
<rn:widget path="input/DateInput"
name="Incident.CustomFields.c.answer_needed"
default_value="tomorrow" />
```



To set a Yes/No field

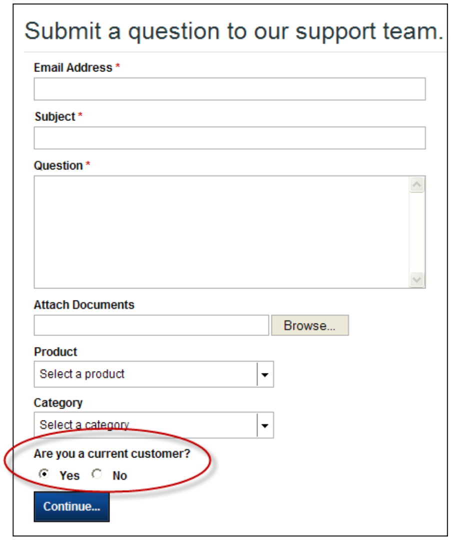
The SelectionInput widget is used to display Yes/No radio buttons for a custom field. The following example assumes you've added a custom field to the Ask a Question page that asks if the person submitting the question is a current customer. It also assumes you want to set the default value of the widget to Yes. (To set it to No, set the *default_value* attribute to 0 or false.) Add code that resembles the following to the Ask a Question page.

```
<rn:widget path="input/SelectionInput"
name="Contact.CustomFields.c.current_cust"
default_value="1"/>
```

Alternately, you could set the value to true.

```
<rn:widget path="input/SelectionInput"
name="Contact.CustomFields.c.current_cust"
default_value="true"/>
```

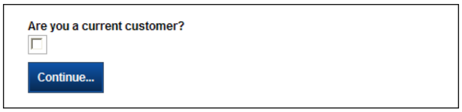
Note If *default_value* is set to anything other than 1, 0, true, or false, neither selection appears.



To change radio buttons to a check box

If you'd prefer to display yes/no fields as a single check box instead of as radio buttons, simply add the *display_as_checkbox* attribute to the SelectionInput widget. When this attribute is set to true, the customer's response is saved as Yes if the check box is selected and No if the check box is not selected. Your code will resemble the following.

```
<rn:widget path="input/SelectionInput"
name="Contact.CustomFields.c.current_cust"
display_as_checkbox="true" />
```



To set a menu option

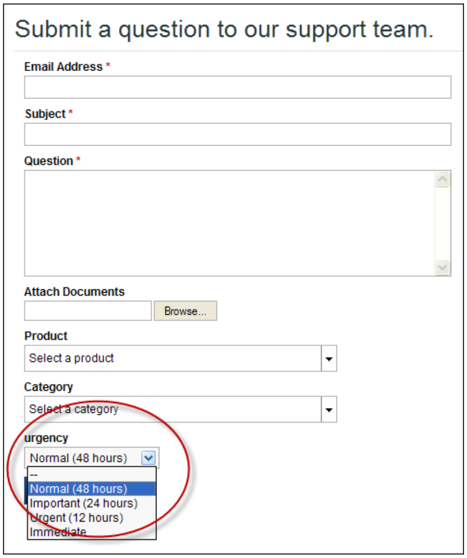
You might want to populate a menu option on a drop-down menu. In that case, you'll use the FormInput widget and set the default value by using the ID of the option. This example includes a menu custom field to define the urgency of the incident, and it sets the urgency to Normal. (Refer to [Adding and editing custom fields]() if you need help defining a menu custom field.)

To find the ID of a custom field option, open the Ask a Question page in source code view, search for the menu custom field, note the <option> tags, and find the value you want to set.

```
</div>
        <div id="rn_SelectionInput_19" class="rn_SelectionInput rn_Input">
    <label for="rn_SelectionInput_19_Incident.CustomFields.c.urgency" id="rn_SelectionInput_19_Label"
    class="rn_Label">urgency </label>
    <select id="rn_SelectionInput_19_Incident.CustomFields.c.urgency" name="Incident.CustomFields.c.urgency">
                 <option value="">--</option>
                    <option value="1" >Normal (48 hours)</option>
                    <option value="2" >Important (24 hours)</option>
                    <option value="3" >Urgent (12 hours)</option>
                    <option value="4" >Immediate</option>
    </select>
</div>
```

Add code that resembles the following to the Ask a Question page. (Use this line to replace the default `<rn:widget path="input/CustomAllInput" table="Incident"/>` line.)

```
<rn:widget path="input/FormInput"
name="Incident.CustomFields.c.urgency"
default_value="1"/>
```



Setting default values with URL parameters

Besides being able to set a default value with the code for an input widget, you can also define a default value for an input field in the URL that opens the page containing the field. If you define a field's value in the URL that calls the page and if that default value is also defined in the code for the input widget, the value in the URL overrides the value specified in the widget code.

Important You cannot use URL parameters to define password field values.

You can use this method of populating an input widget when you call a page from within the customer portal. The following example populates the Subject field on the Ask a Question page, defining the field with one value when the page is opened by clicking the navigation tab and a different value when the page is opened through the sidebar link.

To populate the Subject field using a URL

1 Open the *standard.php* file in the */views/templates* folder.

2 Edit the navigation tab for the Ask a Question page.

  a Locate the following line of code.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:ASK_QUESTION_HDG#"
link="/app/ask"
pages="ask, ask_confirm"/></li>
```

  b Edit the *link* attribute to use the URL to populate the Subject field. Your code will resemble the following.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:ASK_QUESTION_HDG#"
link="/app/ask/Incident.Subject/From the Navigation Tab"
pages="ask, ask_confirm"/></li>
```

3 Edit the sidebar link to the Ask a Question page.

  a Locate the following line of code.

```
<a href="/app/ask#rn:session#">#rn:msg:ASK_QUESTION_LBL#</a>
```

  b Edit the *link* attribute to use the URL to populate the Subject field. Your code will resemble the following.

```
<a href="/app/ask/Incident.Subject/From the Sidebar
Link"#rn:session#">#rn:msg:ASK_QUESTION_LBL#</a>
```

4 Save *standard.php*.

Although this example shows you how to populate a field with a URL within your customer portal, you're more likely to populate an input field value to access the Ask a Question page from an external page. Click here for examples of links to the Ask a Question page that use the URL to populate different fields on the Ask a Question page.

Populating fields with URLs from external pages

Although these examples populate fields on the Ask a Question page when you link to the page from outside the customer portal, you can use them for writing code to link to other pages of the customer portal as well.

To populate the Subject field through a URL

```
<a href="http://<your_site>/app/ask/Incident.Subject/From External
Page/">Name of Link</a>
```

To populate default product and category values through a URL

```
<a href="http://<your_site>/app/ask/Incident.Product/1,2,19/
Incident.Category/33/">Name of Link</a>
```

To populate a date field through a URL

This example assumes you've added a custom date field to the Ask a Question page using this procedure. If you want to set a default value when the Ask a Question page opens, use a link that resembles the following.

```
<a href="http://<your_site>/app/ask/
```

```
Incident.CustomFields.c.answer_needed/1355853091">Name of Link</a>
```

Note The value can be generated using a UNIX date/time stamp generator.

You can also enter absolute and relative dates, which will be converted to a UNIX time stamp format using the PHP strtotime( ) function. Absolute dates must be entered using the English date format of dd/mm/yyyy, **not** the United States date format of mm/dd/yyyy. If, for example, you specify a default value of 3-7-2014, the date is July 3, 2014.

Any of the following default values are valid, and more examples can be found in the PHP strtotime( ) documentation.

- Now
- 18-12-2014
- December 18, 2014
- Tomorrow
- Today + 5 days
- Today + 2 months
- First day of next month
- Next Wed + 4 days

To populate a custom Yes/No field through a URL

```
<a href="http://<your_site>/app/ask/
Contact.CustomFields.c.current_cust/1/">Name of Link</a>
```

To populate a menu option through a URL

To find the ID of a custom field option, open the Ask a Question page in source code view, search for the menu custom field, note the <option> tags, and find the value you want to set. Add code that resembles the following to the Ask a Question page.

```
<a href="http://<your_site>/app/ask/Contact.CustomFields.c.urgency/1/
">Name of Link</a>
```

Setting default values with POST parameters

Similar to using URL parameters to populate contact and incident input fields, you can also use POST parameters from forms you create to populate those fields. As with URL parameters, the POST parameter must use the *Table.Field* format, for example, *Incident.Subject*.

Outputting field values with the Field page tag

When you don't need a label or any special formatting, you might find it easier to use the Field page tag to output the value of the field. All you need to do is specify the table and field names just as you do when defining an output widget. For example, the following code is used in the *standard.php* template file to display the customer's name in the template header.

```
<rn:field name="Contact.LookupName"/>
```

The Field tag has two attributes: *name* to identify the database table and field for the tag's output value and *highlight* to identify content that matches the keyword parameter in the URL. For a list of all table and field names you can use for defining fields, refer to Business objects.

Allowing customer edits after PTA and open login

When customers log in to your customer portal using pass-through authentication (PTA) or open login, the input fields on the Account Settings page are set to read-only by default. However, an attribute called *allow_external_login_updates* is available on the SelectionInput, DateInput, and TextInput widgets that are incorporated in the FormInput widget. This attribute lets you change these fields so customers can edit them. The default value for the attribute is false, which prevents customers from updating any of the Account Settings fields when they log in with PTA or open login. If you add this attribute to the input widget and set its value to true, the field can be edited by customers.

Note As long as PTA is enabled, customers will not be able to change their user name, regardless of the value of the *allow_external_login_updates* attribute.

The following procedure assumes you want to let customers update their email address on the Account Settings page after logging in with PTA or open login.

To allow customer edits to input fields after PTA or open login

1 Open the *profile.php* file in the */views/pages/account* folder.

2 Locate the following line of code.

```
<rn:widget path="input/FormInput"
```

```
name="Contact.Emails.PRIMARY.Address"
required="true"
validate_on_blur="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#" />
```

3 Edit the code to add the *allow_external_login_updates* attribute. Your code will resemble the following.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
validate_on_blur="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"
allow_external_login_updates="true" />
```

4 Save *profile.php*.

If you have a block of input fields that you want to let customers edit, you can enclose them in condition tags rather than editing each widget's code separately. Click here for the procedure.

Using system attributes

System attributes can be added to standard data objects, such as answers, contacts, and incidents, and can be displayed on your customer portal using the FormInput and DataDisplay widgets as well as the Field page tag. Refer to Creating system attributes to learn how the attributes are created on the Service Console.

To find the field name of a system attribute, use the Business objects page on the Customer Portal Administration site. The format used is [table].CustomFields.CO.[field], for example, Contact.CustomFields.CO.product_registration.

Important System attributes that include a dynamic value, such as the current date or time, cannot be used on customer portal pages.

To use a system attribute with the FormInput widget

Note This example adds a contact system attribute to the Ask a Question page. The system attribute is a yes/no field that asks customers if they have used a previous version of the product. The *usedpreviousproducts* attribute was defined on the Service Console. Refer to Creating system attributes.

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code.

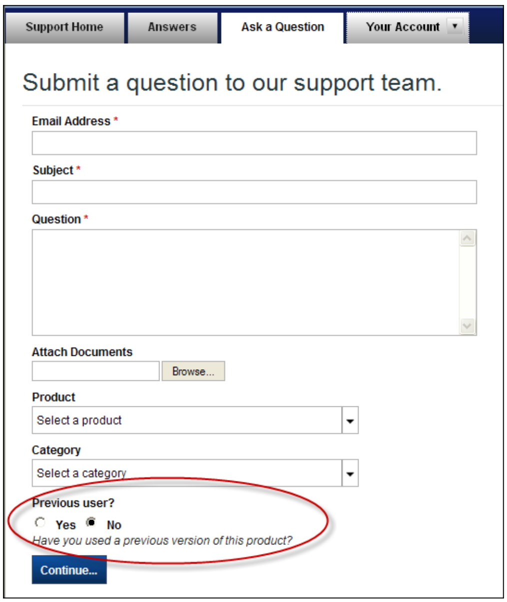
```
<rn:widget path="input/CustomAllInput"
table="Incident"/>
```

3 Add the following code just below the line you located in step 2.

```
<rn:widget path="input/FormInput"
name="Contact.CustomFields.CO.usedpreviousproducts"
always_show_hint="true"
hint="Have you used a previous version of this product?" />
```

Note It's always good practice to include a hint when you ask customers to enter data into an object with a system attribute. Likewise, you will want to set the *always_-show_hint* attribute to `"true."` This is especially true if your system attribute requires a regular expression with a specified format, such as a product registration number or a catalog number. Refer to To use system attributes with regular expressions.

4 Save *ask.php*.



To use a system attribute with the DataDisplay widget

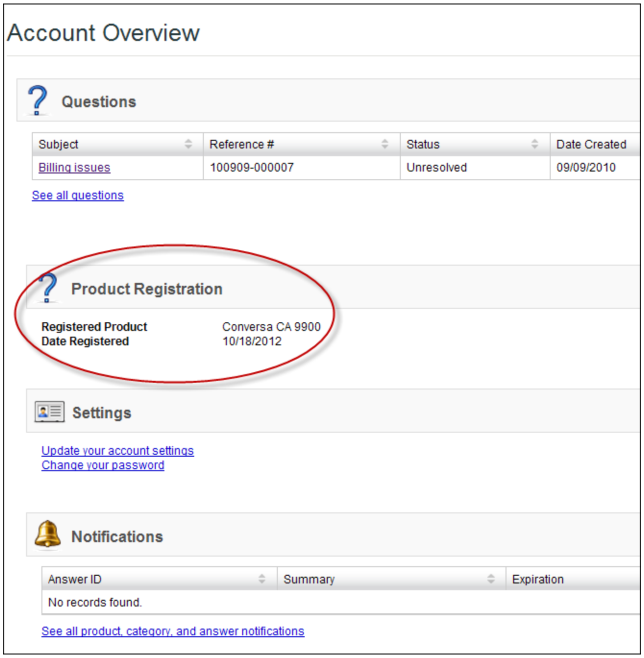
Note This example adds a Product Registration section to the Account Overview page. The *product_registration* system attribute is a text field, and the *date_registered* attribute is a date field. Both were defined on the Service Console. Refer to Creating system attributes.

1 Open the *overview.php* file in the */views/pages/account* folder.

2 Add the following code where you want it to appear on the page. This example places after the closing div for the Questions section.

```
<div class="rn_Overview">
    <h2><a class="rn_Questions" href="/app/account/questions/
    list#rn:session#">Product Registration</a></h2>
    <div class="rn_Questions">
        <rn:widget path="output/DataDisplay"
        name="Contact.CustomFields.CO.product_registration"
        label="Registered Product"/>
        <rn:widget path="output/DataDisplay"
        name="Contact.CustomFields.c.date_registered"
        label="Date Registered"/>
    </div>
```

3 Save *overview/php*.



To use system attributes with regular expressions

Note For the sake of this example, we'll assume that you've added an *RMA* system attribute to incidents so that you can match the incident with your organization's Return Merchandise Authorization process. We'll also assume that you've defined the format of the *RMA* system attribute to use the pattern AA-#####, for example, CX-49935. (Refer to Creating system attributes for help with this step.)

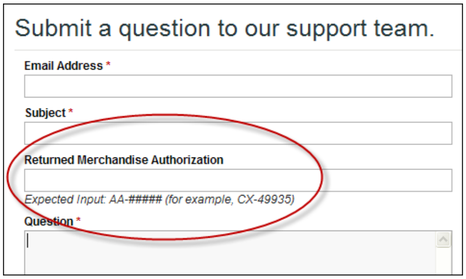
1 Open the page where you want to add the incident's system attribute.

2 Add the FormInput widget to the code so it appears where you want it to on the page. Your code will resemble the following.

```
<rn:widget path="input/FormInput"
name="Incident.CustomFields.CO.RMA"
always_show_hint="true"
hint="Expected Input: AA-##### (for example, CX-49935)"
```

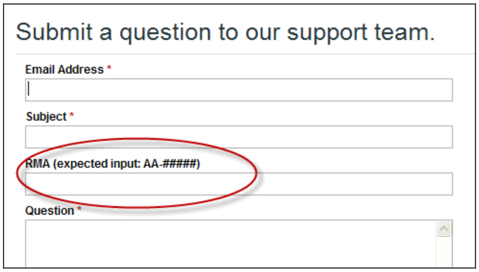
```
validate_on_blur="true"
label_input="Returned Merchandise Authorization" />
```

Note If the regular expression (the AA-##### pattern) is not met, the *validate_on_blur* attribute indicates an error as soon as customers move to a different field. Without this attribute, the error is not pointed out until customers click the Continue button.



Alternately, you could add the hint directly to the field name. In that case, your code would resemble:

```
<rn:widget path="input/FormInput"
name="Incident.CustomFields.CO.RMA"
label_name= validate_on_blur="true"
label_input="RMA (expected input: AA-#####)" />
```



3 Save the page.

Web form security

When customers submit information to websites, it is common to verify that the information originates from a human rather than a bot (an automated software program) being run for malicious purposes. The Customer Portal includes web form security on the FormSubmit widget that automatically requires human validation when abuse is suspected, for example, when a spammer automatically submits repeated incidents in a short amount of time.

Validation is accomplished through the use of a CAPTCHA, a dialog containing distorted words that the customer is asked to type. When the words are typed correctly, a human is assumed to be on the client side. Once customers have correctly entered a CAPTCHA, they will not be asked for verification again as long as the visit has not ended or does not exceed an hour.

You may also want to require CAPTCHAs to prevent user name enumeration, that is, the automatic harvesting of user names from your database. Refer to Preventing user name enumeration for that procedure.

Click to view

By default, a CAPTCHA opens on the customer portal only when the system detects abuse, but you can configure a form to always require human validation. You can also configure a form to open a CAPTCHA wherever you want on the form instead of in a dialog, where it opens by default.

Important CAPTCHAs are not used with pass-through authentication.

Nor are they used on the basic page set. CAPTCHAs require JavaScript to display and the basic page set does not support JavaScript. Therefore, if an abuse situation is detected on your basic page set, customers will see a generic error message rather than a CAPTCHA.

To require a CAPTCHA validation on every submit

1. Open the page containing the form where you want a CAPTCHA to always appear and locate the code for the FormSubmit widget.

2. Edit the FormSubmit widget code to add the *challenge_required* attribute. Your edited code will resemble the following, where the attribute is used on the Create an Account page.

```
<rn:widget path="input/FormSubmit"
label_button="#rn:msg:CREATE_ACCT_CMD#"
on_success_url="/app/account/overview"
error_location="rn_ErrorLocation"
challenge_required="true" />
```

3. Save the page.

Note If you want to test a CAPTCHA on a page, you can temporarily set the *challenge_required* attribute to true, as shown in this example. When your testing is complete, you can remove the attribute from the widget code so that a CAPTCHA appears only when abuse is detected.

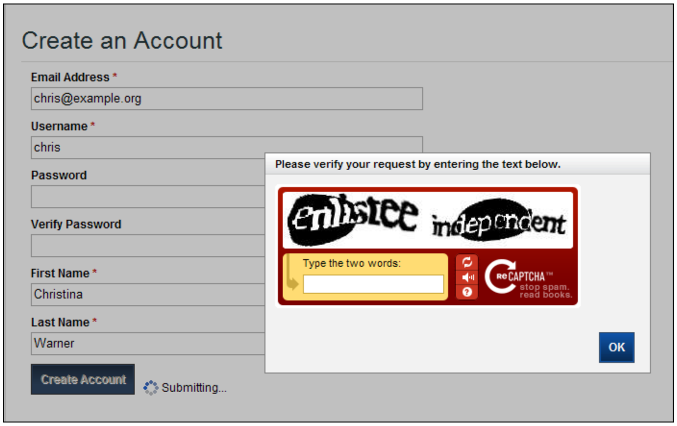
To open the CAPTCHA within a form instead of a dialog

1. Open the page containing the form where you want the CAPTCHA to appear and locate the code for the FormSubmit widget.

2. Edit the widget code to add the *challenge_location* attribute. Set the attribute equal to the div ID in which you want the CAPTCHA to appear.

3. Save the page.

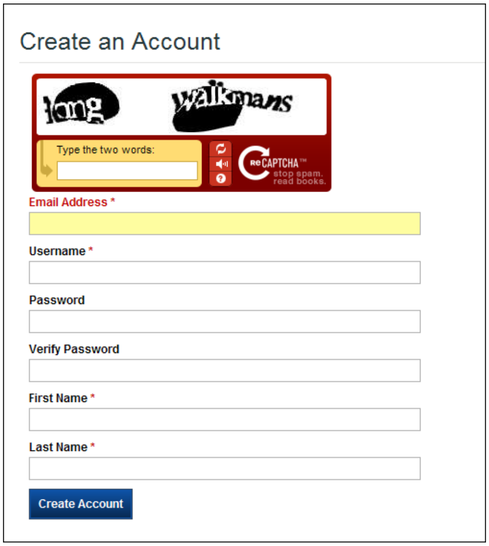
For example, assume you want to place the CAPTCHA on the Create an Account page below the Create an Account heading. By default, the CAPTCHA appears in a dialog, as shown in the following figure.



To place the CAPTCHA below the Create an Account heading, edit the widget code as follows. (If the location you specify is invalid, the CAPTCHA appears above the submit button on the form.)

```
<rn:widget path="input/FormSubmit"
label_button="#rn:msg:CREATE_ACCT_CMD#"
on_success_url="/app/account/overview"
error_location="rn_ErrorLocation"
challenge_required="true"
challenge_location="rn_ErrorLocation" />
```

The CAPTCHA appears in the form, as shown in the following figure.



Simulating abuse situations

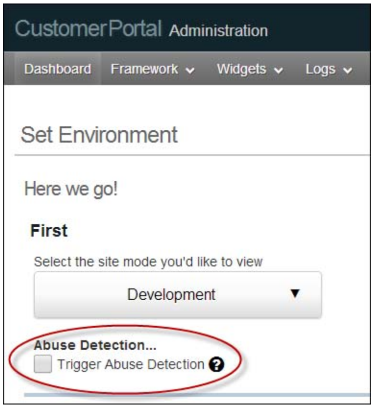
An abuse scenario is hard to create deliberately for testing purposes, so the Customer Portal includes a cookie that makes your site behave as if it is under abuse when the cookie is set. It works only in development mode for testing purposes, so it does not affect customers on your production site.

To set the abuse detection cookie from the Customer Portal Administration site

1 Go to your Customer Portal Administration site at https://<your_site>/ci/admin.

2 Click the Set Environment shortcut.

3 Select the Trigger Abuse Detection check box.

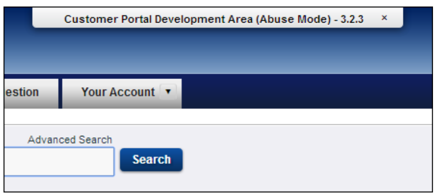


To set the abuse detection cookie from the development header

1 On your development site, click the header to display the main headings.

2 Click Links and Resources to expand the list of options.

3 Click Toggle Abuse Detection. The header indicates that your development site is now in abuse mode.



4 To turn off abuse detection, click the development header, expand Links and Resources, and click Toggle Abuse Detection again.

ClickjackPrevention widget

Clickjacking is an attack on browser security that can mislead your customers into clicking a concealed link. To prevent clickjacking, you must not allow your site to be put into an iFrame or frameset on another site. The new ClickjackPrevention widget, included by default on the standard, mobile, and basic templates, ensures that your customer portal cannot be viewed inside a frame.

The ClickjackPrevention widget does not have a view, so it does not appear on the pages your customers see. Whenever it appears in template or page code, that page cannot be loaded in an iFrame or frameset. If your site must run in frames (see Using iFrames), remove the ClickjackPrevention widget from the templates.

To remove the ClickjackPrevention widget from the template

1 Open the *standard.php* file in the *customer/development/view/template* folder.

2 Delete the following line of code.

```
<rn:widget path="utils/ClickjackPrevention"/>
```

3 Save *standard.php*.

4 Repeat steps 1 through 3 for the mobile (*view/template/mobile.php*) and basic (*view/template/basic.php*) templates.

Syndicated widgets

A syndicated widget lets you access the Oracle knowledge base using a customer portal widget that you add to a web page that is not part of your customer portal. Syndicated widgets include the following.

- ConditionalChatLink
- KnowledgeSyndication
- PollingSyndication
- ProactiveChat
- ProactiveSurveyLink

The syndicated widgets are generated with JavaScript code that can be placed within another web page. You can configure the widgets by modifying the JavaScript or by using the widget definition page to define the configuration options and settings.

The widgets can be completely styled with their CSS files, which are found in the */cp/customer/assets/css/syndicated_widgets/standard* folder. You can select one of the syndicated widgets to review and modify its settings at https://<your_site>/ci/tags/syndicated_widgets.

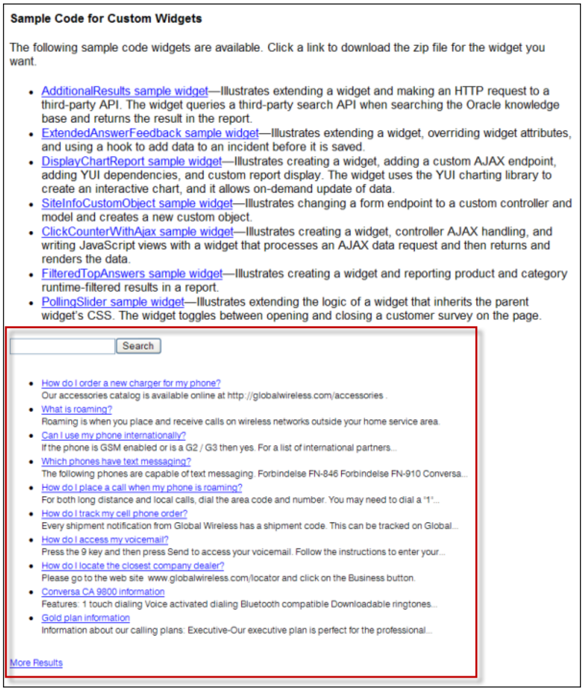
KnowledgeSyndication widget

The KnowledgeSyndication widget functions like the search fields and reports on the Support Home and Answers pages of your customer portal, but you can place this widget on any page of your website rather than restricting it to customer portal pages. This lets your customers search the Oracle **knowledge base** from your organization's home page, for example, instead of requiring them to go to your support site.

By default, the KnowledgeSyndication widget displays a search field, a list of answers from the knowledge base, and a link to additional results on the customer portal pages. This widget can be configured to display spelling corrections and suggestions, recommended documents, and other suggested searches. It can open an answer in a page overlay or on a new page. You can also edit labels and configure the number of displayed answers, whether to display a description of each answer and, if so, the length of the description.

- Adding the KnowledgeSyndication widget
- Configuring the KnowledgeSyndication widget

Note If you have enabled **web indexing**, the KnowledgeSyndication widget will also search external documents. Refer to Configuring the Web Indexer.



Adding the KnowledgeSyndication widget

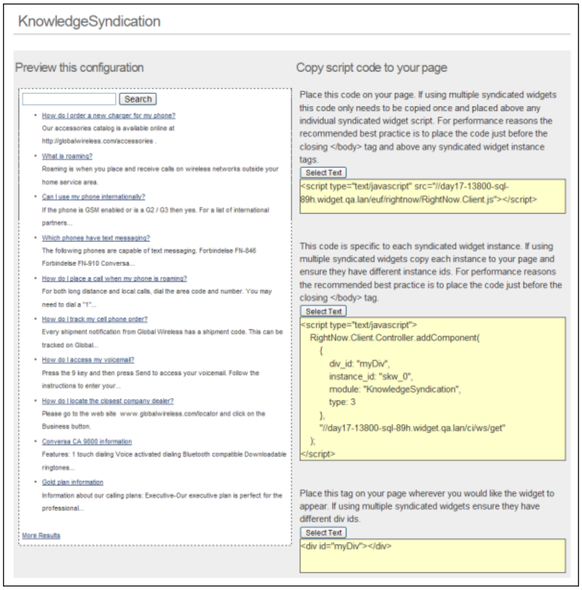
The widget information page gives you everything you need to add the KnowledgeSyndication widget to any page on your website. As you modify the attributes of the widget, the page displays a preview of the widget and modifies the widget code to reflect the changes you make. When you're done, all you have to do is select and copy the code to your page to place the syndicated widget on it.

To add the KnowledgeSyndication widget to a web page

1 Type `https://<your_site>/ci/tags/syndicated_widgets/standard/KnowledgeSyndication` to open the page for the KnowledgeSyndication widget. The page displays a preview of the widget and the code you will add to your page.

Note Your profile must have the CP Edit permission enabled, and you must log in to the Customer Portal Administration site if you are not already logged in.

Click to view



2 Scroll down to the Configure Widget section and begin modifying the widget attributes as you choose. The attribute is on the left, the value is in the center, and a description of the attribute is on the right. For specific information about the attributes, refer to [Configuring the KnowledgeSyndication widget](#).

Click to view

Configure Widget

The CSS file for this widget may be edited. It is located at:
cp/customer/assets/css/syndicated_widgets/standard/standard/KnowledgeSyndication.css

c		Category hierarchy in a comma separated chain. Multiple categories may be specified with a semicolon. Example: 1,2;33,44,55;6
context		Comma-separated context HTML elements for preprocessor. The content of the elements will be used for content-sensing. Document, title, meta, and any div ID may be used. Example: title,meta,productDiv
correction	☑ Enabled	A flag to enable or disable spelling corrections
description	☑ Enabled	A flag to enable or disable answer description/blurb
display_answers_in_overlay	☐ Enabled	If the value is true then answer content will be shown in an overlay. Otherwise, for false, it will be shown in a new window
div_id	myDiv	The div element on your page where you want the code to appear
ext_docs	☐ Enabled	Perform searches against the external document index (must be enabled)
hide_initial_answers	☐ Enabled	If set to true, only the search box is initially displayed. Answers will appear following a search.
instance_id	skw_0	Widget instance_id must be unique for each widget on a page
label_correction	Did You Mean:	Displays spelling suggestions. EU_SEARCH_TERM_FEEDBACK_ENABLE must be set to yes
label_created	Created: %s	Label to display next to answer created time when using the 'display_answers_in_overlay' attribute.
label_documents	Recommended Documents	Label for recommended documents
label_more_results	More Results	Label for more results. Link will go to page specified in the CP_HOME_URL config setting
label_no_results	No Results Found	Displays when no results are found
label_related_searches	Other Suggested Searches:	Displays the message when suggested searches are found. EU_SUGGESTED_SEARCHES_ENABLE must be set to yes
label_search_button	Search	Label for search button
label_updated	Updated: %s	Label to display next to answer updated time when using the 'display_answers_in_overlay' attribute.
navigation	☑ Enabled	A flag to enable or disable more results link
number_answers	10	Number of answers to display
p		Product hierarchy in a comma separated chain. Multiple products may be specified with a semicolon. Example: 1,2;33,44,55;6
payload_size	150	Maximum content size for Content-Sensing functionality
persist_prodcat	☐ Enabled	Persist the product and category through to subsequent searches
preprocess	pagescraper	Handler for page preprocessing
q		Keyword for search query
recommended	☑ Enabled	A flag to enable or disable recommended documents
related	☑ Enabled	A flag to enable or disable suggested searches
search_box	☑ Enabled	A flag to enable or disable the keyword search box
target	_self	Defines the target where the linked document will be opened. It should be a valid target value of the HTML anchor tag.
truncate_size	100	Number of characters to truncate to if the column is answers.solution or answers.description

Apply

3 To preview your changes, click Apply at the bottom left of the Configure Widget section. Continue to configure the widget until you are satisfied with the result.

Note You can also modify the widget's appearance by editing its CSS file, which you can find at */cp/customer/assets/css/syndicated_widgets/standard/KnowledgeSyndication.css*. If you modify the CSS file, you must reload the page to see your changes.

4 Open the source code for the web page you want to add the widget to.

5 To ensure the page renders correctly in Internet Explorer 7, add the following code to the top of the page before your first HTML tag.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http:/
/www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

6 On the right side of the widget page, click the top Select Text button to select the code in the first yellow box and press **Ctrl+c** to copy the code.

7 Paste the code into your page file just before the closing </body> tag. Even if you plan to use multiple syndicated widgets on the page, you need to paste this code only once.

8 Click the second Select Text button and copy the code that defines the widget.

9 Paste the copied code just below the code you copied in step 7.

10 Add the following line to the page code wherever you want the widget to appear.

```
<div_id="myDiv"></div>
```

Note You can also copy this line from the widget page by pressing the third Select Text button, copying the code, and pasting it where you want the widget to appear.

11 Save your web page.

Configuring the KnowledgeSyndication widget

You can configure the following attributes of the KnowledgeSyndication widget.

- External document searching
- Answer displayed as a page overlay

- Product and category IDs
- Retention of product and category search filters
- Ability to determine search results based on page information
  - ▷ Maximum content size for content sensing
- Hiding answers until search is performed
- Keyword for search query
- Flag settings to enable or disable the following:
  - ▷ Spelling corrections
  - ▷ Answer description
  - ▷ The More Results link
  - ▷ Recommended documents link
  - ▷ Related searches
  - ▷ Keyword search box
- Labels
  - ▷ Spelling suggestions
  - ▷ Recommended documents
  - ▷ More results
  - ▷ No results found
  - ▷ Related searches
  - ▷ Search button
  - ▷ Time created and time updated
- The target window where linked documents and additional search results will open
- Truncate answer description length
- Number of displayed answers
- Div element
- Instance ID

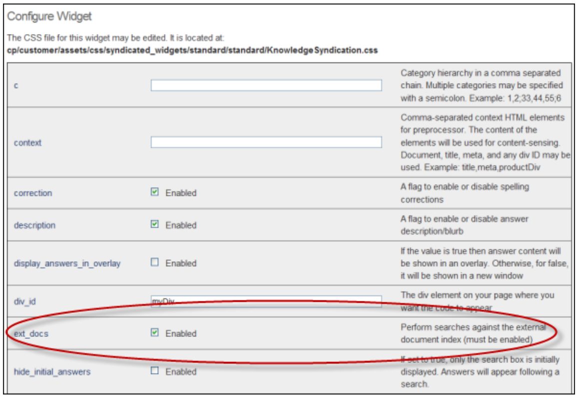
Enabling external document searching

In order to return external documents from a search, web indexing must first be enabled. Refer to Configuring the Web Indexer.

To enable external document searching

With the page for the KnowledgeSyndication widget open, scroll to the Configure Widget section of the page, find the attribute called *ext_docs*, and select the check box.

Continue configuring attributes for the KnowledgeSyndication widget.



Opening answers with a page overlay

By default, any answers your customers click on the KnowledgeSyndication widget open on a new page. However, you may not want your customers leaving the page they are on to view an answer if, for example, they are in the middle of a transaction. You may decide it's better to keep customers on the page and simply display the answer in an overlay.

To open answers in an overlay instead of a separate window

Locate the attribute called *display_answers_in_overlay* and select the check box.

Note If an answer has file attachments, they appear on the overlay, but answers that use guided assistance will not display the guide on the overlay.

Continue configuring attributes for the KnowledgeSyndication widget.

Defining product and category IDs

You can specify one or more **products** and **categories** to be associated with the report, and these can be products and categories at any level of the hierarchy. To determine the IDs of products and categories, refer to Finding product ID numbers.

To define products for a KnowledgeSyndication widget report

Note This procedure describes how to specify the products used for a search with the KnowledgeSyndication widget. The procedure to specify categories is identical, but the attribute name is **c** for categories instead of **p** for products.

1 With the page for the KnowledgeSyndication widget open, scroll to the Configure Widget section of the page, and find the attribute called **p**.

2 To specify a single product for the search report to search on, type the product ID in the field. Click here to learn how to find the product ID number.

Note If you specify a sub-product, the product ID will be a comma-separated series of the ID numbers in the product hierarchy, with the highest level product first and the specified sub-product last. Any intermediate levels should be listed in descending order.

3 To specify additional products for the search report, type a semicolon between product IDs.

For example, assume the product attribute field contains “1,2;33,44,55;6.” There are three products being specified in this example. The first product is “1,2” and it defines the sub-product with ID 2 under the top-level product with ID 1. The second product is “33,44,55.” This defines a third-level product with ID 55 under a second-level product with ID 44, which is a sub-product of the top-level product with ID 33. The third product in this example is a top-level product with ID 6.

Continue configuring attributes for the KnowledgeSyndication widget.

Finding product ID numbers

The ID numbers for products and categories are defined on the administration interface, so you’ll need to log in to find these values.

Note The procedure is the same for categories.

To find a product ID number

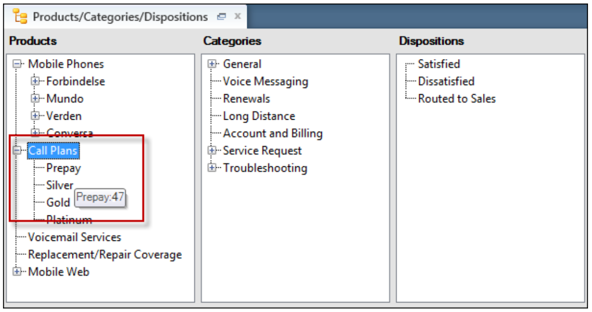
1 Log in to Oracle Service Cloud.

2 Click the Configuration button on the navigation pane.

3 Double-click Products/Categories/Dispositions under Service.

4 Expand the products tree if necessary to display the product you want to select.

5 Hover over the product name to display its ID, as shown here, where the ID number for the Prepay call plan is 47.



  a If the product is a sub-product, hover over the parent product to also get its ID. In the example, the ID for the parent product Call Plans is 421.

6 Type the full path of the product hierarchy into the p attribute field of the KnowledgeSyndication widget. The highest level product ID is listed first and the sub-product you selected is last in the comma-separated series. In this example, you would type 421,47. If the product was a fourth-level product, the ID would resemble 313,420,425,293.

Return to the procedure for defining product and category IDs or Continue configuring attributes for the KnowledgeSyndication widget.

Retaining product and category search filters

If you have defined default products or categories (or both), these products or categories are cleared when customers enter a keyword search term. If you want to restrict customer searches to the default products and categories, you can enable the *persist_prodcat* attribute.

To retain product and category search filters when customers enter search terms

Select the check box for *persist_prodcat*.

Continue configuring attributes for the KnowledgeSyndication widget.

Determining search results based on page information

The KnowledgeSyndication widget can “read” the content of the page and use context-sensitive information to determine what answers should be returned. It does this when you specify the HTML tags on the page that you want the widget to evaluate for context sensitivity. If you leave the field for this attribute blank, the KnowledgeSyndication widget will not use page content to determine what answers should be returned. You can also define the amount of content you want the widget to evaluate.

When you specify the page tags, the content within those tags is passed to the server for evaluating answers that are relevant to the page content. You might, for example, want to place the KnowledgeSyndication widget on your product pages so the specific product information from each page is used to return product-specific answers to your customers.

If you enter information in the *context* attribute's field, the keyword for the search query defined in the *q* attribute is overridden. If the HTML tags you define are not found on the page, the widget defaults to the empty string, and top answers will be returned.

You can list any div ID, as well as *title, document*, and *meta* tags in the field for the *context* attribute. If you list a *meta* tag, only meta elements that are named *description* and *keywords* will be evaluated. If you use a *document* tag, the entire contents of the page will be evaluated.

To define HTML tags for sensing content

Type comma-separated HTML tags in the *context* field. The content within those tags will be used to determine search results.

Continue configuring attributes for the KnowledgeSyndication widget.

Defining content size for evaluation

The *payload_size* attribute defines the number of characters for each tag identified in the *context* attribute that will be sent to the server for evaluation to determine page content and influence context sensitivity of the returned answers. The default value is 150 characters (approximately 25 English words), and the maximum value is 300 characters.

To define the number of characters for content evaluation

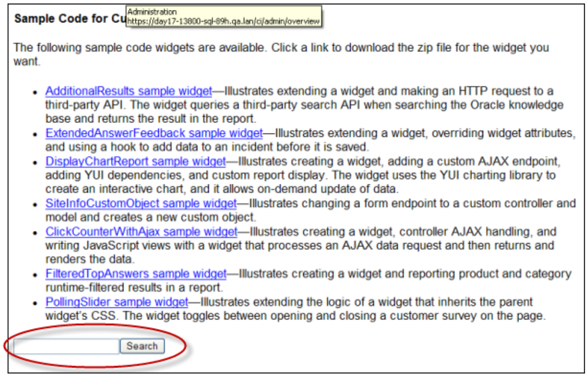
Type the number of characters you want evaluated in the field for the *payload_size* attribute.

Hiding answers until a search is performed

By default, the KnowledgeSyndication widget displays the top ten most popular answers until a search is performed, at which time it displays the search results. If you prefer, you can hide all answers until customers enter a search term on the external page.

To hide answers until a search is performed

Select the check box for *hide_initial_answers*. The widget appears as a search field and button on the external page.



Setting the keyword for the search query

You can define the search term automatically so that the answers returned by the KnowledgeSyndication widget are related to that keyword. The default is blank.

Note If you've entered HTML tags in the context attribute, any values in the *q* attribute will be overridden.

To set a keyword for a search query

Type the search word in the field for the *q* attribute of the KnowledgeSyndication widget.

Continue configuring attributes for the KnowledgeSyndication widget.

Flag settings

By default, all of the following attributes are enabled.

- *correction*—When this attribute is enabled, the widget offers spelling suggestions if the search term appears to be misspelled.
- *description*—When enabled, the widget displays answer descriptions in the list of returned answers. The description includes the beginning of the answer summary. (You can set the description length by editing the *truncate_size* attribute.)
- *navigation*—When enabled and the number of answers that meet the search criteria is greater than the number of displayed answers, the More Results link appears on the widget. (You can set the number of displayed answers by editing the *number_answers* attribute.)
- *recommended*—When enabled, the KnowledgeSyndication widget displays a link to any recommended documents.

- *related*—When enabled, the widget displays a list of related searches.
- *search_box*—When enabled, the widget displays the keyword search box so customers can enter search terms.

To disable a flag setting

1. To disable spelling corrections and suggestions, clear the check box for the *correction* attribute.
2. To disable answer descriptions in the search results, clear the check box for the *description* attribute.
3. To disable the More Results link, clear the check box for the *navigation* attribute.
4. To disable recommended documents, clear the check box for the *recommended* attribute.
5. To disable suggested searches, clear the check box for the *related* attribute.
6. To disable the keyword search box to prevent customers from entering search terms, clear the check box for the *search_box* attribute.

Continue configuring attributes for the KnowledgeSyndication widget.

Editing labels

You might want to change the wording of messages on the KnowledgeSyndication widget. You can do so by editing any of the following *label* attributes.

- Spelling suggestions
- Recommended documents
- More results
- No results found
- Related searches
- Search button
- Time created and time updated

Continue configuring attributes for the KnowledgeSyndication widget.

Editing the spelling suggestion label

The default label for displaying spelling suggestions is Did You Mean, and the message is followed by a list of possible spelling corrections.

Note EU_SEARCH_TERM_FEEDBACK_ENABLE (RightNow User Interface > End-User Interface > General) must be set to Yes to display spelling suggestions. This setting is enabled by default so you shouldn't have to edit it unless it has been disabled using this procedure.

To edit the spelling suggestion label

Type the new label in the field for the *label_correction* attribute.

Editing the Recommended Documents label

When the KnowledgeSyndication widget lists recommended documents, it uses the label Recommended Documents.

To edit the label for recommended documents

Type the new label in the field for the *label_documents* attribute.

Editing the More Results label

If the number of returned answers exceeds the number defined in the *number_answers* attribute, the More Results link appears at the bottom of the list of answers. (Click here to change the number of displayed answers. To disable the More Results link, go to step 3 in the To disable a flag setting procedure.)

Note The behavior you define in Editing the target window is used to determine the behavior of the More Results link. For example, defining `target="_blank"` means that the additional search results will display in a new window just as linked documents do.

To edit the label for the More Results link

Type the new label in the field for the *label_more_results* attribute.

Edit other labels or Continue configuring attributes for the KnowledgeSyndication widget.

Editing the No Results Found label

To edit the No Results Found label

Type the new label in the field for the *label_no_results* attribute.

Editing the related searches label

The related searches feature builds links between search words and phrases based on similar answer search results and suggests terms your customers might not have thought of or known the terminology for. When the KnowledgeSyndication widget displays suggested search terms, it uses the label Other Suggested Searches.

Note EU_SUGGESTED_SEARCHES_ENABLE (RightNow User Interface > End-User Interface > General) must be set to Yes to display related searches. This setting is enabled by default so you shouldn't have to edit it unless you disable suggested searches.

To edit the related searches label

Type the new label in the field for the *label_related_searches* attribute.

Editing the Search button label

To edit the Search button label

Type the new label in the field for the *label_search_button* attribute.

Editing the created and updated button labels

When you enable the ability to display an answer on a page overlay instead of opening it on a separate page (refer to Opening answers with a page overlay), the overlay displays the time the answer was created and the time it was last updated. The default labels for these display fields are Created and Updated, but you can edit them.

To edit the Created label

Type the new label in the field for the *label_created* attribute.

To edit the Updated label

Type the new label in the field for the *label_updated* attribute.

Edit other labels or Continue configuring attributes for the KnowledgeSyndication widget.

Editing the target window

The *target* attribute defines where linked documents and additional search results (the More Results link) should be opened. The default value is "_self" to open the linked document or the additional search results in the same window.

To change the target window

Type one of the following target values for the HTML anchor (<a>) tag in the field for the widget's *target* attribute.

_blank—Opens the link in a new window.

_self—Opens the link in the current window.

_parent—Opens the link in the parent frameset.

_top—Opens the link in the full window.

Truncating answer descriptions

The default length of answer descriptions is 100 characters, but you can edit that value.

To edit the length of answer descriptions

Type a numerical value in the field for the *truncate_size* attribute.

Editing the number of displayed answers

By default, ten answers are displayed when customers conduct a search using the KnowledgeSyndication widget.

To change the number of displayed answers

Type an integer in the field for the *number_answers* attribute.

Continue configuring attributes for the KnowledgeSyndication widget.

Editing the div element

The default div element that defines where you want the KnowledgeSyndication widget to appear on the page is myDiv. If you change the *div_id* attribute, the code you add to the page also changes.

To edit the div element

Type a new name for the div element in the field for the *div_id* attribute. The new code for the div element will resemble the following.

```
<div id="newDiv"></div>
```

Editing the instance ID

If you have more than one KnowledgeSyndication widget on a page, you must have unique ID values for each of them. The default value is skw_0.

To edit the instance ID

Replace the “0” in “skw_0” in the *instance_id* attribute with another value for each widget you add to the page. Each instance of the widget must have a unique value.

Continue configuring attributes for the KnowledgeSyndication widget.

Offering customers a survey

You may want to offer your customers a survey on one of your customer portal pages or an external web page. The Customer Portal contains the following standard survey widgets.

- **Polling**—Lets you add a one-question survey to any customer portal page. Refer to Polling widgets.
- **SurveyLink**—Displays a link your customers can click to open a survey. Refer to SurveyLink widgets.
- **ProactiveSurveyLink**—Opens a window on your customer portal to offer customers the opportunity to take a survey. Refer to ProactiveSurveyLink widget.

Besides the standard survey widgets, two syndicated survey widgets are also available for adding to an external page.

- **PollingSyndication**—Lets you add a one-question survey to an external page. Refer to Polling widgets.
- **ProactiveSurveyLink (syndicated)**—Opens a window on an external page to offer customers the opportunity to take a survey. Refer to Syndicated ProactiveSurveyLink widget.

Polling widgets

The Polling widget is located in the standard widgets folder in the *surveys* subfolder. The PollingSyndication widget can be found on the Customer Portal Administration site by clicking the Widgets tab and selecting Syndicated Widgets.

The polling widgets let you add a single-question poll from surveys that have been created on the **agent desktop**. This section describes the common functionality of these widgets, while the procedure for creating surveys is at Creating polling surveys.

The available question types include choice, text, and matrix, and you can use any of these question types in your poll, although the choice question type probably offers the most usefulness to your organization. (Refer to Creating questions for a description of each type of question.) When customers answer a choice question by selecting a menu item, radio button, check box, or list item, they see a chart displaying the responses to date. (This chart can be a horizontal bar chart, vertical bar chart, or pie chart.) When customers respond to text and matrix questions, they see a thank-you message.

If the survey you have associated with the polling widget contains multiple questions, one of the questions will be selected at random to appear to customers for a one-hour time period. Every customer who is offered the poll during that time sees the same question. At the end of an hour, a new question is selected at random.

Widget attributes

The question, answers, and some styling options are defined on the **agent desktop** when surveys and associated questions are created. Additional styling and other attributes are defined with customer portal code. If widget styling attributes are different than the styling defined when the survey was created, the widget attributes are used.

The following attributes are available for the standard Polling widget and the PollingSyndication widget.

- **Chart Style**—Sets the styling for the chart using the YUI Charts Control. You can specify backgrounds, borders, colors, fonts, and many other chart attributes. The default is blank. Refer to Chart attributes.
- **Chart Type**—Specifies the chart type. Options include none, horizontal bar, vertical bar, pie chart, and simple. The default is a horizontal bar chart. Refer to Chart type.
- **Cookie Duration**—Defines the number of days until the cookie expires. The default is ten days. Refer to Cookie duration.
- **Instance ID**—Defines the ID for the widget instance. You can specify this value, or it will be selected automatically. Refer to Instance ID.

- **Frequency**—Defines what percentage of visitors are offered the poll. This attribute is used only when modal polls are enabled. Refer to To enable and configure modal polls for the Polling widget or To enable and configure modal polls for the PollingSyndication widget.
- **Modal**—Sets the survey dialog to be modal. This mode requires customer interaction to close the dialog. By default, the modal poll is disabled. Refer to Enabling and configuring modal polls.
- **Poll Logic**—Prevents the survey dialog from opening unless the *evt_showPoll* event is fired. This attribute is used only when modal polls are enabled. You must add code to define the condition that triggers the event. Refer to Poll logic.
- **Seconds**—Used only with modal polls to specify the time in seconds until the dialog is opened. The default value is 0.
- **Series Style**—Sets the styling for the chart's bars or pie wedges with the YUI Charts Control. Refer to Chart attributes.
- **Survey ID**—Required to identify the polling survey the widget uses. Refer to Survey ID.
- **Test**—Puts the widget in test mode so results are not recorded. Refer to Test mode.

Adding a polling widget

The Polling widget and the PollingSyndication widget have the same attributes, although the methods for defining those attributes are different. You configure the Polling widget by placing widget code on the customer portal page where you want it to appear and then editing its attributes. You configure the PollingSyndication widget by selecting widget attributes on the Customer Portal Administration site, where the code is automatically generated for you to copy and paste on the external web page where you want the widget to appear.

The following procedures describe the general process for editing each widget. The specific procedures for defining individual attributes are described in later sections.

To add the Polling widget to a customer portal page

1 Open the file for the page on which you want to place the Polling widget.

2 Add a blank line in the code in the location where you want the widget to appear on the page.

3 Type the code for the Polling widget in the blank line you added. The most basic widget code is as follows, where the value of the *survey_id* attribute is the ID of the survey containing the polling question you want to use.

```
<rn:widget path="surveys/Polling" survey_id="8" />
```

Important Every Polling widget must include a value for the *survey_id* attribute. If it does not, an error message appears on the customer portal page.

4 Save the file.

The following figures show the default formatting of the Polling widget. In this example, it has been added to the Account Settings page. The first figure shows the poll being offered to a customer. The second figure shows the results that appear when the customer submits a response.

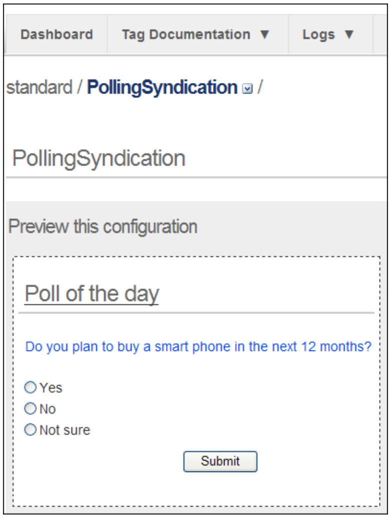
To add the PollingSyndication widget to an external page

1. Type https://<your_site>/ci/tags/syndicated_widgets/standard/PollingSyndication to open the page for the PollingSyndication widget.

2. Scroll to the Configure Widget section of the page and edit the widget attributes.

Important Every PollingSyndication widget must include a value for the *survey_id* attribute. If you do not enter one, code is not generated for the widget.

3. To preview your changes, click Apply at the bottom left of the Configure Widget section. Continue to configure the widget until you are satisfied with the result.



4. Open the source code for the web page you want to add the widget to.

5. To ensure the page renders correctly in Internet Explorer 7, add the following code to the top of the page before your first HTML tag.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http:/
/www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

6. On the right side of the widget page, click the top Select Text button to select the code in the first yellow box and press **Ctrl+c** to copy the code.

7. Paste the code into your page file just before the closing </body> tag. Even if you plan to use multiple syndicated widgets on the page, you need to paste this code only once.

8 Click the second Select Text button and copy the code that defines the widget.

9 Paste the copied code just below the code you pasted in step 7.

10 Click the third Select Text button, copy the code, and paste it where you want the widget to appear.

11 Save your web page.

Configuring polling widgets

Configuration options for the polling widgets include defining the survey ID (required), setting the cookie duration, enabling and configuring modal polls, specifying the chart type, setting chart and series styles, setting the instance ID and div ID, and enabling the test mode.

Survey ID

Every polling widget must be associated with a polling survey that was designed on the Service Console. If the survey ID is missing from the Polling widget code, you will see an error on the page where you are trying to place the widget. If it is missing from the PollingSyndication widget, you will not be able to generate code to paste on an external page.

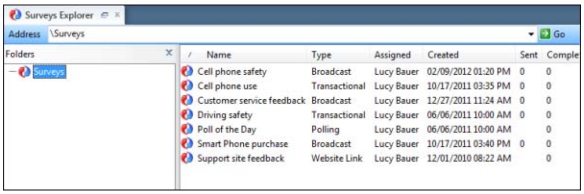
To determine the ID for a survey

1 Log in to Oracle Service Cloud.

2 Click the Surveys button on the **navigation pane**.

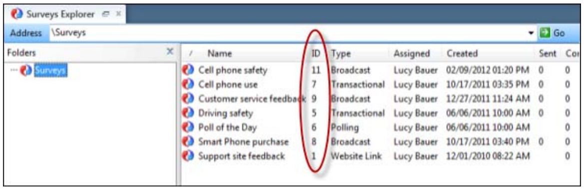
3 Double-click Surveys Explorer. The explorer opens on the content pane.

Note This procedure assumes you access the Surveys explorer from the Surveys **navigation list**. However, this explorer might reside in another navigation list. For help adding the Surveys explorer to a navigation list, refer to [Customizing navigation and configuration lists](#).



4 On the ribbon, click the Choose Details button in the Display group. The Hide or Display Details window opens.

5 Select the check box for ID and click OK. The survey ID appears in the list of surveys.



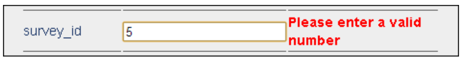
To define the survey ID for the Polling widget

Add the *survey_id* attribute to the widget code so it resembles the following.

```
<rn:widget path="surveys/Polling" survey_id="5" />
```

To define the survey ID for the PollingSyndication widget

With the page for the PollingSyndication widget open, scroll to the Configure Widget section of the page, find the attribute called *survey_id*, and type the ID number of the survey you want to use in the text field.



Cookie duration

After a customer has answered the poll, a cookie is set to prevent the survey from being offered again when the customer visits the page in the future. You can define the life of the cookie, which is ten days by default, or you can prevent a cookie from being set.

With modal polls (that is, when the poll opens in a separate dialog instead of as an element on the page), the survey is not presented again after the customer has responded once, even if the randomization process now presents a different question to customers. In the non-modal mode after a customer has answered the poll, subsequent visits to the site when the cookie is active will display only the survey results instead of the survey question that appeared on the first visit.

To define the cookie duration for the Polling widget

Add the *cookie_duration* attribute to the widget code and set its value for the number of days you want the cookie to remain active. Your code will resemble the following.

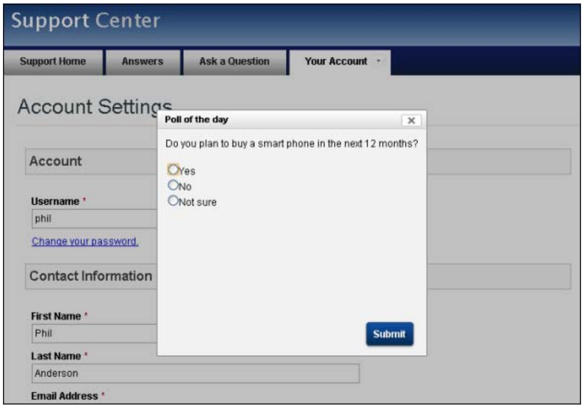
```
<rn:widget path="surveys/Polling"
survey_id="5"
cookie_duration="5"/>
```

To define the cookie duration for the PollingSyndication widget

With the page for the PollingSyndication widget open, scroll to the Configure Widget section of the page, find the attribute called *cookie_duration*, and type the number of days you want the cookie to remain active in the text field.

Enabling and configuring modal polls

By default, the poll is not modal, but is instead an element on the page that customers can choose to respond to or ignore. You can define the poll to be modal so customers must deliberately close the window to reactivate the page they were on. The survey dialog remains in the middle of the page even if scrolling occurs.



Other attributes influence the behavior of the polling widgets when modal polls are enabled. The following attributes apply only to modal polls.

- **Frequency**—You can define what percentage of visitors to your site will be offered the poll.
- **Poll logic**—If you enable this attribute, the survey dialog does not appear unless the JavaScript event *evt_showPoll* is triggered. You must add code to define the condition that triggers the event. Refer to Poll logic.

- **Seconds**—This attribute defines the number of seconds before the survey dialog opens on the page.

To enable and configure modal polls for the Polling widget

1 Add the *modal* attribute to the widget code, which will resemble the following.

```
<rn:widget path="surveys/Polling"
survey_id="5"
modal="true" />
```

2 To offer the poll to only a percentage of your customers instead of all of them, add the *frequency* attribute to the widget code. Your code will resemble the following.

```
<rn:widget path="surveys/Polling"
survey_id="5"
modal="true"
frequency="50"/>
```

3 To trigger the dialog on the event defined in *evt_showPoll*, add the *poll_logic* attribute to the widget code. Your code will resemble the following.

```
<rn:widget path="surveys/Polling"
survey_id="5"
modal="true"
poll_logic="true"/>
```

   a Add the necessary poll logic as described in To use poll logic with the Polling widget.

4 To trigger the dialog after the page has been open a specified number of seconds, add the *seconds* dialog to the widget code. Your code will resemble the following.

```
<rn:widget path="surveys/Polling"
survey_id="5"
modal="true"
seconds="3" />
```

To enable and configure modal polls for the PollingSyndication widget

1 With the page for the PollingSyndication widget open, scroll to the Configure Widget section of the page, find the attribute called *modal*, and select the check box.

2 To offer the poll to only a percentage of your customers instead of all of them, find the attribute called *frequency* and enter a percentage value in the field.

3 To trigger the dialog on the event defined in *evt_showPoll*, find the attribute called *poll_logic*, and select the check box.

a Add the necessary poll logic as described in [To use poll logic with the PollingSyndication widget](#).

4 To trigger the dialog after the page has been open a specified number of seconds, find the attribute called *seconds* and type the number of seconds in the text field.

Poll logic

A JavaScript event, *evt_showPoll*, lets you use logic to display the polling widget when modal polls are enabled. When the *poll_logic* attribute is set to true, the polling dialog does not display unless the *evt_showPoll* event is triggered.

Note You must add code to define the condition that triggers the event.

To use poll logic with the Polling widget

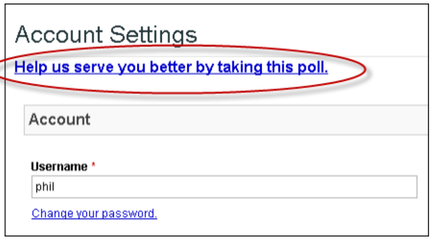
Add the *poll_logic* attribute to the widget code. Your code will resemble the following.

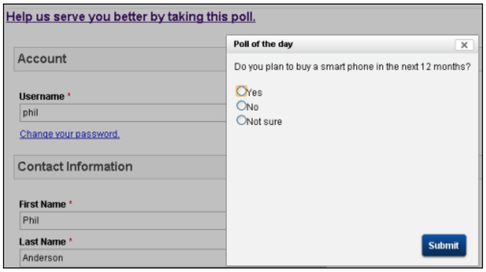
```
<rn:widget path="surveys/Polling"
survey_id="4"
modal="true"
poll_logic="true" />
```

Then add code to trigger the *evt_showPoll* event. If, for example, you want to trigger the poll after customers click a link on the widget, you could add the following code to the page containing the widget. (Notice that the widget code prevents cookies from being set so the link will remain active.)

```
<rn:widget path="surveys/Polling" survey_id="4" modal="true"
poll_logic="true" cookie_duration="0" />
<script type="text/javascript">
function pollLogic() {
    RightNow.Event.fire('evt_showPoll');
}
</script>

<a href="#" onclick="pollLogic()"><h2>Help us serve you better by
taking this poll.</h2></a>
```





To use poll logic with the PollingSyndication widget

Add the logic code to the external page below the code you added for the PollingSyndication widget. The following example shows the code you might add if you want to display the poll 500 milliseconds after the page opens.

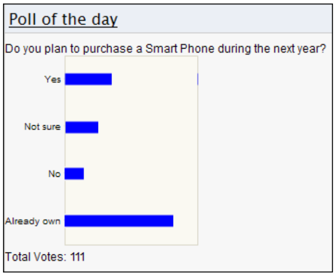
```
<script type="text/javascript">
var rnTimer;
startCheck();
// check to see when the RightNow javascript is loaded and ready to use
function startCheck()
{
    rnTimer = setInterval(checkLoaded, 500); // this is milliseconds
}
// when loaded fire the poll
function checkLoaded()
{
    if (RightNow && RightNow.Client && RightNow.Client.Event &&
    RightNow.Client.Event.evt_showPoll)
    {
```

```
            clearInterval(rnTimer);
            RightNow.Client.Event.evt_showPoll.fire();
    }
}
</script>
```

Chart type

When the polling widget uses a survey with a choice type question, the page displays a chart with the results of the poll. By default, a horizontal bar chart is used, but you can change that to a vertical bar chart, pie chart, or simple chart instead. You can also select None if you do not want to display the results in a chart.

Note The simple chart type is styled with the widget's CSS file. If you define attributes for the widget in the code on the page where it appears, they are not applied to the widget.



To edit the chart type on the Polling widget

1 To display a vertical bar chart, add the *chart_type* attribute to the widget code and set its value to vertical_bar. Your code will resemble the following.

```
<rn:widget path="surveys/Polling"
survey_id="5"
chart_type="vertical_bar" />
```

2 To display a pie chart, add the *chart_type* attribute to the widget code and set its value to pie. Your code will resemble the following.

```
<rn:widget path="surveys/Polling"
survey_id="5"
chart_type="pie" />
```

To edit the chart type on the PollingSyndicated widget

With the page for the PollingSyndication widget open, scroll to the Configure Widget section of the page, find the attribute called *chart_type*, and select vertical_bar, pie, or simple to change the chart from the default horizontal_bar option.

Chart attributes

The polling widgets use the YUI Library's Charts module to generate the charts that display poll results for choice type questions. Although the YUI chart attributes are not displayed on the Customer Portal Administration site for either of the polling widgets, you can change the YUI default attributes directly in the widget code. If you do not enter chart attributes, the YUI defaults will be used. Refer to the Yahoo Developer Network for specific details.

Instance ID

The *instance_id* is used as a unique identifier of the polling widget. Each instance of a polling widget on a customer portal page or an external page must have its own instance ID. You can enter a value for *instance_id* in the Polling widget code or type a value in the field for the PollingSyndication widget. If you do not enter a value, one will be assigned automatically.

div_id

The *div_id* attribute is used only with the PollingSyndication widget. You can use the default value myDiv or enter one of your choosing. If you have multiple PollingSyndication widgets on an external page, each widget must have a unique *div_id* value.

Test mode

When the test mode is enabled, you can test the polling widgets without worrying that your sample poll selections will skew actual customer results. No statistics will be collected in test mode.

To set the test mode for the Polling widget

Add the *test* attribute to the widget code and set it to true. Your code will resemble the following.

```
<rn:widget path="surveys/Polling"
survey_id="5"
test="true" />
```

To set the test mode for the PollingSyndication widget

With the page for the PollingSyndication widget open, scroll to the Configure Widget section of the page, find the attribute called *test*, and select the check box.

Randomized survey questions

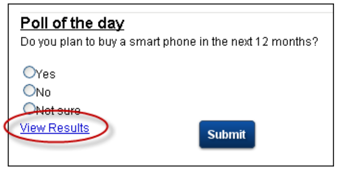
If the survey used by the polling widget has multiple questions, the survey question is selected at random. During a one-hour period, every customer who is presented with the survey will see the same question. After one hour, another question is selected at random.

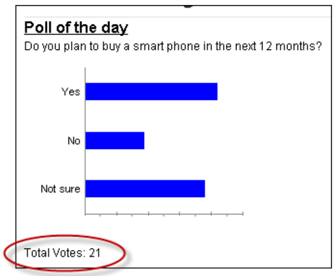
Anonymous responses

If customers are logged in, their responses to the survey question will be associated with their contact record. If customers are not logged in, they can still respond to the survey because polling surveys allow anonymous responses.

Other configuration options

Other polling survey options are available when the survey is created. (Refer to To create a polling survey.) The following figures show a Polling widget that displays a View Results link and the total number of results.





Viewing results without participating

When you create or edit a survey with choice-type questions, you can add the ability for customers to see survey results even if they do not participate in the survey.

Displaying the total number of votes

You can set the survey results to display the total number of votes when you create or edit a survey.

End of survey actions

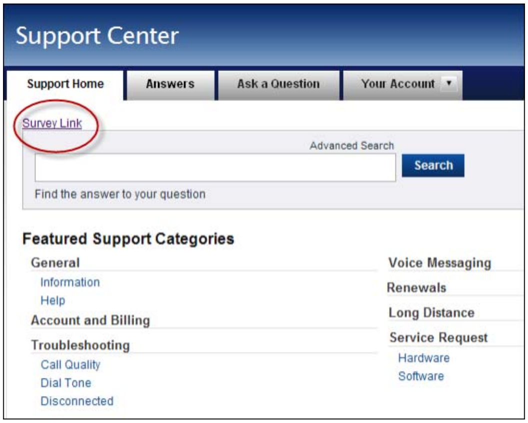
If the survey used by the polling widget includes end of survey actions, those actions will occur only when customers are logged in. If customers are not logged in, no action will occur. These actions are defined when the survey is created.

SurveyLink widgets

The SurveyLink, ProactiveSurveyLink, and syndicated ProactiveSurveyLink widgets provide a link your customers can click to open a survey. The SurveyLink widget is a static link, while both proactive widgets open a separate survey invitation on the page. The syndicated ProactiveSurveyLink widget lets you offer a survey invitation on a non-customer portal page.

Adding the SurveyLink widget

You can add a link to any customer portal page that opens broadcast and website link types of surveys. (Click here to create a broadcast survey, and click here for website link surveys.) Customers who click the survey link for a broadcast survey must be logged in. The following figure shows the SurveyLink widget at the top of the Support Home page.



Important You must know the survey ID value and specify it in the *survey_id* attribute so the widget knows what survey to open. Refer to To determine the ID for a survey.

To add the SurveyLink widget to a page

1 Open the customer portal page that you want to add the SurveyLink widget to.

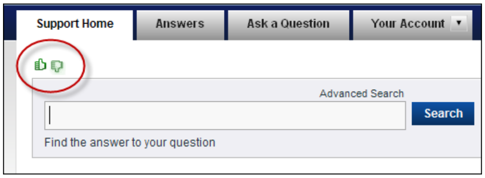
2 Add the following code in the location on the page where you want the widget to display, defining the *survey_id* attribute with the ID value of the survey you want to use.

```
<rn:widget path="surveys/SurveyLink"
survey_id="11"/>
```

3 To use a graphic element instead of the text link to the survey, add the *icon_path* attribute to the widget so that your code resembles the following.

```
<rn:widget path="surveys/SurveyLink"
survey_id="11"
icon_path="images/cp_survey_icon.png" />
```

Note When you use the *icon_path* attribute, the default label that is read by screen readers is “Follow this link to take a survey.” If you want to change this label, add the *label_icon_alt* attribute and set the value to whatever you want the screen reader to read.



4 To open the survey in a separate window instead of on the same page, add the *target* attribute to the widget code and set it to `_blank`.

```
<rn:widget path="surveys/SurveyLink"
survey_id="11"
target="_blank" />
```

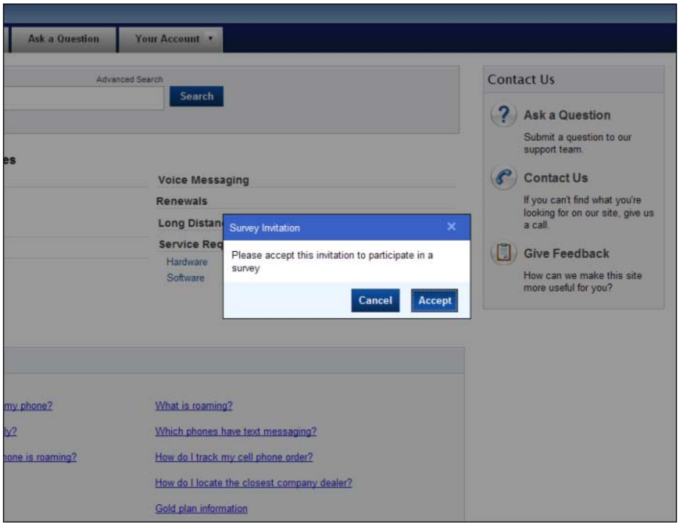
5 To change “Survey Link” to different text, add the *link_text* attribute to the widget.

```
<rn:widget path="surveys/SurveyLink"
survey_id="11"
link_text="Click here to take our survey" />
```

6 Save the page file.

ProactiveSurveyLink widget

Besides displaying the static SurveyLink widget to offer your customers a survey, you can also offer a survey when your customers have been on a page for a defined number of seconds or when an event that you have defined occurs. The ProactiveSurveyLink widget can be placed on any customer portal page, and it is shown on the Support Home page in this figure. The widget is modal, which means that it opens in a separate window that must be closed before resuming operations on the page it was opened from.



To add the ProactiveSurveyLink widget to a page

1 Open the customer portal page that you want to add the ProactiveSurveyLink widget to.

2 Add the following code to the page. Because the widget opens in the center of the page, you can simply add the code as the last line on the page.

```
<rn:widget path="surveys/ProactiveSurveyLink"
survey_id="11"/>
```

Important You must include the *survey_id* attribute so the widget knows what survey it should link to. Refer to To determine the ID for a survey.

3 To change the labels on the Accept and Cancel buttons, add the *label_accept_button* and *label_cancel_button* attributes. Your code will resemble the following.

```
<rn:widget path="surveys/ProactiveSurveyLink"
survey_id="11"
label_accept_button="Yes please"
label_cancel_button="No thanks" />
```

4 To open the survey in a separate window instead of on the same page, add the *target* attribute to the widget code and set it to `_blank`.

```
<rn:widget path="surveys/ProactiveSurveyLink"
survey_id="11"
target="_blank" />
```

5 To set the cookie duration to anything other than the default value of ten days, add the *cookie_duration* attribute and set it to the number of days you want to avoid presenting the survey offer again. If you set the value to 0, no cookie is set.

```
<rn:widget path="surveys/ProactiveSurveyLink"
survey_id="11"
cookie_duration="0"/>
```

6 To change the width of the window that opens when the link is clicked from its default value of 300 pixels, add the *dialog_width* attribute and set it to the value you want.

```
<rn:widget path="surveys/ProactiveSurveyLink"
survey_id="11"
dialog_width="200" />
```

7 To define a percentage of visitors who will be offered the survey (instead of the default value of 100), add the *frequency* attribute and set it the value you choose.

```
<rn:widget path="surveys/ProactiveSurveyLink"
survey_id="11"
frequency="50" />
```

8 To change the default invitation to participate in the survey, add the *intro_paragraph* attribute with the text of your choice.

```
<rn:widget path="surveys/ProactiveSurveyLink"
survey_id="11"
intro_paragraph="Complete this survey and be entered in a drawing to
win an iPad!" />
```

9 To open the window after a specified number of seconds, add the *seconds* attribute.

```
<rn:widget path="surveys/ProactiveSurveyLink"
survey_id="11"
seconds="10" />
```

10 To change the survey title from the default “Survey Invitation,” add the *title* attribute.

```
<rn:widget path="surveys/ProactiveSurveyLink"
survey_id="11"
title="Tell us what you're thinking" />
```

11 To open the widget only when an event is fired, add the *wait_for_event* attribute to the widget and then add the code to fire the event.

Note A JavaScript event, *evt_showOffer*, lets you use logic to display the ProactiveSurveyLink widget. You must add code to fire *evt_showOffer* in order for the widget to open. If you have defined the *seconds* attribute, the widget opens after the event has fired and the number of seconds has elapsed.

Your code will resemble the following. (Notice that the widget code prevents cookies from being set so the link will remain active.)

```
<rn:widget path="surveys/ProactiveSurveyLink"
survey_id="11"
wait_for_event="true"
cookie_duration="0" />
<script type="text/javascript">
function dialogLogic()
{
    RightNow.Event.fire('evt_showOffer');
}
</script>
<a href="#" onclick="dialogLogic()"><h2>Help us serve you better
by taking this survey.</h2></a>
```

12 Save the page.

Syndicated ProactiveSurveyLink widget

The syndicated ProactiveSurveyLink widget performs the same function as the standard ProactiveSurveyLink widget but on an external page rather than a customer portal page. The code for the syndicated ProactiveSurveyLink widget is generated on the Customer Portal Administration site, so you must copy the code and then paste it into the code for the external page.

To add the syndicated ProactiveSurveyLink widget to a web page

1 Type `https://<your_site>/ci/tags/syndicated_widgets/standard/ProactiveSurveyLink` to open the page for the syndicated ProactiveSurveyLink widget.

2 Scroll to the Configure Widget section and edit the widget attributes. Refer to [To configure the syndicated ProactiveSurveyLink widget]().

Important Every syndicated ProactiveSurveyLink widget must include a value for the *survey_id* attribute. If you do not enter one, code is not generated for the widget.

3 To preview your changes, click Apply at the bottom left of the Configure Widget section. Continue to configure the widget until you are satisfied with the results.

4 Open the source code of the external page you want to add the widget to.

5 To ensure the page renders correctly in Internet Explorer 7, add the following code to the top of the page before your first HTML tag.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http:/
/www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

6 On the right side of the widget page, click the top Select Text button to select the code in the first yellow box and press **Ctrl+c** to copy the code.

7 Paste the code into your page file just before the closing </body> tag. Even if you plan to use multiple syndicated widgets on the page, you need to paste this code only once.

8 Click the second Select Text button and copy the code that defines the widget.

9 Paste the copied code just below the code you pasted in step 7.

10 Click the third Select Text button, copy the code, and paste it where you want the widget to appear on the page.

11 Save your web page.

To configure the syndicated ProactiveSurveyLink widget

1 With the page for the syndicated ProactiveSurveyLink widget page open, scroll to the Configure Widget section of the page, find the attribute called *survey_id*, and type the ID number of the survey you want to use in the text field.

2 To set the cookie duration to anything other than the default value of ten days, type the number of days you want to avoid presenting the survey offer again in the *cookie_duration* attribute. If you set the value to 0, no cookie is set.

3 To change the width of the window that opens when the link is clicked from its default value of 300 pixels, type the new value in the *dialog_width attribute.*

4 To open the widget only when an event is fired, select the Enabled check box for the *display_logic* attribute.

Note A JavaScript event, *evt_showLink*, lets you use logic to display the syndicated ProactiveSurveyLink widget. You must add code to fire *evt_showLink* in order for the widget to open. If you have defined the *seconds* attribute, the widget opens after the event has fired and the number of seconds has elapsed.

a Add the following code just below the widget code on the page where you're placing the widget.

```
<script type="text/javascript">
function dialogLogic()
{
    RightNow.Client.Event.evt_showLink.fire();
}
</script>
<a href="#" onclick="dialogLogic()"><h2>Help us serve you better
by taking this survey.</h2></a>
```

5 To change the *div_id* attribute from its default of `myDiv`, type a new name for the div in the field.

Note It doesn't matter if you use the default value or enter one of your choosing. If you have multiple ProactiveSurveyLink widgets on an external page, each widget must have a unique *div_id* value.

6 To define a percentage of visitors who will be offered the survey (instead of the default value of 100), set the percentage value you want in the *frequency* attribute.

7 To rename the *instance_id* attribute, replace the "0" in "psl_0" with another value.

Note Each instance of the widget on a page must have a unique value.

8 To change the default invitation to participate in the survey, type text for the new introduction in the *intro_paragraph* attribute.

9 To change the labels on the Accept and Cancel buttons, type new values for the *label_accept_button* and *label_cancel_button* attributes.

10 To open the survey link window after a specified number of seconds, type the value in the *seconds* attribute. The default value of 0 means the window opens immediately.

11 To open the survey in a separate window instead of on the same page, click the drop-down arrow for the *target* attribute and select "_blank."

12 To change the survey title from the default "Survey Invitation," type the new title in the *title* attribute.

Standard widgets

The following table lists all the widgets included in both the standard and mobile customer portal reference implementations, the pages on which they are used, and their functionality on the page.

Click here for a list of standard widgets that are not used in the reference implementation pages or templates.

A | B | C | D | E | F | G | K | L | M | N | O | P | R | S | T | U | V

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
Accordion	mobile/account/questions/detail	Expands and collapses the Update This Question, Communication History, and Additional Details sections.
	mobile/answers/list	Expands and collapses the + Search Options section, which displays product and category filters.
	mobile/home	Expands and collapses the Most Popular Answers, Featured Support Categories, and Contact Us sections.
AdvancedSearchDialog	account/questions/list	Displays the advanced search options, which include search terms, product and category filters, and sorting options. Also includes Search and Cancel buttons and a link to Search Tips.
	answers/list	
	home	

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
AnswerFeedback	answers/detail	Displays the Was This Answer Helpful? section of the page, including the Yes/No buttons, and feedback dialog.
AnswerNotificationIcon	answers/detail	Displays the Notify Me link on the answer details page.
AnswerNotificationMan-ager	account/notif/list	Opens the list of answers to which a customer is subscribed and displays the Renew and Delete buttons.
BasicAnswerFeedback	basic/answers/detail	Displays the Was This Answer Helpful? section of the page, including the Yes/No buttons, and the Submit Feedback button.
BasicCustomAllInput	basic/ask	Displays input fields for incident cus-tom fields.
	basic/account/profile	Displays input fields for contact cus-tom fields.
	basic/utils/create_account	Displays input fields for contact cus-tom fields.
BasicDisplaySearchFilters	basic/account/questions/list	Displays the search filters that were used to restrict a search by products, categories, or both.
	basic/answers/list	
BasicEmailCredentials	basic/utils/account_assis-tance	Displays the fields and buttons for cus-tomers to enter their email address or user name and request to have their user name emailed to them or have their password reset.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
BasicFormInput	basic/ask	Displays the Email Address, Subject, and Question fields.
	basic/account/change_-password	Displays the Current Password, Password, and Verify Password fields.
	basic/account/profile	Displays the Username, First Name, Last Name, Email Address, Street, City, Country, State/Province, Postal Code, and phone number fields.
	basic/account/questions/detail	Displays the field for adding information to a question being updated and the Do You Want a Response? field and menu.
	basic/answers/submit_-feedback	Displays the Email Address and Feedback fields for submitting feedback on an answer.
	basic/utils/create_account	Displays the Email Address, Username, Password, Verify Password, First Name, and Last Name fields.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
BasicFormStatusDisplay	basic/ask	Displays status and error messages from form submissions on the basic page set.
	basic/account/change_password	
	basic/utils/create_account	
	basic/account/profile	
	basic/account/reset_password	
	basic/account/setup_password	
	basic/account/questions/detail	
	basic/answers/detail	
	basic/answers/submit_feedback	
	basic/utils/account_assistance	
BasicFormSubmit	basic/ask	Displays the Submit button.
	basic/account/change_password	
	basic/account/profile	
	basic/account/questions/detail	
	basic/answers/submit_feedback	
	basic/utils/create_account	Displays the Create Account button.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
BasicKeywordSearch	basic/home	Displays the Search field.
	basic/account/questions/list	
	basic/answers/list	
BasicLoginForm	basic/utils/login_form	Displays the Username and Password fields and the Log In button.
BasicMultiline	basic/home	Displays the Most Popular Answers report.
	basic/account/overview	Displays the customer's incidents in the Questions section.
	basic/account/questions/list	Displays the customer's incidents, filtered by product or category if selected.
	basic/answers/list	Displays the list of answers that meet customer-entered search terms.
BasicPaginator	basic/account/questions/list	Displays a list of page numbers that customers can select when the length of a report exceeds what can be displayed on a single page.
	basic/answers/list	
BasicProductCategoryInput	basic/ask	Lets customers select a product and category when they submit a question.
BasicProductCategorySearchFilter	basic/ask	Displays the Select a Product and Select a Category pages that appear before customers submit a question.
	basic/account/questions/list	Displays the Limit by Product and Limit by Category search filters.
	basic/answers/list	
BasicResetPassword	basic/account/reset_password	Displays the Password and Verify Password fields and the Submit button. This widget is accessed only through a link in an email sent to the customer.
	basic/account/setup_password	

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
BasicResultInfo	basic/account/questions/list	Displays the number of matching answers displayed in the search results.
BrowserSearchPlugin	templates/standard	Provides a link that can be output to a browser search engine plug-in.
ChatAgentStatus	chat/chat_landing mobile/chat/chat_landing	Displays the **status of the chat agent** (absent, listening, or responding).
ChatAttachFileButton	chat/chat_landing	Displays the Attach File button.
ChatCancelButton	chat/chat_landing mobile/chat/chat_landing	Displays the Leave button.
ChatDisconnectButton	chat/chat_landing mobile/chat/chat_landing	Displays the Disconnect button.
ChatEngagementStatus	chat/chat_landing mobile/chat/chat_landing	Displays the status of the **chat session**.
ChatHours	chat/chat_launch mobile/chat/chat_launch	Lists the chat hours defined on the **administration interface** and the current date and time.
ChatLaunchButton	chat/chat_launch mobile/chat/chat_launch	Displays the Submit Request button.
ChatOffTheRecordButton	chat/chat_landing	Displays the Chat Off the Record button.
ChatOffTheRecordDialog	chat/chat_landing	Opens the dialog for sending an off-the-record message when the Chat Off the Record button is clicked.
ChatPostMessage	chat/chat_landing mobile/chat/chat_landing	Displays the area where customers enter chat messages.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
ChatPrintButton	chat/chat_landing	Displays the Print button for printing the chat transcript.
ChatQueueSearch	chat/chat_landing	Adds a Search button and field where customers can search for an **answer** while waiting for a chat session.
ChatQueueWaitTime	chat/chat_landing mobile/chat/chat_landing	Displays a message to let customers know their position in the **chat session queue**, the estimated wait time, the average wait time, or all three.
ChatRequestEmailResponseButton	chat/chat_landing mobile/chat/chat_landing	Displays the Request Email Response button that appears when no agents are available.
ChatSendButton	chat/chat_landing mobile/chat/chat_landing	Displays the Send button that submits customer chat messages.
ChatServerConnect	chat/chat_landing mobile/chat/chat_landing	Displays the message customers see while the chat connection is being established and when other events occur during the chat session.
ChatSoundButton	chat/chat_landing	Produces an audible signal to indicate when customers are connected to an agent and when agents post a response. Customers can turn the audio on or off.
ChatStatus	chat/chat_launch mobile/chat/chat_launch	Displays a message to let customers know if chat sessions are currently available.
ChatTranscript	mobile/chat/chat_landing chat/chat_landing	Contains a record of the customer and agent messages that comprise the chat session.
ConditionalChatLink	templates/standard	Displays the Live Chat link in the template's sidebar when Chat is enabled.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
CustomAllDisplay	account/questions/detail	Displays the read-only **incident custom fields** in the Additional Details section.
	basic/account/questions/detail	
	mobile/account/questions/detail	
CustomAllInput	chat/chat_launch	Displays input fields for incident custom fields with chat visibility.
	utils/create_account	Displays input fields for **contact custom fields**.
	account/profile	Displays input fields for contact custom fields.
	ask	Displays input fields for incident custom fields.
	mobile/account/profile	Displays input fields for contact custom fields.
	mobile/ask	Displays input fields for incident custom fields.
	mobile/utils/create_account	Displays input fields for contact custom fields.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
DataDisplay	account/questions/detail	Displays the following read-only incident fields: incident thread, customer's email address, reference number for the incident, incident status, the dates the incident was created and last updated, the product and category associated with the incident, and file attachments.
	answers/detail	Displays an answer's file attachments with links to the files.
	basic/account/questions/detail	Displays the following read-only incident fields: incident thread, customer's email address, reference number for the incident, incident status, the dates the incident was created and last updated, the product and category associated with the incident, and file attachments.
	mobile/account/questions/detail	Displays the following read-only incident fields: incident thread, customer's email address, reference number for the incident, incident status, the dates the incident was created and last updated, the product and category associated with the incident, and file attachments.
	mobile/answers/detail	Displays an answer's file attachments with links to the files.
DisplaySearchFilters	account/questions/list	Displays the search filters that were used to restrict a search by products, categories, or both.
	answers/list	
EmailAnswerLink	answers/detail	Displays the Email This Page link.
	mobile/answers/detail	

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
EmailCredentials	mobile/utils/account_assistance	Displays the fields and buttons for customers to enter their email address or user name and request to have their user name emailed to them or have their password reset.
	utils/account_assistance	
FileAttachmentUpload	account/questions/detail	Displays the field and Browse button for attaching additional documents to a question being updated.
	ask	Displays the field and Browse button for attaching documents to a question being asked.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
FormInput	account/profile	Displays the user name, email address, street, city, country, state, postal code, and phone number fields.
	account/questions/detail	Displays the field for adding information to a question being updated and the Do You Want a Response? field and menu.
	ask	Displays the Email Address, Subject, and Question fields.
	chat/chat_launch	Displays the Email Address field.
	mobile/account/change_-password	Displays the current password, new password, and password confirmation fields.
	mobile/account/profile	Displays the user name, email address, street, city, country, state, postal code, and phone number fields.
	mobile/account/questions/detail	Displays the field for adding information to a question being updated and the Do You Want a Response? field and menu.
	mobile/ask	Displays the Email Address, Subject, and Question fields.
	mobile/chat/chat_launch	Displays the Email Address field.
	mobile/utils/create_account	Displays the Email Address, Username, Password, and Verify Password fields.
	utils/create_account	Displays the Email Address, Username, Password, and Verify Password fields.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
FormSubmit	account/change_password	Displays the Submit button.
	account/questions/detail	Displays the Submit button.
	ask	Displays the Continue button.
	mobile/account/change_-password	Displays the Submit button.
	mobile/account/profile	Displays the Save Changes button.
	mobile/ask	Displays the Continue button.
	mobile/utils/create_account	Displays the Create Account button.
	utils/create_account	Displays the Create Account button.
	account/profile	Displays the Save Changes button.
	mobile/account/questions/detail	Displays the Submit button.
Grid	account/overview	Displays reports of recently submitted questions, recent **answer notifications**, and **service contracts**.
	account/questions/list	Displays the Support History report.
GuidedAssistant	agent/guided_assistant	Opens a preview of the guide on the **administration interface**.
	answers/detail	Opens the first question of the guide associated with the answer.
	mobile/answers/detail	Displays the Launch the Troubleshooter button.
	mobile/utils/guided_assistant	Opens the first question of the guide associated with the answer.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
KeywordText	account/questions/list	Displays the search field.
	answers/list	
	home	
	mobile/account/questions/list	
	mobile/answers/list	
LoginDialog	templates/standard	Opens the login dialog when customers who are not logged in click the Log In link. After customers click the link and log in from the Create Account, Log In, or Account Assistance pages, or from an external site, they are redirected to the Account Overview page or another customer portal page.
LoginForm	mobile/utils/login_form	Displays the Username and Password fields and the Log In button.
	utils/login_form	
LogoutLink	templates/mobile	Displays the Logout link.
	templates/standard	
	mobile/chat/chat_landing	
MobileAnswerFeedback	mobile/answers/detail	Displays the Was This Answer Helpful? question, the Yes and No buttons, and feedback dialog.
MobileMultiline	mobile/account/questions/list	Displays the list of customer's **incidents**.
	mobile/answers/list	Opens a list of answers when See All Popular Answers is clicked on the home page.
	mobile/home	Displays the Most Popular Answers report.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
MobileNavigationMenu	templates/mobile	Displays the Menu and Search buttons and their associated menus.
	mobile/chat/chat_landing	Displays the Menu button and its associated menu.
MobileProductCategoryInput	mobile/ask	Displays the Select a Product and Select a Category buttons and their associated menus.
MobileProductCategoryList	mobile/home	Displays the list of Featured Support Categories.
	basic/home	
MobileProductCategorySearchFilter	mobile/answers/list	Displays the product and category search filters.
MobileSimpleSearch	templates/mobile	Displays the search field and Search button that open when the primary Search button is clicked.
Multiline	answers/list	Displays the list of answers that meet customer-entered search terms.
	home	Opens the Most Popular Answers report.
NavigationTab	templates/standard	Displays the Support Home, Answers, Community, Ask a Question, and Your Account navigation tabs.
OpenLogin	mobile/utils/login_form	Displays the third-party sites that can authenticate customers, allowing them to be logged in to the customer portal. The default providers include Facebook, Twitter, Google, Yahoo, WordPress, and OpenID.
	utils/login_form	
	utils/create_account	
PageSetSelector	templates/mobile	Displays the option for selecting the desktop, mobile, or basic page set.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
Paginator	account/questions/list	Displays a list of page numbers that customers can select when the length of a report exceeds what can be displayed on a single page.
	answers/list	
	mobile/account/questions/list	
	mobile/answers/list	
PasswordInput	account/change_password	Displays the Current Password, Password, and Verify Password fields.
PreviousAnswers	answers/detail	Displays the list of answers previously viewed by the customer.
PrintPageLink	account/questions/detail	Displays the Print link.
	answers/detail	
	answers/intent	
ProdCatNotificationManager	account/notif/list	Opens the list of products and categories to which a customer is subscribed and displays the Renew, Delete, and Add Notifications buttons.
ProductCategoryInput	ask	Displays the drop-down menus of products and categories that can be selected when submitting a question.
ProductCategoryList	home	Displays the Featured Support Categories list.
RelatedAnswers	answers/detail	Displays the Answers Others Found Helpful heading with links to related answers.
	basic/answers/detail	
	mobile/answers/detail	

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
ResetPassword	account/reset_password	Displays the Password and Verify Password fields and the Submit button. This widget is accessed only through a link in an email sent to the customer.
	account/setup_password	
	mobile/account/reset_-password	
	mobile/account/setup_-password	
ResultInfo	account/questions/list	Displays the number of matching answers displayed in the search results.
	answers/list	
	mobile/account/questions/list	
	mobile/answers/list	
RightNowLogo	templates/standard	Displays the Oracle logo and link.
	chat/chat_landing	
RssIcon	answers/list	Although added to the default Answers page, the *icon_path* attribute is set to null (" "). As a result, the RSS icon does not display on the page.
SearchButton	account/questions/list	Displays the Search button or icon.
	answers/list	
	home	
	mobile/account/questions/list	
	mobile/answers/list	
SimpleSearch	templates/standard	Displays the Search field on the sidebar of all pages except Support Home, Answers, and Support History.

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
SiteFeedback	templates/standard	Displays the Give Feedback link on the sidebar of all pages and opens the dialog when the link is clicked.
SmartAssistantDialog	ask	Displays a list of suggested answers when customers click the Continue button on the Ask a Question page (unless they have viewed two answers or conducted one search).
	mobile/ask	
SocialBookmarkLink	answers/detail	Displays the Share link that opens a menu of social networking sites.
	answers/intent	
TopAnswers	pages/basic/home.php	Displays a list of suggested top answers that can be filtered by product or category.
	pages/home.php	
	pages/mobile/home.php	
TopicWords	answers/list	Displays a list of links to recommended answers.
Unsubscribe	account/notif/unsubscribe	Lists the notifications a customer is subscribed to. This widget is accessed only through a link in an email sent to the customer.
VirtualAssistantAvatar	chat/chat_landing	Displays the virtual assistant avatar during the chat engagement.
	mobile/chat/chat_landing	
VirtualAssistantBanner	chat/chat_landing	Displays the virtual assistant banner during the chat engagement.
	mobile/chat/chat_landing	
VirtualAssistantFeedback	chat/chat_landing	Displays the Was This Response Helpful? section of the page, including the Yes/No buttons, and the Submit Feedback button during the chat engagement.
	mobile/chat/chat_landing	

Table 380: Standard Widgets and Their Functionality on the Reference Implementation

Widget	Page	Widget functionality on the page
VirtualAssistantSimilar-Matches	chat/chat_landing mobile/chat/chat_landing	Displays links to content that is similar to the phrases used in the chat engagement.

Widgets not used in reference implementation

The following standard widgets are not used in the **reference implementation** but are available for you to add to your pages. If the widgets are referenced in the documentation, a link to the relevant section is provided.

- *chat*
  - ChatCoBrowseButton in prior Customer Portal frameworks)
  - ChatCobrowsePremium
  - ChatLaunchFormOpen (used in prior Customer Portal frameworks)
  - ProactiveChat
- *input*
  - AssetCheck
  - ChannelAllInput
  - ContactNameInput (used in prior Customer Portal frameworks)
  - DateInput
  - EmailCheck
  - ProductCatalogInput
  - SelectionInput
  - TextInput
- *knowledgebase*
  - SearchSuggestions
  - TopicBrowse
- *mobile*
  - MobileEmailAnswerLink
- *output*
  - ChannelAllDisplay
  - ContactNameDisplay

  - ▷ FieldDisplay
  - ▷ FileListDisplay (used in */views/admin/answer_full_preview.php* for displaying the print version of an answer on the **agent desktop**)
  - ▷ IncidentThreadDisplay
  - ▷ ProductCatalogDisplay
  - ▷ ProductCategoryDisplay
- *search*
  - ▷ AssetOrgList
  - ▷ CombinedSearchResults
  - ▷ FilterDropdown
  - ▷ OrgList
  - ▷ ProductCatalogSearchFilter
  - ▷ ProductCategorySearchFilter (contained in AdvancedSearchDialog on the Support Home and Answers pages)
  - ▷ SearchTypeList (contained in AdvancedSearchDialog)

Note You should add the SearchTypeList widget to any page containing a custom report that uses an integer filter. Without the widget, your customers can search only by answer ID. Adding the widget lets your customers select a different search type so they can enter text search terms.

  - ▷ SortList (contained in AdvancedSearchDialog)
  - ▷ WebSearchSort (also contained in AdvancedSearchDialog on the Answers page)
  - ▷ WebSearchType (also contained in AdvancedSearchDialog on the Answers page)
- *social*
  - ▷ AnswerComments
  - ▷ CommunityPostDisplay
  - ▷ CommunityPosts
  - ▷ CommunityPostSubmit
  - ▷ CommunitySearchResults
  - ▷ CommunityUserDisplay
- *surveys*
  - ▷ Polling
  - ▷ SurveyLink

    - ▷ ProactiveSurveyLink
- *utils*
    - ▷ AnnouncementText
    - ▷ Blank
    - ▷ CoBrowsePremium
    - ▷ ProgressBar (adding to the Ask a Question page and adding to the Create an Account page)

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Logging in to the Customer Portal

Depending on how you set up the Oracle RightNow Customer Portal Cloud Service (Customer Portal), your customers can log in directly or they can log in through an external site that verifies their identity. The following list summarizes the various login methods.

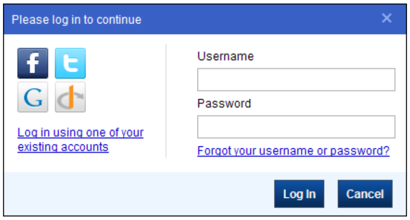
- **Standard login**—Customers use standard login when they log in to your customer portal using the user name and password assigned to them in Oracle Service Cloud instead of logging in through an external service provider, such as Facebook or PingFederate. Clicking the Log In link in the upper right corner of any customer portal page opens the LoginDialog widget so customers can log in. Clicking the Your Account tab when not logged in automatically takes customers to the Log In page, where they are asked for their Oracle Service Cloud user name and password. And customers who do not yet have an account can open the Create an Account page by clicking the Sign Up link on the Log In page or in the upper right corner of any customer portal page.
- **Open login**—The LoginDialog widget, the Log In page, and the Create an Account page also let your customers log in to the customer portal through an external service provider where they already have an account. You can accept verified customer logins from Facebook, Twitter, Google, Yahoo, WordPress, and most other OpenID sites. Refer to Customer portal open login.
- **Pass-through authentication (PTA)**—You can integrate the customer portal with your organization's website so your customers can automatically log in to your support site. Although your organization's web pages may be external to the customer portal, they can pass login parameters through the URL of the customer portal page. As a result, your customers do not have to complete a second login procedure to access your support site. Information sharing between your external site and the customer portal can be used to create and update contact records. To enable pass-through authentication, contact your Oracle account manager.
    - ▷ **Encrypted pass-through authentication**—Data encryption transmits customer information even more securely through the customer portal page URL using one of several encryption options. You can configure encrypted PTA so your customers can log in directly to the customer portal as well as log in with pass-through authentication from your external site. You also have the option of requiring cus-

tomers to log out through the external site or allowing them to log out from the customer portal. Your Oracle account manager can provide information about encrypted PTA.

- **SAML 2.0 open login (single sign-on)**—Instead of logging in to the customer portal with their Oracle Service Cloud user name and password, customers can log in to a third-party identity provider, such as PingFederate or Windows ADFS, which authenticates their identity. Then they select a connection to the customer portal. The identity provider verifies their login, sends an assertion to the customer portal, which verifies the signature and (if successful) logs the customer in. Contact your **administrator** to enable SAML 2.0 open login, and review Customer login for an overview of the feature.

LoginDialog widget

The LoginDialog widget, accessed by clicking the Login link from any customer portal page, lets customers log in using their Oracle Service Cloud user name and password or through open login. When customers click the “Log in using one of your existing accounts” link, they are taken to the Log In page.



Configuration options for the LoginDialog widget include the following.

- Remove the open login option.
- Edit labels on the widget.
- Remove the Password field.

Removing the open login option

To remove the open login option from the LoginDialog widget

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following lines of code.

```
<rn:condition hide_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink"/>
</rn:condition>
<rn:condition show_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink"
    redirect_url="/app/account/overview"/>
</rn:condition>
```

3 Add the *open_login_url* attribute to both LoginDialog widgets and set it to a null value. Your code will now look like the following.

```
<rn:condition hide_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink" open_login_url="" />
</rn:condition>
<rn:condition show_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink"
    redirect_url="/app/account/overview"
    open_login_url="" />
</rn:condition>
```

4 Save *standard.php*.

Editing labels on the LoginDialog widget

To edit labels on the LoginDialog widget

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following lines of code.

```
<rn:condition hide_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink"/>
</rn:condition>
<rn:condition show_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
```

```
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink"
    redirect_url="/app/account/overview"/>
</rn:condition>
```

3 The code you located in step 2 contains two LoginDialog widgets. Edit both widgets to make any of the following changes.

a To edit the “Please log in to continue” message, add the *label_dialog_title* attribute and set its value to your new message.

b To edit the “Log in using one of your existing accounts” message, add the *label_open_login_link* attribute and set its value to the new label.

c To edit the Username label, add the *label_username* attribute and set its value to the new label.

d To edit the Password label, add the *label_password* attribute and set its value to the new label.

e To edit the “Forgot your username or password?” message, add the *label_assistance* attribute and set its value to the new message.

4 Save *standard.php*.

Removing the Password field

To remove the Password field from the LoginDialog widget

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following lines of code.

```
<rn:condition hide_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink"/>
</rn:condition>
<rn:condition show_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink"
    redirect_url="/app/account/overview"/>
</rn:condition>
```

3 Add the *disable_password* attribute to both instances of the LoginDialog widget and set its value to true, as shown in the following code.

```
<rn:condition hide_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink" disable_password="true"/>
</rn:condition>
<rn:condition show_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink"
    redirect_url="/app/account/overview"
    disable_password="true"/>
</rn:condition>
```

4 Save *standard.php*.

5 Next, you'll want to change message bases that refer to passwords.

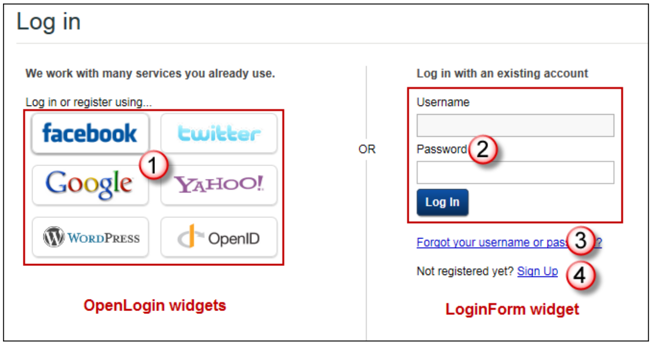
Log In page

When customers are logged in, they can access their account profile, previously submitted questions, and notifications. They can also change their password and view any **SLAs** associated with their account.

Important Customers will not be allowed to log in if their browsers do not accept cookies. Additionally, if CP_FORCE_PASSWORDS_OVER_HTTPS is enabled, as it is by default on new installations, customers will be redirected to the SSL version of your site for the duration of their visit.

When customers who are not logged in click the Your Account tab, the Log In page opens. Notice that the page contains OpenLogin widgets and the LoginForm widget.

Note The code for the default Log In page includes six OpenLogin widgets, but your page may not display all of these widgets if your site is not configured for Facebook, Twitter, and Google. The Facebook logo appears only if FACEBOOK_OAUTH_APP_ID and FACEBOOK_OAUTH_APP_SECRET have been defined on the **administration interface**. The Twitter logo appears only if TWITTER_OAUTH_APP_ID and TWITTER_OAUTH_APP_SECRET have been defined. And the Google logo appears only if GOOGLE_OAUTH_APP_ID and GOOGLE_OAUTH_APP_SECRET have been defined. Refer to Open login configuration settings.



On the Log In page, customers can perform the following tasks.

1. Use open login to log in with an existing external account from a third-party provider, such as Facebook, Twitter, or Google.
2. Enter their user name and password.
3. Request account assistance if they have forgotten their user name or password.
4. Create an account if they do not have one.

Once they have logged in, customers do not need to log in again during the current **web visit** as long as cookies are enabled and the visit has not expired. If cookies are disabled, customers must log in again whenever a visit ends (for example, if a customer closes the web browser or opens a different website and then returns to the customer portal). However, you can edit the code to maintain visit information when cookies are disabled.

The configuration options for the Log In page include the following.

- Edit the LoginForm widget.
  - ▷ Edit the Username, Password, and Log In button message bases.
  - ▷ Remove the Password field.
- Modify the open login widgets.
- Edit the other message bases on the page.
- Remove the Sign Up link.
- Edit the Sign Up link.
- Change the minimum password length.

If you are finished editing this page and want to configure another page on your customer portal, select the page you want to edit.

- Support Home Page
- Answers Page
- Answer Details Page
- Ask a Question Page
- Your Account Pages
- Live Help page or Chat page

Editing the LoginForm widget

The configuration options for the LoginForm widget include the following.

- Edit the Username, Password, and Log In button message bases.
- Remove the Password field.

When you're finished configuring the LoginForm widget, you can continue configuring the Log In page.

Editing LoginForm message bases

To edit LoginForm message bases

1 Open the *login_form.php* file in the */views/pages/utils* folder.

2 Locate the following line of code.

```
<rn:widget path="login/LoginForm"
redirect_url="/app/account/overview"
initial_focus="true"/>
```

3 To change the Username label, add the *label_username* attribute to the LoginForm widget and set the value equal to the replacement label you want to use.

4 To change the Password label, add the *label_password* attribute to the LoginForm widget and set the value equal to the replacement label you want to use.

5 To change the Log In button's label, add the *label_login_button* attribute to the LoginForm widget and set the value equal to the replacement label you want to use. Your edited code may resemble the following.

```
<rn:widget path="login/LoginForm"
redirect_url="/app/account/overview"
initial_focus="true"
label_username="Your name"
label_password="Your password"
```

```
label_login_button="Log In Now" />
```

6 Save *login_form.php*.

Continue configuring the LoginForm widget or Continue configuring the Log In page.

Removing the Password field

If your organization does not require your customers to have passwords, you may want to remove the Password field from the Log In page. You can easily remove the Password field from the Log In and Create an Account pages by setting the value of EU_CUST_PASSWD_ENABLED to No. If you want to remove the Password field from only the Log In page, leave the configuration setting at its default value of Yes and remove it from the page using the following procedure. The value of the LoginForm widget's *disable_password* attribute overrides the value of the configuration setting.

Note If you remove the Password field, any customers who already have passwords will still be able to log in with only their user name.

To remove the Password field from the Log In page

1 Open the *login_form.php* file in the */views/pages/utils* folder.

2 Locate the following line of code.

```
<rn:widget path="login/LoginForm"
redirect_url="/app/account/overview"
initial_focus="true"/>
```

3 Add the *disable_password* attribute to the LoginForm widget and set its value to true, as shown in the following code.

```
<rn:widget path="login/LoginForm"
redirect_url="/app/account/overview"
initial_focus="true"
disable_password="true"/>
```

4 Save *login_form.php*.

5 Next, you'll want to change message bases that refer to passwords.

Changing message bases after removing the Password field

Removing the Password field on the Log In page (by setting the LoginForm widget attribute, by removing it from the LoginDialog widget, or by setting EU_CUST_PASSWD_ENABLED to No) does not automatically change the message bases within the customer portal that still refer to passwords. You will want to edit or remove the following links to remove password references when you remove the Password field.

- Forgot Your Username or Password? link on the Log In page
- Forgot Your Username or Password? link on the LoginDialog widget
- Change Your Password link on the Account Overview page
- Change Your Password link on the Account Settings page

Continue configuring the LoginForm widget or Continue configuring the Log In page.

Changing the password link on the Log In page

To change the password link on the Log In page

1 Open the *login_form.php* file in the */views/pages/utils* folder.

2 Locate the following line of code.

```
<a href="/app/
#rn:config:CP_ACCOUNT_ASSIST_URL##rn:session#">#rn:msg:FORGOT_YOUR_
USERNAME_OR_PASSWORD_MSG#</a>
```

3 Edit the message base to resemble the following.

```
<a href="/app/#rn:config:CP_ACCOUNT_ASSIST_URL##rn:session#">Forgot
your username?</a>
```

4 Save *login_form.php*.

Continue changing messages to remove password references or Continue configuring the LoginForm widget.

Changing the password link on the LoginDialog widget

To change the password link on the LoginDialog widget

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following lines of code.

```
<rn:condition hide_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
```

```
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink"/>
</rn:condition>
<rn:condition show_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink" redirect_url="/app/account/
    overview"/>
</rn:condition>
```

3 Add the *label_assistance* attribute to both instances of the LoginDialog widget. Your code will resemble the following.

```
<rn:condition hide_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink"
    label_assistance="Forgot your username?"/>
</rn:condition>
<rn:condition show_on_pages="utils/create_account, utils/login_form,
utils/account_assistance">
    <rn:widget path="login/LoginDialog"
    trigger_element="rn_LoginLink"
    redirect_url="/app/account/overview"
    label_assistance="Forgot your username?"/>
</rn:condition>
```

Note There are two LoginDialog widgets in the template code. The second instance, containing the *redirect_url* attribute, is displayed when invoked from the Login Form, Create Account, and Account Assistance pages. If you want to change the link text only when the dialog is invoked from these three pages, add the *label_assistance* attribute only to the second instance. The first instance is used on all other pages.

4 Save *standard.php*.

Continue changing messages to remove password references or Continue configuring the LoginForm widget.

Removing the password link on the Account Overview page

To remove the password link on the Account Overview page

1 Open the *overview.php* file in the */views/pages/account* folder.

2 Delete the following lines of code.

```
<rn:condition external_login_used="false">
    <rn:condition config_check="RNW_UI:EU_CUST_PASSWD_ENABLED ==
    true">
        <a href="/app/account/
        change_password#rn:session#">#rn:msg:CHANGE_YOUR_PASSWORD_CMD
        #</a>
    </rn:condition>
</rn:condition>
```

3 Save *overview.php*.

Continue changing messages to remove password references or Continue configuring the LoginForm widget.

Removing the password link on the Account Settings page

To remove the password link on the Account Settings page

1 Open the *profile.php* file in the */views/pages/account* folder.

2 Delete the following lines of code.

```
<rn:condition external_login_used="false">
    <rn:condition config_check="RNW_UI:EU_CUST_PASSWD_ENABLED ==
    true">
        <a href="/app/account/
        change_password#rn:session#">#rn:msg:CHANGE_YOUR_PASSWORD_CMD
        #</a>
    </rn:condition>
</rn:condition>
```

3 Save *profile.php*.

Continue changing messages to remove password references or Continue configuring the LoginForm widget.

Editing other message bases on the Log In page

To edit other message bases on the Log In page

1 Open the *login_form.php* file in the */views/pages/utils* folder.

2 To edit the “Log In” heading, locate the following line of code and type the new heading between the `<h1>` tags.

```
<h1>#rn:msg:LOG_IN_UC_LBL#</h1>
```

3 To edit the “We work with many services you already use” message, locate the following line of code and type the new message between the `<h2>` tags.

```
<h2>#rn:msg:SERVICES_MSG#</h2>
```

4 To edit the “Log in or register using…” message, locate the following line of code and type the new message between the `<br>` tags.

```
<br/>#rn:msg:LOG_IN_OR_REGISTER_USING_ELLIPSIS_MSG#<br/>
```

5 To edit the “Log in with an existing account” message, locate the following line of code and type the new message between the `<h2>` tags.

```
<h2>#rn:msg:LOG_IN_WITH_AN_EXISTING_ACCOUNT_LBL#</h2><br/>
```

6 To change the “Not registered yet?” heading, locate the following line of code and replace it with the new message.

```
#rn:msg:NOT_REGISTERED_YET_MSG#
```

7 Save *login_form.php*.

Continue configuring the Log In page.

Removing the Sign Up link

To remove the Sign Up link from the Log In page

1 Open the *login_form.php* file in the */views/pages/utils* folder.

2 Delete the following lines of code.

```
#rn:msg:NOT_REGISTERED_YET_MSG#
<a href="/app/utils/create_account/redirect/
<?=urlencode(\RightNow\Utils\Url::getParameter('redirect'));?>#rn:ses
sion#">#rn:msg:SIGN_UP_LBL#</a>
```

3 Save *login_form.php*.

Continue configuring the Log In page.

Editing the Sign Up link label

To edit the label on the Sign Up link

1 Open the *login_form.php* file in the */views/pages/utils* folder.

2 Locate the following line of code.

```
#rn:msg:NOT_REGISTERED_YET_MSG#
<a href="/app/utils/create_account/redirect/
<?=urlencode(\RightNow\Utils\Url::getParameter('redirect'));?>#rn:ses
sion#">#rn:msg:SIGN_UP_LBL#</a>
```

3 Replace `#rn:msg:SIGN_UP_LBL#` with the new label you want to appear on the button.

4 Save *login_form.php*.

Continue configuring the Log In page.

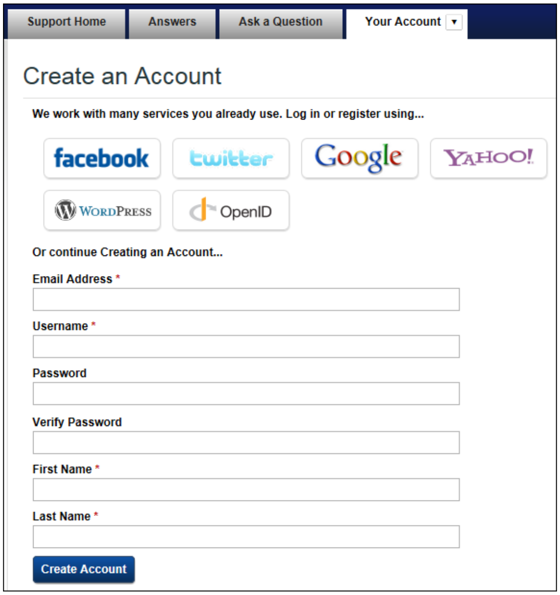
Create an Account page

Customers can open the Create an Account page by clicking the Sign Up link on the Log In page or in the upper right corner of any customer portal page. Just as the Log In page and the LoginDialog widget let your customers use an external service provider to log in to the customer portal, so does the Create an Account page. You can also add fields to this page (including a global **opt-in** selection), remove fields, and edit labels and message bases.

Configuration options on the Create an Account page include the following.

- Modifying the open login widgets
- Editing the heading
- Adding fields
- Removing fields
- Editing the password label to specify password length
- Preventing user name enumeration (automatic retrieval of user names for malicious purposes)

When you're finished configuring this page, you can select another page to configure.



Editing the heading

To edit the Create an Account heading

1 Open the *create_account.php* file in the */views/pages/utils* folder.

2 Locate the following line of code.

```
<h1>#rn:msg:CREATE_AN_ACCOUNT_CMD#</h1>
```

3 Type the replacement heading for the page between the `<h1>` tags.

4 Save *create_account.php*.

Continue configuring the Create an Account page.

Adding fields

You can add fields to the Create an Account page, including a global **opt-in** selection, as well as additional contact and organization fields.

To add a global opt-in field on the Create an Account page

1 Open the *create_account.php* file in the */views/pages/utils* folder.

2 Locate the following lines of code.

```
<rn:widget path="input/CustomAllInput"
table="Contact"/>
<rn:widget path="input/FormSubmit"
label_button="#rn:msg:CREATE_ACCT_CMD#" on_success_url="/app/account/
overview"
error_location="rn_ErrorLocation"/>
```

3 Add a FormInput widget between the lines you located in step 2 to ask customers if they want to be on your mailing list. The following sample code adds the widget and also changes the label from the default Global Opt-In.

```
<rn:widget path="input/FormInput"
name="Contact.MarketingSettings.MarketingOptIn"
label_input="Can we add you to our mailing list?" />
```

4 Save *create_account.php*.

To add fields on the Create an Account page

1 Open the *create_account.php* file in the */views/pages/utils* folder.

2 To add a contact field, add a line of code that calls the FormInput widget. For example, you might want to add alternate email address fields and the customer's mailing address to the page. In this case, you would add the following code to the block of FormInput widgets for contact fields.

Note To find the names of all the contact fields you can use for the FormInput widget, click Framework > Business Objects on the Customer Portal Administration site. Refer to [Business objects](#).

```
<rn:widget path="input/FormInput" name="Contact.Emails.ALT1.Address"
label_input="Alternate Email 1" />
<rn:widget path="input/FormInput" name="Contact.Emails.ALT2.Address"
label_input="Alternate Email 2" />
```

```
<rn:widget path="input/FormInput" name="Contact.Address.Street" />
<rn:widget path="input/FormInput" name="Contact.Address.City" />
<rn:widget path="input/FormInput"
name="Contact.Address.StateOrProvince" label_input="State or
Province" />
<rn:widget path="input/FormInput" name="Contact.Address.PostalCode" /
>
```

Note If you want the Street field to allow the entry and display of multiple lines, add the *textarea* attribute to the FormInput widget so your code is as follows.

```
<rn:widget path="input/FormInput"
name="Contact.Address.Street" textarea="true" />
```

3 To add an organization login and password so your customers can be associated with an organization, add the following lines of code. (Customers cannot enter the organization's name, so they must know the login and password before they can be associated with an organization.)

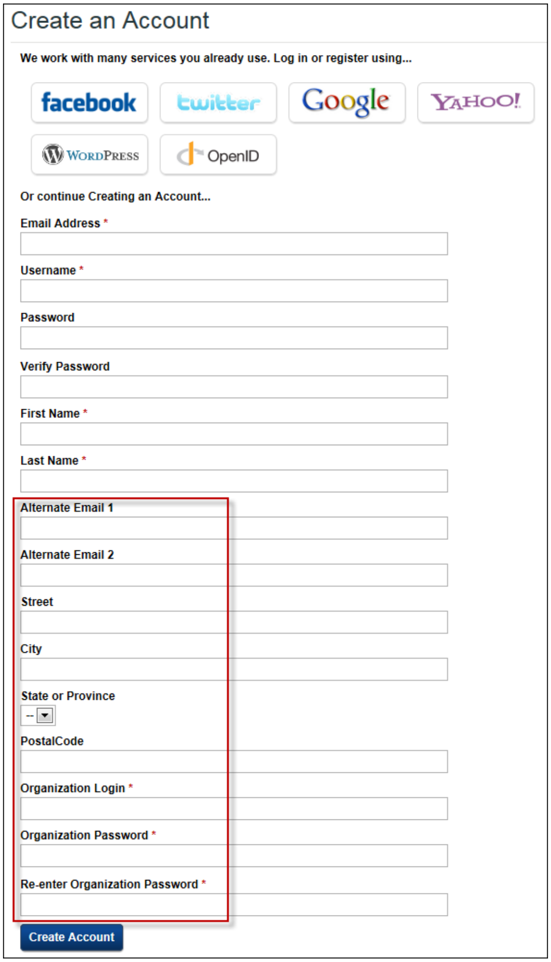
```
<rn:widget path="input/FormInput" name="Contact.Organization.Login"
label_input="Organization Login" />
<rn:widget path="input/FormInput"
name="Contact.Organization.NewPassword" label_input="Organization
Password" />
```

Note If organizations in your knowledge base have passwords and you want to let your customers create an organization association when they create an account, you must be sure to include the organization password on the page. If you do not, they will be prevented from making the association.

4 To make the organization login and password required fields, replace the code in step 3 with the following code.

```
<rn:widget path="input/FormInput" name="Contact.Organization.Login"
required="true" label_input="Organization Login" />
<rn:widget path="input/FormInput"
name="Contact.Organization.NewPassword" required="true"
label_input="Organization Password" />
```

5 Save *create_account.php*.



[Continue configuring the Create an Account page.]()

Removing fields

To remove fields on the Create an Account page

1 Open the *create_account.php* file in the */views/pages/utils* folder.

2 To remove the Email Address field, delete the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
validate_on_blur="true"
initial_focus="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
```

3 To remove the Username field, delete the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.Login"
required="true"
validate_on_blur="true"
label_input="#rn:msg:USERNAME_LBL#"/>
```

4 To remove the Password and Verify Password fields, delete the following lines of code.

```
<rn:condition config_check="EU_CUST_PASSWD_ENABLED == true">
    <rn:widget path="input/FormInput"
    name="Contact.NewPassword"
    require_validation="true"
    label_input="#rn:msg:PASSWD_LBL#"
    label_validation="#rn:msg:VERIFY_PASSWD_LBL#"/>
</rn:condition>
```

5 To remove the First Name and Last Name fields, delete the following lines of code.

```
<rn:condition config_check="intl_nameorder == 1">
    <rn:widget path="input/FormInput"
    name="Contact.Name.Last"
    label_input="#rn:msg:LAST_NAME_LBL#"
    required="true"/>
    <rn:widget path="input/FormInput"
    name="Contact.Name.First"
    label_input="#rn:msg:FIRST_NAME_LBL#"
    required="true"/>
<rn:condition_else/>
    <rn:widget path="input/FormInput"
    name="Contact.Name.First"
    label_input="#rn:msg:FIRST_NAME_LBL#"
    required="true"/>
    <rn:widget path="input/FormInput"
    name="Contact.Name.Last" label_input="#rn:msg:LAST_NAME_LBL#"
    required="true"/>
</rn:condition>
```

6 To remove all contact custom fields with end-user visibility, delete the following line of code.

```
<rn:widget path="input/CustomAllInput"
table="Contact"/>
```

7 Save *create_account.php*.

Continue configuring the Create an Account page.

Editing the password label to specify password length

If you set a minimum password length that customers must enter when they're creating an account or changing their password, passwords are automatically required. You may want to edit the label on the Create an Account and Change Your Password pages so customers know how long their password must be before they enter one.

To edit the password label on the Create an Account page

1 Open the *create_account.php* file in the */views/pages/utils* folder.

2 Locate the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.NewPassword"
require_validation="true"
label_input="#rn:msg:PASSWORD_LBL#"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"/>
```

3 Edit the *label_input* attribute of the FormInput widget to define password length information. Your code will resemble the following.

```
<rn:widget path="input/FormInput"
name="Contact.NewPassword"
require_validation="true"
label_input="Password (8 characters minimum)"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"/>
```

4 Save *create_account.php*.

Continue configuring the Create an Account page.

To edit the password label on the Change Your Password page

1 Open the *change_password.php* file in the */views/pages/account* folder.

2 Locate the following line of code.

```
<rn:widget path="input/PasswordInput"
name="Contact.NewPassword"
require_validation="true"
require_current_password="true"
```

```
label_input="#rn:msg:PASSWORD_LBL#"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"
initial_focus="true"/>
```

3 Edit the *label_input* attribute of the PasswordInput widget to define password length information. Your code will resemble the following.

```
<rn:widget path="input/PasswordInput"
name="Contact.NewPassword"
require_validation="true"
require_current_password="true"
label_input="Password (8 characters minimum)"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"
initial_focus="true"/>
```

Note Even if you leave the *required* attribute set to false, setting a minimum password length on the administration interface causes the configuration setting to override the attribute. Refer to Configuring password requirements.

4 Save *change_password.php*.

Preventing user name enumeration

User name enumeration is an automated attempt to retrieve user names in your database for malicious purposes. By default, the entry of an existing user name on the Create an Account page triggers a warning that the user name already exists, and the warning appears as soon as the focus shifts to another field. While this is useful to your customers because they don't have to complete the entire page before learning that they need to select another user name, you may decide that the security risk is greater than customer convenience. If that is the case, you can add barriers to prevent the automated harvesting of user names.

Two changes to the Create an Account page can accomplish this. The first is removing the *validate_on_blur* attribute, which prevents the message from appearing until the entire form is completed and submitted. The second is requiring a CAPTCHA validation on every submit.

To prevent user name enumeration

1 Open the *create_account.php* file in the */views/pages/utils* folder.

2 Locate the following lines of code.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
```

```
validate_on_blur="true"
initial_focus="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
<rn:widget path="input/FormInput"
name="Contact.Login" required="true"
validate_on_blur="true"
label_input="#rn:msg:USERNAME_LBL#"/>
```

3 Remove the *validate_on_blur* attribute for both widgets located in step 2 so the code now reads as follows.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true" initial_focus="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
<rn:widget path="input/FormInput"
name="Contact.Login"
required="true"
label_input="#rn:msg:USERNAME_LBL#"/>
```

4 Locate the following line of code.

```
<rn:widget path="input/FormSubmit"
label_button="#rn:msg:CREATE_ACCT_CMD#"
on_success_url="/app/account/overview"
error_location="rn_ErrorLocation"/>
```

5 Edit the FormSubmit widget code to add the *challenge_required* attribute. Your edited code now reads as follows.

```
<rn:widget path="input/FormSubmit"
label_button="#rn:msg:CREATE_ACCT_CMD#"
on_success_url="/app/account/overview"
error_location="rn_ErrorLocation"
challenge_required="true" />
```

Note To learn about CAPTCHAs, see Web form security.

6 Save *create_account.php*.

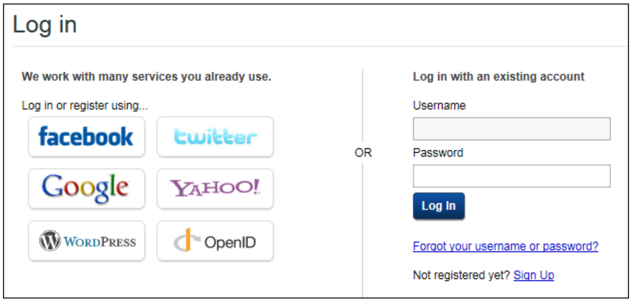
Continue configuring the Create an Account page.

Customer portal open login

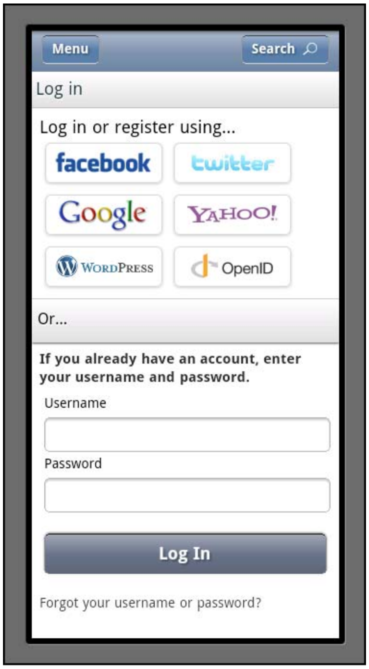
The open login feature lets your customers create an **account** in Oracle Service Cloud or log in to the customer portal by logging in through an external service provider where they already have an account, such as Facebook, Twitter, or Google. By using the external service to authenticate customers instead of requiring them to create a separate customer portal account, you offer your customers a faster, more convenient experience. Although Oracle Service Cloud creates **contact** records with information passed from the external service, that process occurs automatically and is invisible to customers.

The list of external services from which the customer portal accepts verified customer logins includes Facebook, Twitter, Google, Yahoo, WordPress, and most other OpenID sites. Customers who try to access a customer portal page that requires a password are presented with the Log In page, which offers them the option of logging in through one of the external services, in addition to the options of logging in to the customer portal with an existing account or signing up to create an account in Oracle Service Cloud. The OpenLogin widgets also appear on the Create an Account page.

OpenLogin widgets on the standard Log In page



OpenLogin widgets on the mobile login page



[Click here for an overview of open login.](#)

[Click here to configure the OpenLogin widgets.](#)

Overview of open login

The default Log In and Create an Account pages contain six OpenLogin widgets, each one associated with an external service provider, such as Facebook or Twitter. When customers click the Sign Up link, the Create an Account page opens. Instead of completing the contact information fields on the page to create their account, they can click a widget associated with an external account provider they already have. After being logged in to the external account, an **account** is created for them automatically in Oracle Service Cloud.

Customers on the Log In page can click one of the OpenLogin widgets to log in to their external provider, after which they will be automatically logged in to their Oracle Service Cloud account. If they do not yet have an account, one will be created for them automatically after they log in through the external provider.

Customers who click the Facebook, Twitter, Google, or Yahoo OpenLogin widgets see a message that tells them to log in to the external service and explains that they will then be redirected to your customer portal and logged in. When they click the button above the message, they are taken to the external site to log in (if they are not already logged in). The site asks for permission to send their email address and possibly their name, depending on the site, back to the customer portal. Customers who allow the transfer of information to Oracle Service Cloud are redirected to the customer portal and logged in automatically.

Important To allow customers to log in using Facebook, Twitter, and Google, you must define public IDs and private keys for the applications. Refer to Open login configuration settings.

Additionally, to use Facebook as an open login provider, you must migrate to OAuth 2.0, process a signed_request parameter, and obtain an SSL certificate. For the latest information about these requirements, refer to the Facebook Developer Roadmap Update.

If customers want to log in using their WordPress or OpenID account, they are asked to enter a user name or OpenID provider. Then, just as with the other open login sites, they are asked for permission to send their information to your support site. When they agree, they are logged in to the customer portal.

Note If you are opening your customer portal pages in iFrames, you should not use open login. Open login directs customers to a third-party site that then redirects them to the customer portal after verification. Because iFrames do not display a URL, customers cannot verify that the third-party login site is legitimate, and security issues are possible. Additionally, some open login providers do not allow their login page to be opened in an iFrame.

For a general discussion about iFrames and the Customer Portal, see Using iFrames.

How open login works

The Customer Portal uses the web industry protocols OAuth and OpenID to let customers log in from their existing accounts on external services. OAuth lets customers grant authorization for your customer portal to access their information from external sites where they have existing accounts. The Customer Portal supports OAuth 1.0 – 2.0.

OpenID lets customers log in to the site, which then confirms their identity to your customer portal, and also lets them specify what customer information can be shared.

Note Customer information includes, at a minimum, an email address, but may contain other information, such as the customer's full name. The specific information that is shared depends on which external service is the provider for the customer's account.

How contacts are created in the database

When the customer portal receives the customer's email address from the external provider, it creates a **contact** record in the Oracle database. (If the email address is not received, a contact cannot be created and customers see a message that asks them for their email address or lets them know an account was not created.) If the customer's name has been transferred from the site, that information is also added to the contact record. The Login field of the record on the **agent desktop** (which is the Username field on the customer portal) is populated with the customer's email address, and the password is null.

Important Customers whose contact record has been disabled on the agent desktop cannot log in through open login.

Customers can continue to log in through open login with a null password, but they cannot log in to the customer portal directly until they set a password using the standard customer portal protocol. Customers who log in through open login can create a password on the customer portal by clicking the Change Your Password link on the Account Settings page. They can then log in to the customer portal using their login and password, or they can continue to log in through open login.

Oracle Service Cloud keeps track of all open login accounts a customer uses to prevent duplicate contact records. When a customer's email address is provided from the external service and it matches an email address in the database, the application finds the existing contact and adds a new channel or OpenId for the customer. The database table *openid_accounts* keeps track of the different OpenID accounts customers use to log in by mapping OpenIDs to contact IDs.

Initial login

When customers log in to the customer portal using open login, the following events occur the first time they log in from the selected service provider.

1 The customer attempts to access a password-protected customer portal page and is directed to the Log In page. Or, the customer clicks the Sign Up link, opening the Create an Account page.

2 The customer selects one of the open login options.

3 If the customer is not logged in to the external service provider, the third-party login page opens to allow login, and the provider verifies the customer's identity.

4 The external service lets the customer know that the customer portal is requesting specific account information and asks the customer for permission to share that information.

5 When the customer grants permission for the external site to share information with the customer portal, the site gives the customer's information to Oracle Service Cloud.

6 A contact record for the customer is created in the database using the email address and, if available, the customer's name. The contact record uses the customer's email address as the login/username with a null password. The customer is logged in to the customer portal.

Subsequent logins

After customers have logged in to the customer portal using one of their accounts with an external service, the following events occur when they use open login again with the same account.

1 The customer tries to access the customer portal by logging in through an external site.

2 The external site verifies the customer and sends the customer's information to the customer portal. If the customer previously gave permission for more than one-time use, this step occurs automatically and the customer does not see the provider page, but is logged in to the customer portal and directed to the Support Home page.

3 The customer portal looks up the customer using the account's user ID (provided by Twitter and Facebook and stored as contact2channel_type.userid) or the OpenID URL (used by Google, Yahoo, and other OpenID providers, stored as openid_account.openid_url).

4 The customer portal then checks the customer's login, which should still be the email address, as it was when the contact record was created. If the login is blank for any reason (for example, a staff member deleted it), the login field is repopulated with the customer's email address.

5 The customer's email address, as received from the external site, is checked against the email address in the database. If the two addresses do not match, the contact record is updated with the email address from the external site. However, the customer's login, which is the original email address, is *not* updated.

6 If the customer does not have a first or last name in the database but that information is received from the external service, the first name and last name fields are updated in the database.

The process is slightly different when customers use an open login from a different external site than the one used to create the contact record in Oracle Service Cloud. If the open login account the customer is using on this visit does not match other open logins associated with the contact record, the account's OpenID URL is added to the contact record.

Note By default, customers who use external login to access your customer portal, whether through open login or pass-through authentication, cannot edit their account information on the Account Settings (*profile.php*) page. If you remove the external login condition on the FormSubmit button—which we recommend against doing—you must also add the *allow_external_login_updates* attribute before the Save Changes button is available to customers. See Allowing customer edits after PTA and open login.

Email address sharing

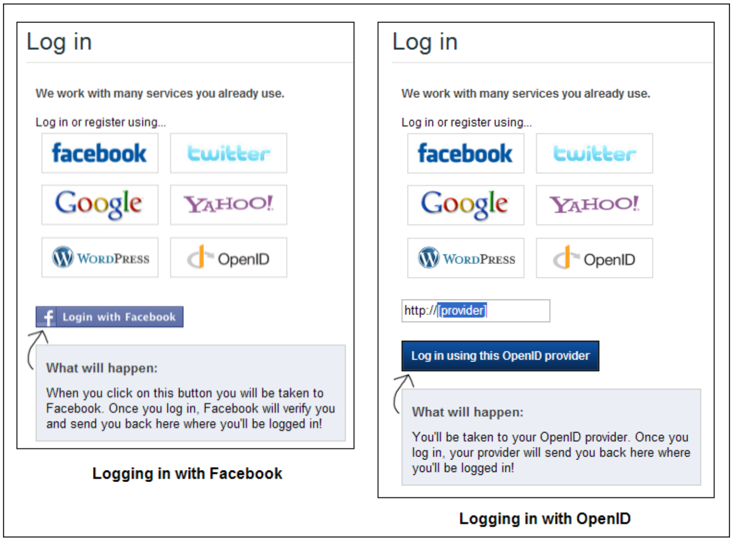
When email address sharing is enabled (refer to Allowing duplicate email addresses) and the external site returns an email address that already exists in the database, the first contact record with that email address is updated with the open login channel or URL. (Refer to the flowchart in Email address sharing to see how the associated contact is determined.)

Editing the OpenLogin widgets

Six OpenLogin widgets appear on the Log In page of the standard and mobile reference implementations, and also on the Create an Account pages of both page sets. There's a separate widget for every open login provider, so you can configure these pages to include only the open login providers you want.

Note The code for the default Log In page includes six OpenLogin widgets, but your page may not display all of these widgets if your site is not configured for Facebook and Twitter use. The Facebook logo appears only if FACEBOOK_OAUTH_APP_ID and FACEBOOK_OAUTH_APP_SECRET have been defined on the **administration interface**. The Twitter logo appears only if TWITTER_OAUTH_APP_ID and TWITTER_OAUTH_APP_SECRET have been defined. And the Google logo appears only if GOOGLE_OAUTH_APP_ID and GOOGLE_OAUTH_APP_SECRET have been defined. Refer to Open login configuration settings.

When customers click one of the open login options, a message explains what will happen. The information is slightly different depending on the external service the customer selects. The following figure shows Facebook and OpenID selections.



Logging in with Facebook

Logging in with OpenID

The following configuration options are available for open login.

- Remove all OpenLogin widgets from the Log In page.
- Remove all OpenLogin widgets from the Create an Account page.
- Remove selected OpenLogin widgets from the Log In or Create an Account page.
- Configure individual OpenLogin widgets. You can modify the following for each of the OpenLogin widgets on the Log In page and the Create an Account page.
  - ▷ Change widget labels.
  - ▷ Populate text for OpenID provider URLs.
  - ▷ Specify the page where customers are redirected after successful login to the external provider.

Removing all OpenLogin widgets from the Log In page

To remove all OpenLogin widgets from the Log In page

1 Open the *login_form.php* file in the */views/pages/utils* folder.

2 Delete the following lines of code.

```
<div class="rn_Column rn_LeftColumn rn_ThirdPartyLogin">
    <h2>#rn:msg:SERVICES_MSG#</h2>
    <br/>#rn:msg:LOG_IN_OR_REGISTER_USING_ELLIPSIS_MSG#<br/>
```

```
<rn:widget path="login/OpenLogin"/> <? /* Attributes Default to
Facebook */ ?>

<rn:widget path="login/OpenLogin"
display_in_dialog="false"
controller_endpoint="/ci/openlogin/oauth/authorize/twitter"
label_service_button="Twitter"
label_process_explanation="#rn:msg:CLICK_BTN_TWITTER_LOG_TWITTER_
MSG#"
label_login_button="#rn:msg:LOG_IN_USING_TWITTER_LBL#"/>

<rn:widget path="login/OpenLogin"
display_in_dialog="false"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VE
RIFY_MSG#"
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#"/>

<rn:widget path="login/OpenLogin"
display_in_dialog="false"
controller_endpoint="/ci/openlogin/openid/authorize/yahoo"
label_service_button="Yahoo"
label_process_explanation="#rn:msg:CLICK_BTN_YAHOO_LOG_YAHOO_VERI
FY_MSG#"
label_login_button="#rn:msg:LOG_IN_USING_YAHOO_LBL#"/>

<rn:widget path="login/OpenLogin"
display_in_dialog="false"
controller_endpoint="/ci/openlogin/openid/authorize"
label_service_button="Wordpress"
openid="true"
preset_openid_url="https://[username].wordpress.com"
openid_placeholder="[#rn:msg:YOUR_WORDPRESS_USERNAME_LBL#]"
label_process_explanation="#rn:msg:YOULL_LOG_ACCT_WORDPRESS_TAB_E
NTER_MSG#"
label_login_button="#rn:msg:LOG_USING_YOUR_WORDPRESS_ACCOUNT_LBL#
"/>

<rn:widget path="login/OpenLogin"
display_in_dialog="false"
controller_endpoint="/ci/openlogin/openid/authorize"
label_service_button="OpenID"
openid="true" openid_placeholder="http://[provider]"
```

```
        label_process_explanation="#rn:msg:YOULL_OPENID_PROVIDER_LOG_PROV
        IDER_MSG#"
        label_login_button="#rn:msg:LOG_IN_USING_THIS_OPENID_PROVIDER_LBL
        #"/>

    </div>
    <span class="rn_MiddleBuffer">#rn:msg:OR_CAPS_LBL#</span>
    <div class="rn_Column rn_RightColumn">
```

3 Save *login_form.php*.

Continue configuring the Log In page.

Removing all OpenLogin widgets from the Create an Account page

To remove all OpenLogin widgets from the Create an Account page

1 Open the *create_account.php* file in the */views/pages/utils* folder.

2 Delete the following lines of code.

```
<div class="rn_Padding">
    <p><strong>#rn:msg:SERVICES_MSG#
    #rn:msg:LOG_IN_OR_REGISTER_USING_ELLIPSIS_MSG#</strong></p>
    <div class="rn_ThirdPartyLogin">

        <rn:widget path="login/OpenLogin"/>

        <rn:widget path="login/OpenLogin"
        controller_endpoint="/ci/openlogin/oauth/authorize/twitter"
        label_service_button="Twitter"
        label_process_explanation="#rn:msg:CLICK_BTN_TWITTER_LOG_TWIT
        TER_MSG#"
        label_login_button="#rn:msg:LOG_IN_USING_TWITTER_LBL#"/>

        <rn:widget path="login/OpenLogin"
        controller_endpoint="/ci/openlogin/openid/authorize/google"
        label_service_button="Google"
        label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGL
        E_VERIFY_MSG#"
        label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#"/>

        <rn:widget path="login/OpenLogin"
        controller_endpoint="/ci/openlogin/openid/authorize/yahoo"
        label_service_button="Yahoo"
```

```
        label_process_explanation="#rn:msg:CLICK_BTN_YAHOO_LOG_YAHOO_
        VERIFY_MSG#"
        label_login_button="#rn:msg:LOG_IN_USING_YAHOO_LBL#"/>

        <rn:widget path="login/OpenLogin"
        controller_endpoint="/ci/openlogin/openid/authorize"
        label_service_button="Wordpress"
        openid="true"
        preset_openid_url="https://[username].wordpress.com"
        openid_placeholder="[#rn:msg:YOUR_WORDPRESS_USERNAME_LBL#]"
        label_process_explanation="#rn:msg:YOULL_LOG_ACCT_WORDPRESS_T
        AB_ENTER_MSG#"
        label_login_button="#rn:msg:LOG_USING_YOUR_WORDPRESS_ACCOUNT_
        LBL#"/>

        <rn:widget path="login/OpenLogin"
        controller_endpoint="/ci/openlogin/openid/authorize"
        label_service_button="OpenID"
        openid="true"
        openid_placeholder="http://[provider]"
        label_process_explanation="#rn:msg:YOULL_OPENID_PROVIDER_LOG_
        PROVIDER_MSG#"
        label_login_button="#rn:msg:LOG_IN_USING_THIS_OPENID_PROVIDER
        _LBL#"/>

    </div>
    <p><strong>#rn:msg:CONTINUE_CREATING_ACCOUNT_ELLIPSIS_CMD#</
    strong></p>
```

3 Save *create_account.php*.

Continue configuring the Create an Account page.

Removing selected OpenLogin widgets from a page

To remove selected OpenLogin widgets from the Log In or Create an Account page

1 Open the *login_form.php* file in the */views/pages/utils* folder.

Or

Open the *create_account.php* file in the */views/pages/utils* folder.

2 Identify the widgets you want to remove. The code `<rn:widget path="login/OpenLogin"/>` is for the Facebook widget. All other widgets include the provider's name in the *controller_endpoint, label_service_button, label_process_explanation,* and *label_login_button* attributes. For example, here is the widget to log in with a Google account as it appears on the Log In page.

```
<rn:widget path="login/OpenLogin" display_in_dialog="false"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#"/>
```

And here is the code for the Create an Account page. Notice the absence of the *display_in_dialog* attribute, which is enabled by default.

```
<rn:widget path="login/OpenLogin"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#"/>
```

3 Delete the lines of code associated with open login providers you want to remove from the page.

4 Save the page.

Continue configuring OpenLogin widgets or Return to configuring the Log In page or Return to configuring the Create an Account page.

Changing labels on OpenLogin widgets

This procedure uses the Google OpenLogin widget as an example, but you can use the same method to edit labels on all OpenLogin widgets.

To change labels on OpenLogin widgets

1 Open the *login_form.php* file in the */views/pages/utils* folder.

Or

Open the *create_account.php* file in the */views/pages/utils* folder.

2 Locate the code for the widget you want to edit. This example from the Log In page uses the Google widget.

```
<rn:widget path="login/OpenLogin"
display_in_dialog="false"
```

```
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#"/>
```

Note Remember that OpenLogin widgets on the Create an Account page do not contain the *display_in_dialog* attribute.

3 To change the label on the login button (in this example, "Log in using Google"), edit the *label_login_button* attribute. Your code will resemble the following.

```
<rn:widget path="login/OpenLogin"
display_in_dialog="false"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
label_login_button="Use Google to log in now"/>
```

4 To change the label that explains the process to customers (in this example, "When you click on this button you will be taken to Google. Once you log in, Google will verify you and send you back here where you'll be logged in!"), edit the *label_process_explanation* attribute.

```
<rn:widget path="login/OpenLogin"
display_in_dialog="false"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="Google will verify you and log you in
instantly."
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#"/>
```

5 To change the "What will happen:" label in the explanation area, add the *label_process_header* attribute. Your code will resemble the following.

```
<rn:widget path="login/OpenLogin" display_in_dialog="false"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#"
label_process_header="Why it is okay to do this" />
```

6 To edit the email labels that appear when the service provider authenticates the customer but does not provide the customer's email address, add any of the following widget attributes to the code: *label_email_address, label_email_prompt, label_email_prompt_cancel_button, label_email_prompt_submit_button,* and *label_email_prompt_title*. Your code might resemble the following.

```
<rn:widget path="login/OpenLogin" display_in_dialog="false"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#"
label_email_prompt="We'll get you started just as soon as you enter
your email address." />
```

7 To change the text label that is hidden by the service provider's logo, edit the *label_service_button* attribute.

8 Save the page.

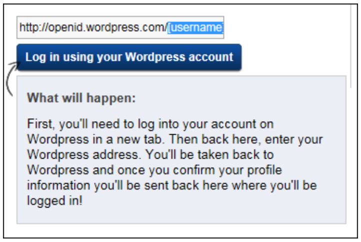
Continue configuring OpenLogin widgets or Return to configuring the Log In page or Return to configuring the Create an Account page.

Populating and pre-setting OpenID URLs

By default, the WordPress and OpenID widgets use the OpenID protocol and therefore have the *openid* attribute set to true.

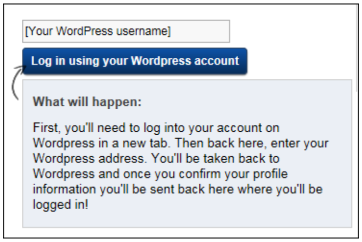
Using the *openid_placeholder* attribute of the OpenLogin widget, you can preset the URL that displays when an OpenID widget opens, where the URL contains a space for the user name. For example, for the WordPress OpenLogin widget, you would edit the widget code to remove the *preset_openid_url* attribute and include:

```
openid_placeholder="https://openid.wordpress.com/[username]"
```



However, you might want the increased security of hiding the URL so the customer sees only a user name field to complete. The *preset_openid_url* attribute defines the URL but does not expose it on the page. The reference implementation uses the following attributes to hide the URL and name the default placeholder "Your WordPress username." That widget code includes the following attributes:

```
preset_openid_url="https://openid.wordpress.com/[username]"
openid_placeholder="[#rn:msg:YOUR_WORDPRESS_USERNAME_LBL#]"
```



Continue configuring OpenLogin widgets or Return to configuring the Log In page or Return to configuring the Create an Account page.

Specifying the redirect page

After customers log in successfully to their open login provider, they are returned to the customer portal page they tried to access originally. The *redirect_url* attribute lets you send them to a different page instead.

To redirect customers after login

1 Open the *login_form.php* file in the */views/pages/utils* folder.

Or

Open the *create_account.php* file in the */views/pages/utils* folder.

2 Locate the code for the widget you want to edit. This example uses the Google widget on the Log In page.

```
<rn:widget path="login/OpenLogin" display_in_dialog="false"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
```

```
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#"/>
```

Note Remember that OpenLogin widgets on the Create an Account page do not contain the *display_in_dialog* attribute.

3 Add the *redirect_url* attribute to the widget code setting the value to the page where you want customers to be redirected.

4 Save the page.

Continue configuring OpenLogin widgets or Return to configuring the Log In page or Return to configuring the Create an Account page.

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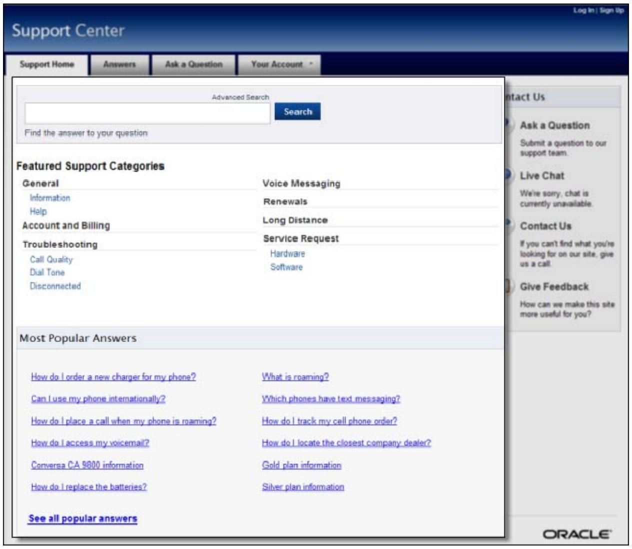
Support Home Page

The Support Home page is the entry point to your customer support portal. The default configuration for the Support Home page contains a search field where your customers can enter their search terms to search your **knowledge base** for **answers** that address their questions. It also contains a list of support **categories** they can drill down on for specific answers as well as the Most Popular Answers **report** that displays the list of answers most frequently viewed by your customers.

Note This page includes an off-screen <h1> tag that is made visible to screen readers using the rn_ScreenReaderOnly CSS class. This tag provides **accessible** navigation using shortcut keys for customers who use screen readers to access your customer portal pages. The content is not visible to sighted users unless styles are disabled.

For information about creating content that is hidden to all users except screen readers, refer to the WebAIM article [CSS in Action: Invisible Content Just for Screen Reader Users.]

Click to view



The other elements on the page—log in/sign up links, navigation tabs, Contact Us sidebar, and the Oracle logo, shown on the gray background of the figure—are part of the customer portal template.

You can configure the following areas on the Support Home page.

- The search field and search options
- The featured support categories
- The Most Popular Answers report

If you are finished editing this page and want to configure another page on your customer portal, select the page you want to edit.

- Answers Page
- Answer Details Page
- Ask a Question Page
- Your Account Pages
- Log In page
- Live Help page or Chat page

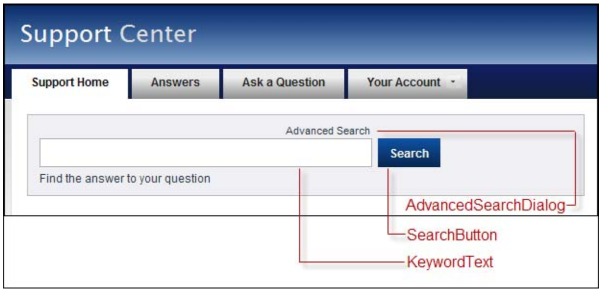
Configuring the search field

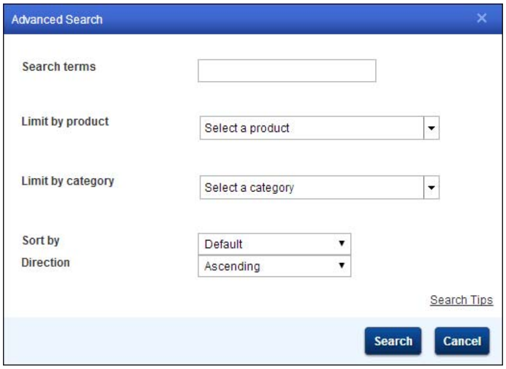
The search field on the Support Home page lets your customers search your **knowledge base** to find answers that match their search terms. Besides the search field and Search button, the search area also includes the Advanced Search dialog.

When customers enter search keywords on the Support Home page, the search parameters are remembered while the customer navigates among the search results pages. If the customer navigates away from the search results and then returns to the Answers page, previous search parameters are not maintained. If customers want to return to earlier search results, they must use the Back button on the browser.

If customers click the Advanced Search link, the options they select on that dialog—which include **products**, **categories**, and sorting options—are remembered as well. However, if they select advanced search options and then close the Advanced Search dialog or click the Cancel button, the search options revert to the values they had when the page was originally loaded.

Three widgets make up the search field on the Support Home page. These include AdvancedSearchDialog, KeywordText, and SearchButton. By modifying the attributes of these widgets, you can make several changes to the search field.





Do you want to let your customers search the knowledge base from the Support Home page?

- **Yes.** This is the default, so you can continue configuring other sections of the Support Home page.
- **Yes,** but I want to change labels or messages on the search field.
- **Yes,** but I want to change the search report that opens.
- **Yes,** but I want to edit the search filters display.
- **No.** I want to remove the search field from the Support Home page.

When you're finished with the search field, continue configuring the Support Home page.

Editing labels and message bases

The search field is comprised of the AdvancedSearchDialog, KeywordText, and SearchButton widgets. By modifying their attributes, you can change the following labels and messages.

- The Search button label
- The default search message
- The Advanced Search link label
- Labels on the Advanced Search window
- The Search Tips page

When you're finished with labels and messages, continue configuring the search field.

Editing the Search button label

To edit the Search button label

1 Open the *home.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="search/SearchButton"
report_page_url="/app/answers/list"/>
```

3 Edit the code to add the *label_button* attribute with the text you want to display on the button. Your new code will resemble the following.

```
<rn:widget path="search/SearchButton"
label_button="Find All Answers"
report_page_url="/app/answers/list" />
```

4 Save *home.php*.

Continue editing search field labels and messages or Continue configuring the search field.

Editing the default search message

The default search message is "Find the answer to your question." You can change this message if you want.

To edit the default search message

1 Open the *home.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="search/KeywordText"
label_text="#rn:msg:FIND_THE_ANSWER_TO_YOUR_QUESTION_CMD#"
initial_focus="true" />
```

3 Select the text between the quotation marks for the *label_text* attribute and type the text you want to display. Your new code will resemble:

```
<rn:widget path="search/KeywordText"
label_text="Search all answers."
initial_focus="true" />
```

4 Save *home.php*.

Continue editing search field labels and messages or Continue configuring the search field.

Editing the Advanced Search link

To edit the label for the Advanced Search link

1 Open the *home.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="search/AdvancedSearchDialog"
report_page_url="/app/answers/list"/>
```

3 Add a *label_link* attribute to the AdvancedSearchDialog widget code. Your new code will resemble the following.

```
<rn:widget path="search/AdvancedSearchDialog"
report_page_url="/app/answers/list"
label_link="Advanced Searching Options"/>
```

4 Save *home.php*.

Continue editing search field labels and messages or Continue configuring the search field.

Configuring labels on the Advanced Search dialog

The text of labels on the Advanced Search window can be modified by adding label parameters to the AdvancedSearchDialog widget code.

The code for the AdvancedSearchDialog widget is:

```
<rn:widget path="search/AdvancedSearchDialog" report_page_url="/app/
answers/list"/>
```

The *report_page_url* attribute is an attribute of the AdvancedSearchDialog, which you'll see when you go to the widget definition page at:

https://<your_site>/ci/tags/widgets/standard/search/AdvancedSearchDialog

However, you won't see the *show_confirm_button_in_dialog* attribute in the list of attributes for the AdvancedSearchDialog widget. The *show_confirm_button_in_dialog* attribute belongs to the ProductCategorySearchFilter widget, which is contained in the AdvancedSearchDialog widget. When a widget contains other widgets, you can use the attributes of the contained widgets in the widget definition.

To configure labels on the Advanced Search dialog

1 Open the *home.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="search/AdvancedSearchDialog"
```

```
report_page_url="/app/answers/list"/>
```

3 Add any or all of the following attributes of the AdvancedSearchDialog widget to make the following changes.

   a To change the Cancel button, add `label_cancel_button="New Cancel Button"` to the widget code.

   b To change the window title, add `label_dialog_title="New Window Title"` to the widget code.

   c To change the Search button, add `label_search_button="New Search Button"` to the widget code.

4 Save *home.php*.

Continue editing search field labels and messages or Continue configuring the search field.

Editing the Search Tips page

The Search Tips link on the Advanced Search window points to the default Search Tips page. You can edit the default page or create a different search tips page and change the URL that the link points to.

To edit the Search Tips page

1 Open the *help_search.php* file in the */views/pages/utils* folder.

2 Make whatever changes you want to the file.

Note The text on this page can be modified by either replacing or editing the indicated message bases. Learn about editing message bases here.

3 Save *help_search.php*.

To point the Search Tips link to a different page

1 Open the *home.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="search/AdvancedSearchDialog"
report_page_url="/app/answers/list"/>
```

3 Add a *search_tips_url* attribute to the AdvancedSearchDialog widget code to point to a different search tips page. Your new code will resemble:

```
<rn:widget path="search/AdvancedSearchDialog"
```

```
report_page_url="/app/answers/list"
search_tips_url="/app/utils/help_search_2" />
```

4 Save *home.php*.

Continue editing search field labels and messages or Continue configuring the search field.

Changing the search report

The default search report on the Support Home page is Answers–Complex Expressions Search Default (report ID 176). If you want to replace this report, you must be sure that the report you use contains the answers.special_settings filter. (Learn how to check for the filter here.)

Note You should add the SearchTypeList widget to any page containing a custom report that uses an integer filter. Without the widget, your customers can search only by answer ID. Adding the widget lets your customers select a different search type so they can enter text search terms.

To change the search report on the Support Home page

Important So that all of your customer portal search functions work the same way, you should also change the reports used on the Answers page. When these pages use different reports, unexpected results may occur.

1 Open the *home.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:container report_id="176">
```

3 Replace the `176` in the code shown in step 2 with the report ID of the answers report you want to open when the customer conducts a search. (Learn how to find a report's ID number.)

4 Save *home.php*.

Continue configuring the search field.

Checking for the answers.special_settings filter in an answers report

Answers reports that are used on the customer portal must contain the answers.special_settings filter. All standard answers reports for the customer portal include this filter, but you must be sure any custom answers reports you want to use also include it.

Tip One way to be sure the answers.special_settings filter is included in a custom answers report is to copy one of the standard answers reports and edit the copy to create your custom report.

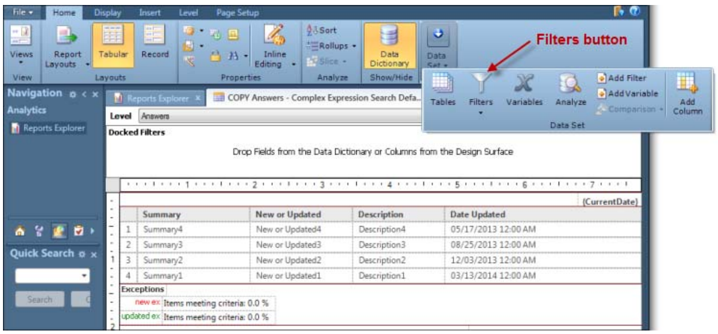
To check for the answers.special_settings filter in an answers report

1 Log in to Oracle Service Cloud.

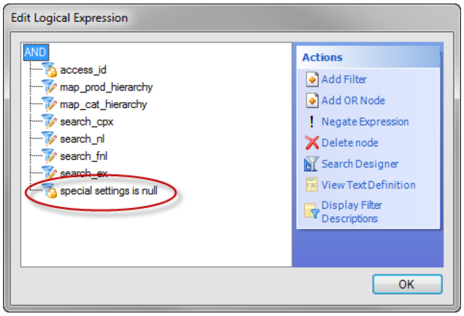
2 Click Analytics.

3 Double-click Reports Explorer.

4 Locate the custom answers report you want to use on the customer portal, right-click it, and select Edit. The report opens on the report design center. (Refer to [Opening the report design center](#) if you want to learn to design reports.)



5 Click the Filters button on the ribbon. (The Filters button is in the Data Set group, which may be collapsed and require expanding.) The Edit Logical Expression window opens.

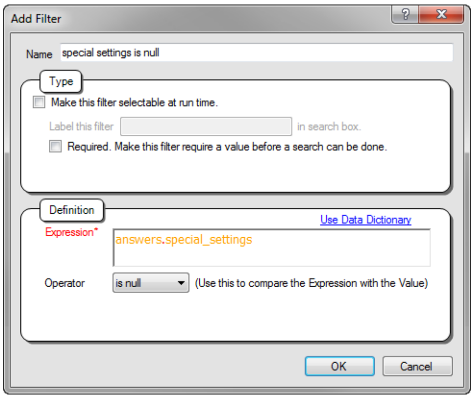


6 Locate “special settings is null” in the list of filters on the window.

7 If the special settings filter is not present in the list, add it.

a Click Add Filter in the Actions column. The Add Filter window opens.
b Type “special settings is null” in the Name field.
c Type “answers.special_settings” in the Expression field.
d Select “is null” in the Operator drop-down menu.

Note If the “is null” option is not available in the Operator menu, be sure the check box for “Make this filter selectable at run time.” is cleared. (The check box appears in the Type section just below the Name field.)



e Click OK to close the Add Filter window.

8 Click OK to close the Edit Logical Expression window.

9 Close the report.

Or

If you edited the report, click Save and Close.

Finding the ID number for a report

To find a report ID

1 Log in to Oracle Service Cloud.

2 Click Analytics.

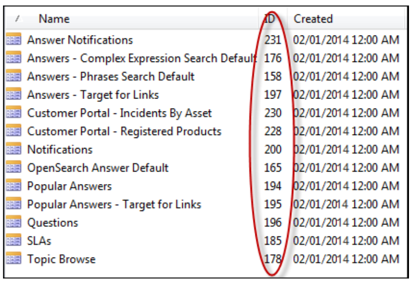
3 Double-click Reports Explorer.

4 **Drill down** through the tree of reports until the report you want appears in the list on the right.

Tip Standard Customer Portal reports are located in the *Public Reports**Service**Views–Service**Customer Portal* folder.

5 If the list does not contain an ID column, click Choose Details on the explorer **ribbon**, select the check box for ID in the Hide or Display Details window, and click OK. The Report ID column now appears in the list of reports.

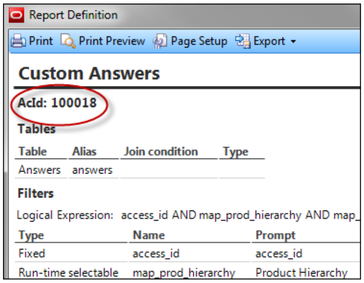
Click to view



Name	ID	Created
Answer Notifications	231	02/01/2014 12:00 AM
Answers - Complex Expression Search Default	176	02/01/2014 12:00 AM
Answers - Phrases Search Default	158	02/01/2014 12:00 AM
Answers - Target for Links	197	02/01/2014 12:00 AM
Customer Portal - Incidents By Asset	230	02/01/2014 12:00 AM
Customer Portal - Registered Products	228	02/01/2014 12:00 AM
Notifications	200	02/01/2014 12:00 AM
OpenSearch Answer Default	165	02/01/2014 12:00 AM
Popular Answers	194	02/01/2014 12:00 AM
Popular Answers - Target for Links	195	02/01/2014 12:00 AM
Questions	196	02/01/2014 12:00 AM
SLAs	185	02/01/2014 12:00 AM
Topic Browse	178	02/01/2014 12:00 AM

Or, you can open a report by right-clicking it and selecting Open. Then click Definition on the report ribbon and select View. The AcId value in the upper left corner is the report ID.

Click to view



Continue configuring the search field.

Removing the search field from the Support Home page

To remove the search field from the Support Home page

1 Open the *home.php* file in the */views/pages* folder.

2 Delete the following code from the page.

```
<div id="rn_SearchControls">
    <h1 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_CMD#</h1>
    <form onsubmit="return false;">
        <rn:container report_id="176">
        <div class="rn_SearchInput">
            <rn:widget path="search/AdvancedSearchDialog"
            report_page_url="/app/answers/list"/>
            <rn:widget path="search/KeywordText"
            label_text="#rn:msg:FIND_THE_ANSWER_TO_YOUR_QUESTION_CMD#
            " initial_focus="true"/>
        </div>
        <rn:widget path="search/SearchButton" report_page_url="/app/
        answers/list" />
        </rn:container>
    </form>
</div>
```

3 Save *home.php*.

Continue configuring the Support Home page.

Configuring Featured Support Categories

The standard Support Home page contains a list of Featured Support Categories to a maximum of thirty top-level categories with two hierarchical levels.

Do you want to display the Featured Support Categories on the Support Home page?

- **Yes.** This is the default, so continue editing the Support Home page.
- **Yes,** but I'd like to edit the Featured Support Categories.
- **Yes,** and I'd like to add featured products to the page as well.
- **No.** Show me how to remove this section.

Continue configuring the Support Home page.

Editing Featured Support Categories

You can change the heading, the number of top-level **categories** that are displayed, and the number of category levels that are displayed. You can also add featured support **products** to the Support Home page.

To edit the Featured Support Categories section of the Support Home page

1 Open the *home.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="search/ProductCategoryList"
data_type="categories"
label_title="#rn:msg:FEATURED_SUPPORT_CATEGORIES_LBL#"/>
```

3 Select the change you want to make.

- Change the heading
- Change the number of top-level categories displayed
- Change the number of displayed category levels
- Change categories to products

4 Save *home.php*.

Continue configuring Featured Support Categories or Continue configuring the Support Home page.

Changing the heading

To change the Featured Support Categories heading

Replace the **message base** for the *label_title* attribute with whatever text you want to add. (Learn about editing message bases here.) Your edited code might look like this.

```
<rn:widget path="search/ProductCategoryList"
data_type="categories"
label_title="Answers by Category" />
```

Changing the number of top-level categories

To change the number of top-level categories displayed

Add the *maximum_top_levels* attribute to the widget code and set the value equal to the number of categories you want to display. Your edited code might look like this.

```
<rn:widget path="search/ProductCategoryList"
data_type="categories"
label_title="#rn:msg:FEATURED_SUPPORT_CATEGORIES_LBL#"
maximum_top_levels="10"/>
```

Changing the number of displayed category levels

To change the number of displayed category levels

The default value displays two sub-levels of categories. You can change this to display just one sub-level by adding the *levels* attribute to the widget code and setting it equal to 1. Your edited code looks like this.

```
<rn:widget path="search/ProductCategoryList"
data_type="categories"
label_title="#rn:msg:FEATURED_SUPPORT_CATEGORIES_LBL#"
levels="1" />
```

Changing categories to products

To change categories to products

The default widget displays products, not categories, so all you have to do is edit the widget code to delete the other attributes that refer to categories. Your code will look like this.

```
<rn:widget path="search/ProductCategoryList" />
```

Continue editing Featured Support Categories.

Adding Featured Support Products

If you want to add products to the Support Home page, add the following line of code.

```
<rn:widget path="search/ProductCategoryList" />
```

To add products below categories

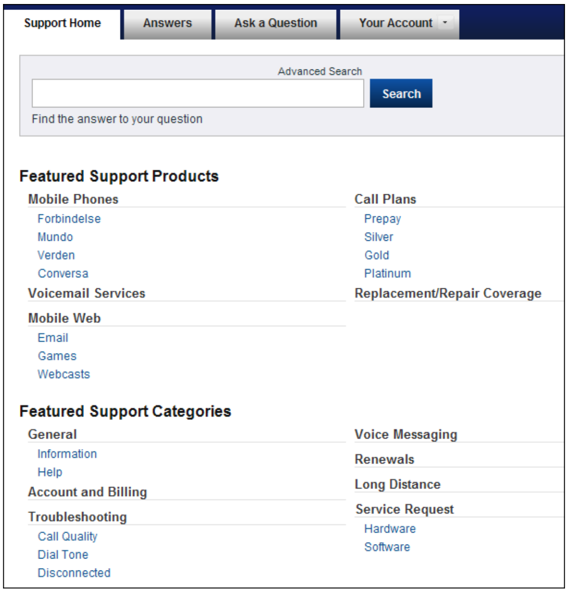
Your code should look like this:

```
<rn:widget path="search/ProductCategoryList"
data_type="categories"
label_title="#rn:msg:FEATURED_SUPPORT_CATEGORIES_LBL#"/>
<rn:widget path="search/ProductCategoryList" />
```

To add products above categories

Your code should look like this:

```
<rn:widget path="search/ProductCategoryList" />
<rn:widget path="search/ProductCategoryList"
data_type="categories"
label_title="#rn:msg:FEATURED_SUPPORT_CATEGORIES_LBL#"/>
```



Continue configuring Featured Support Categories or Continue configuring the Support Home page.

Removing Featured Support Categories

To remove Featured Support Categories from the Support Home page

1 Open the *home.php* file in the */views/pages* folder.

2 Delete the following line of code.

```
<rn:widget path="search/ProductCategoryList" data_type="categories"
label_title="#rn:msg:FEATURED_SUPPORT_CATEGORIES_LBL#"/>
```

3 Save *home.php*.

Continue configuring the Support Home page.

Configuring the Most Popular Answers report

The standard Support Home page contains the Most Popular Answers report. Customers can click a link to open any of the frequently viewed answers displayed in the report.

Do you want to display the Most Popular Answers report on the Support Home page?

- **Yes.** This is the default, so continue configuring the Support Home page.
- **Yes,** but I want to make some changes. Show me how I can edit the report's appearance.
- **Yes,** but I want to open URL and file attachment answer types in a separate window.
- **No,** I don't want to display the Most Popular Answers report, but I'd like to display another report instead. Show me how to substitute a different report for the Most Popular Answers report.
- **No,** I don't want to display the Most Popular Answers report or any other report on the Support Home page. Show me how to remove the report.

When you're finished configuring the Most Popular Answers report, you can return to configuring the Support Home page.

Editing the Most Popular Answers report

You can edit the following elements of the Most Popular Answers Report.

- Change the report heading.
- Change the number of answers that are displayed.
- Change the "See all popular answers" link.

When you're finished editing the report's elements, you can configure other aspects of the Most Popular Answers report.

Editing the Most Popular Answers report heading

To edit the Most Popular Answers report heading

1 Open the *home.php* file in the */views/pages* folder.

2 If you want to customize the report heading, select all code between the <h2> and </h2> tags in the following line and type whatever title you want. (Learn about editing message bases here.)

```
<h2>#rn:msg:MOST_POPULAR_ANSWERS_LBL#</h2>
```

3 Save *home.php*.

Continue configuring the Most Popular Answers report.

Changing the number of displayed popular answers

To change the number of displayed answers

1 Open the *home.php* file in the */views/pages* folder.

2 Locate the *per_page* attribute of the report widget in the following line of code and replace `12` with the number of answers you want to display.

```
<rn:widget path="reports/Multiline"
report_id="194"
per_page="12"/>
```

3 Save *home.php*.

Continue configuring the Most Popular Answers report.

Changing the See All Popular Answers link

To edit the See All Popular Answers link

1 Open the *home.php* file in the */views/pages* folder.

2 To edit the page that is displayed when the See All Popular Answers link is selected, select `/app/answers/list` in the following line and replace it by typing the path and page you want displayed.

```
<a class="rn_AnswersLink"
href="/app/answers/
list#rn:session#">#rn:msg:SEE_ALL_POPULAR_ANSWERS_UC_LBL#</a>
```

3 To edit the link, select the code beginning with `#rn:msg` and ending at # in the following line and replace it with the text you want to appear in the link. Your edited code will resemble the following.

```
<a class="rn_AnswersLink"
href="/app/answers/alt_list_2#rn:session#">Find other relevant
answers here</a>
```

4 Save *home.php*.

Continue configuring the Most Popular Answers report.

Opening answers in a separate window

Your **knowledge base** can contain up to three answer types: 1) HTML answers that are created using standard HTML and are viewed in the same browser window; 2) URL answers that consist of a link to an external URL; and 3) file attachment answers that link to information in another document.

When customers click an answer in the Most Popular Answers report, HTML-type answers open in the same browser. When customers are finished viewing the answer, they can click the browser's Back button to return to the report. The same is true of URL and file attachment type answers, although you may prefer to have these answers open in a separate window.

To open URL and file attachment answers in a separate window

1 Open the *home.php* file in the */views/pages* folder.

2 Replace this code:

```
<rn:widget path="reports/Multiline"
report_id="194"
per_page="12"/>
```

With this code:

```
<rn:widget path="reports/Multiline"
report_id="195"
```

```
per_page="12"/>
```

Note Report ID 195 is identical to report ID 194 except that it opens URL and file attachment answers in a separate window.

3 Save *home.php*.

Continue configuring the Most Popular Answers report or Continue editing the Support Home page.

Substituting a report

The default Most Popular Answers report on the Support Home page is the standard report Popular Answers, with report ID 194. If you want to replace this report, you must be sure that the report you use contains the answers.special_settings filter. (Learn how to check for the filter here.)

To replace the Most Popular Answers report on the Support Home page

1 Open the *home.php* file in the */views/page* folder.

2 In the following line of code, change the report ID number from `194` to the ID number of the report you want to substitute.

```
<rn:widget path="reports/Multiline"
report_id="194"
per_page="12"/>
```

3 Change the heading and label in the following (nonsequential) lines of code to correspond with the report you selected in step 2. You can use a **message base** or simply type the text you want. (Learn about editing message bases here.)

```
<h2>#rn:msg:MOST_POPULAR_ANSWERS_LBL#</h2>
<a class = "noIntercept"
href="/app/answers/
list#rn:session#">#rn:msg:SEE_ALL_POPULAR_ANSWERS_LBL#</a>
```

4 Save *home.php*.

Continue configuring the Most Popular Answers report or Continue editing the Support Home page.

Removing the Most Popular Answers report

To remove the Most Popular Answers report from the Support Home page

1 Open the *home.php* file in the */views/pages* folder.

2 Delete the following section of code from the file.

```
<div class="rn_Module">
    <h2>#rn:msg:MOST_POPULAR_ANSWERS_LBL#</h2>
    <rn:widget path="reports/Multiline" report_id="194"
    per_page="12"/>
    <a class="rn_AnswersLink" href="/app/answers/
    list#rn:session#">#rn:msg:SEE_ALL_POPULAR_ANSWERS_UC_LBL#</a>
</div>
```

3 Save *home.php*.

Continue configuring the Support Home page.

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Answers Page

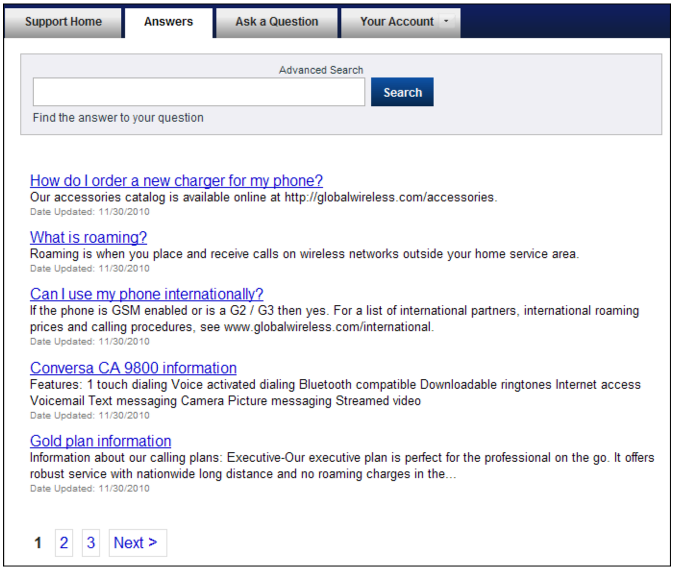
The Answers page lets your customers enter search terms and then provides a list of answers from your knowledge base that match the search terms that were entered.

Note If you want to keep the answers in your knowledge base from being available to the general public, you must require login on both the Answers and the answer details page. If both pages do not have the same login requirement, a warning will appear when you stage and promote your customer portal. The most secure way to do this is to require login on all pages of your customer portal.

Note This page includes off-screen <h1> and <h2> tags that are made visible to screen readers using the rn_ScreenReaderOnly CSS class. These tags provide **accessible** navigation using shortcut keys for customers who use screen readers to access your customer portal pages. The content is not visible to sighted users unless styles are disabled.

For information about creating content that is hidden to all users except screen readers, refer to the WebAIM article CSS in Action: Invisible Content Just for Screen Reader Users.

Click to view



You can configure the following elements on the Answers page.

- The search field and search options
- Web indexing results
- The answers report that is displayed
- Search feedback options

If you are finished editing this page and want to configure another page on your customer portal, select the page you want to edit.

- Support Home Page
- Answer Details Page
- Ask a Question Page
- Your Account Pages
- Log In page
- Live Help page or Chat page

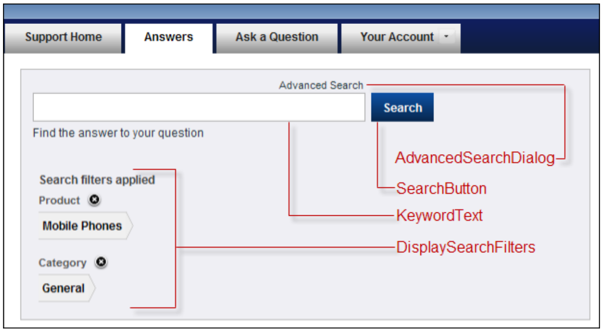
Configuring the search field

The search field on the Answers page is very similar to the one on the Support Home page. When customers enter search keywords on the Support Home page, the search parameters are remembered while customers navigate among the search results pages. If customers navigate away from the search results and then return to the Answers page, previous search parameters are not maintained. If customers want to return to earlier search results, they must use the Back button on the browser.

If customers click the Advanced Search link, the options they select on that dialog—search term, **product**, **category**, and sorting options—are also remembered. However, if customers select advanced search options and then close the Advanced Search dialog or click the Cancel button, the search options revert to the values they had when the page was originally loaded.

The search field on the Answers page is almost identical to the one that is used on the Support Home page. One difference is that Support Home page uses the *report_page_url* attribute for the AdvancedSearchDialog and SearchButton widgets to display the Answers page report. The Answers page does not need to use this attribute since the default is to stay on the same page. Another difference is that the Answers page adds the DisplaySearchFilters widget to indicate which product and category filters have been applied to the search. Customers can apply product and category filters to their search by selecting them on the Advanced Search dialog.

Four widgets make up the search field on the Answers page. These include AdvancedSearchDialog, KeywordText, SearchButton, and DisplaySearchFilters. By modifying the attributes of these widgets, you can make several changes to the search field.



Do you want to keep the default search field options on the Answers page?

- **Yes.** This is the default, so continue configuring the Answers page.
- **No,** I want to edit labels or messages on the search field.
- **No,** I want to change the search filters display.
- **No,** I want to change the product and category tree display on the AdvancedSearchDialog widget.
- **No,** I want to add Search By or Sort By options.

When you're finished configuring the search field, continue configuring the Answers page.

Editing labels and message bases

You can edit much of the text that appears on the widgets that comprise the search field on the Answers page, including the following.

- The Search button label
- The default search message
- The Advanced Search link label
- Labels on the Advanced Search dialog
- The Search Tips page

When you're finished with labels and messages, continue configuring the search field.

Editing the Search button label

To edit the Search button label

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="search/SearchButton" />
```

3 Edit the code to add the *label_button* attribute with the text you want to display on the button. Your new code will resemble:

```
<rn:widget path="search/SearchButton" label_button="Find All Answers"
/>
```

4 Save *list.php*.

Continue editing search field labels and messages or Continue configuring the search field.

Editing the default search message

The default search message is “Find the answer to your question.” You can change this message if you want.

To edit the default search message

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="search/KeywordText"
label_text="#rn:msg:FIND_THE_ANSWER_TO_YOUR_QUESTION_CMD#"
initial_focus="true" />
```

3 Select the text between the quotation marks for the *label_text* attribute and type the text you want to display. Your new code will resemble:

```
<rn:widget path="search/KeywordText"
label_text="Search all answers."
initial_focus="true" />
```

4 Save *list.php*.

Continue editing search field labels and messages or Continue configuring the search field.

Editing the Advanced Search link

To edit the label for the Advanced Search link

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="search/AdvancedSearchDialog"/>
```

3 Add a *label_link* attribute to the AdvancedSearchDialog widget code. Your new code will resemble:

```
<rn:widget path="search/AdvancedSearchDialog"
label_link="Advanced Searching Options"/>
```

4 Save *list.php*.

Continue editing search field labels and messages or Continue configuring the search field.

Configuring labels on the Advanced Search dialog

To configure labels on the Advanced Search dialog

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="search/AdvancedSearchDialog"/>
```

3 Add any or all of the following attributes of the AdvancedSearchDialog widget to make the following changes.

   a To change the window title, add `label_dialog_title="New Window Title"` to the widget code.

   b To change the Search button, add `label_search_button="New Search Button"` to the widget code.

   c To change the Cancel button, add `label_cancel_button="New Cancel Button"` to the widget code.

4 Save *list.php*.

Continue editing search field labels and messages or Continue configuring the search field.

Editing the Search Tips page

You can edit the default Search Tips page. Or you can create a different search tips page and change the URL to which the Search Tips link, found on the Advanced Search window, points.

To edit the Search Tips page

1 Open the *help_search.php* file in the */views/pages/utils* folder.

2 Make whatever changes you want to the file.

3 Save *help_search.php*.

To point the Search Tips link to a different page

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="search/AdvancedSearchDialog"/>
```

3 Add a *search_tips_url* attribute to the AdvancedSearchDialog widget code to point to a different search tips page. Your new code will resemble:

```
<rn:widget path="search/AdvancedSearchDialog" search_tips_url="/app/
utils/help_search_2" />
```

4 Save *list.php*.

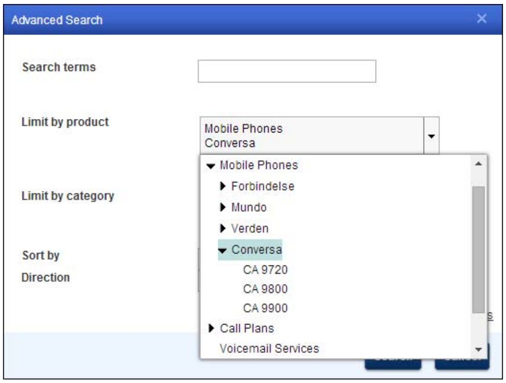
Continue editing search field labels and messages or Continue configuring the search field.

Editing the search filters display

Your customers can use the Advanced Search link to restrict their search to specific products and categories. You can also change the default display to replace the triangle bullets for expanding and collapsing the folders with +/– signs.

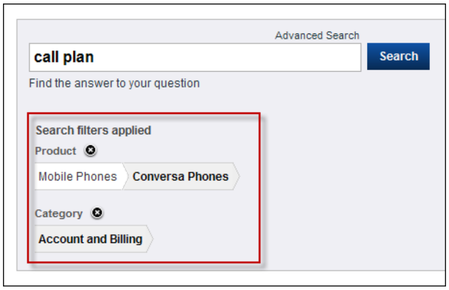
Note Although these procedures modify the search filters displayed on the Answers page, they can easily be edited for use on the Support Home page as well.

Click to view



When searches are restricted by products, categories, or both, the search filters are displayed on the Answers page. This display is controlled by the DisplaySearchFilters widget, which is included by default on the standard Answers page. You can also add custom filters used by the AdvancedSearchDialog widget when you display custom reports.

Click to view



Do you want to keep the DisplaySearchFilters widget on the Answers page?

- **Yes.** This is the default, so you can continue configuring the Answers page.
- **Yes,** but I'd like to make changes to the widget.
- **No,** I'd like to remove the widget.

Editing the DisplaySearchFilters widget

The DisplaySearchFilters widget lets you change labels for the heading, the Remove button, and the image used for the Remove button.

To edit the DisplaySearchFilters widget

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="search/DisplaySearchFilters"/>
```

3 To change the current heading, "Search filters applied," edit the widget code to add the *label_title* attribute with your new heading. Your code will resemble the following.

```
<rn:widget path="search/DisplaySearchFilters" label_title="Your New
Heading" />
```

4 To change the "Remove" tip when customers hover over the Remove button (the black circle with an X in it), edit the code to add the *label_filter_remove* attribute with the new text. Your code will resemble the following.

```
<rn:widget path="search/DisplaySearchFilters"
label_filter_remove="New Remove Label"/>
```

5 To change the Remove button image, edit the code to add the *remove_icon_path* attribute with the path and file name of the new image. (Images are located in the */cp/customer/assets/themes/standard/images* folder.) Your code will resemble the following.

```
<rn:widget path="search/DisplaySearchFilters" remove_icon_path="/cp/
customer/assets/themes/standard/images/new_remove_icon.png"/>
```

6 Save *list.php*.

Continue configuring the search field or Continue configuring the Answers page.

Removing the DisplaySearchFilters widget

To remove the DisplaySearchFilters widget

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Delete the following line of code.

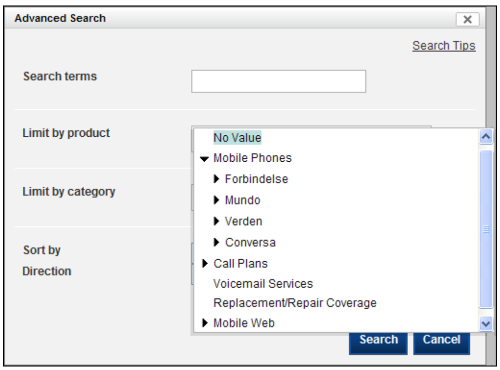
```
<rn:widget path="search/DisplaySearchFilters" />
```

3 Save *list.php*.

Continue configuring the search field or Continue configuring the Answers page.

Changing AdvancedSearchDialog product/category tree display

The AdvancedSearchDialog widget contains two instances of the ProductCategorySearchFilter widget that displays the products and categories with a hierarchical tree structure. By default, these widgets use triangle bullets for expanding and collapsing the folders, as shown here. After customers select the product or category, they must click the OK button to confirm their selection.



If you prefer to display +/– signs for expanding and collapsing the folders, you can edit the Answers page according to the following procedure.

To change the folder structure display

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

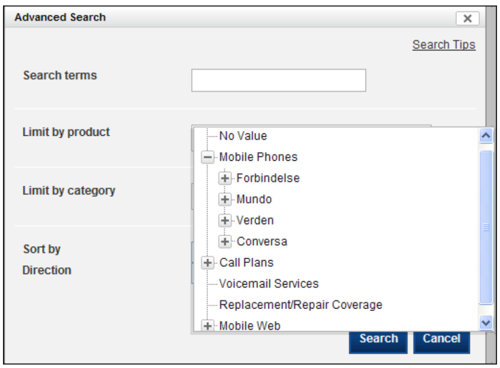
```
<rn:widget path="search/AdvancedSearchDialog"/>
```

3 Edit the widget to add the *treeview_css* attribute as shown in the following code.

Note The *treeview_css* attribute is not listed in the attributes for AdvancedSearchDialog because it is an attribute of the ProductCategorySearchFilter widget, which is contained in AdvancedSearchDialog. When a widget contains other widgets, the parent widget can use the attributes of the other widgets it contains.

```
<rn:widget path="search/AdvancedSearchDialog"
treeview_css="#rn:php:\RightNow\Utils\Url::getYUICodePath('gallery-
treeview/assets/treeview-skin.css')#" />
```

4 Save *list.php*.



Continue configuring the search field or Continue configuring the Answers page.

Adding Search By or Sort By options

You might want to add other searching or sorting options to the Answers page. You can offer your customers their choice of search type, and you can let them sort the search results by report column in ascending or descending order.

- Adding Search By options
- Configuring Sort By options

Adding Search By options

When you add the SearchTypeList widget to the Answers page, customers can select from the following search options.

- **Phrases** matches the phrase the customer enters.
- **Similar Phrases** matches answers containing synonyms and similarly spelled words as those the customer enters.
- **Exact Search** matches the exact sequence of the entered search terms.
- **Complex Expression** allows wildcard searching.

Note that all four methods of searching will find different word forms of the entered terms, such as singular, plural, and different verb tenses. Also, all search methods use the logical operators AND and OR.

To allow search type selection on the Answers page

1 Open the *list.php* file in the */views/pages/answers* folder.

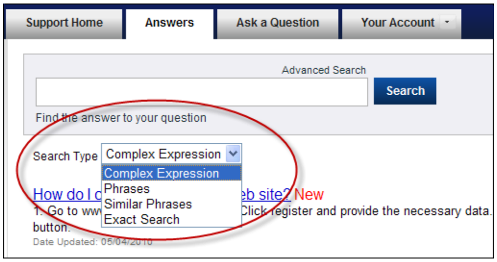
2 Locate the following line of code.

```
<h2 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_RESULTS_CMD#</h2>
```

3 Add the following line of code immediately below the code you located in step 2.

```
<rn:widget path="search/SearchTypeList" />
```

4 Save *list.php*.



Continue configuring the search field or Continue configuring the Answers page.

Configuring Sort By options

The ability to sort the search results appears automatically on the AdvancedSearchDialog widget. You can add it directly to the Answers page or you may want to remove it from the AdvancedSearchDialog widget.

To add sorting options to the Answers page

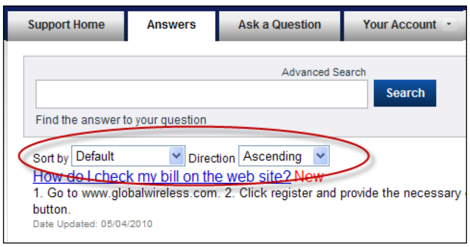
1. Open the *list.php* file in the */views/pages/answers* folder.
2. Locate the following line of code.

```
<h2 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_RESULTS_CMD#</h2>
```

3. Add the following line of code immediately below the code you located in step 2.

```
<rn:widget path="search/SortList" />
```

4. Save *list.php*.



To remove sorting options from AdvancedSearchDialog

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="search/AdvancedSearchDialog"/>
```

3 Edit the code to add the *display_sort_filter* attribute to the widget and set it to false, as shown in the following code.

```
<rn:widget path="search/AdvancedSearchDialog"
display_sort_filter="false" />
```

4 Save *list.php*.

Continue configuring the search field or Continue configuring the Answers page.

Displaying web indexing results

If you want your customers' search results to include documents as well as answers from your knowledge base, you can use the results of **web indexing**. You must enable web indexing first.

You'll need to create a new Answers page that uses one of the two web search reports that display web indexing results. The default web search report is report 10022. Report ID 10016 displays the same information with the exception of the size and score columns.

Product and category filters do not apply to web search reports, so you'll want to remove widgets that use these filters. Instead, you'll use the web search widgets that let your customers sort their web search results by the report columns (the WebSearchSort widget) and specify the matching criteria (the WebSearchType widget).

Here's what your web indexing Answers page might look like.

```
<rn:meta title="#rn:msg:FIND_ANS_HDG#" template="standard.php"
clickstream="answer_list"/>

<rn:widget path="knowledgebase/RssIcon"/>
<rn:container report_id="10022">
<div id="rn_PageTitle" class="rn_AnswerList">
    <div id="rn_SearchControls">
        <h1 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_CMD#</h1>
        <form onsubmit="return false;">
            <div class="rn_SearchInput">
                <rn:widget path="search/WebSearchSort"/>
```

```
                <rn:widget path="search/WebSearchType"/>
                <rn:widget path="search/KeywordText"
                label_text="#rn:msg:FIND_THE_ANSWER_TO_YOUR_QUESTION_CMD#
                " initial_focus="true"/>
            </div>
            <rn:widget path="search/SearchButton"/>
        </form>
    </div>
</div>
<div id="rn_PageContent" class="rn_AnswerList">
    <div class="rn_Padding">
        <h2 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_RESULTS_CMD#</h2>
        <rn:widget path="reports/ResultInfo"/>
        <rn:widget path="reports/Multiline"/>
        <rn:widget path="reports/Paginator"/>
    </div>
</div>
</rn:container>
```

Continue configuring the Answers page.

Changing the report on the Answers page

By default, the Answers page uses the report called Answers–Complex Expression Search Default, which has report ID 176. But you have several options for changing and configuring the report that is displayed when customers enter search terms. Here are some options for changing the report on the Answers page. Click here for general information about configuring widgets for answers reports.

- Use a different report.
- Use a grid report instead of a multiline report.
- Change the number of answers that are displayed.
- Truncate the length of answers.
- Open URL and file attachment answers in a separate window.
- Change the length of time answers are considered new or updated.
- Edit search term highlighting.

Continue configuring the Answers page.

Changing the search report

The default search report on the Answers page is Answers–Complex Expressions Search Default (report ID 176). If you want to replace this report with another standard answers report or a custom answers report, you must be sure that the report you use contains the answers.special_settings filter. (Learn how to check for the filter here.)

Note You should add the SearchTypeList widget to any page containing a custom report that uses an integer filter. Without the widget, your customers can search only by answer ID. Adding the widget lets your customers select a different search type so they can enter text search terms.

To change the search report

Important So that all of your customer portal search functions work the same way, you should also change the report used on the Support Home page. When these pages use different reports, unexpected results may occur.

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:container report_id="176">
```

3 Replace `176` with the report ID of the answers report you want to open when the customer conducts a search. Customer Portal reports can be found in the Reports explorer by going to the \Public Reports\Service\Views – Service\Customer Portal folder. (Learn how to find a report's ID number.)

4 Save *list.php*.

Continue changing the report on the Answers page or Continue configuring the Answers page.

Finding the ID number for a report

To find a report ID

1 Log in to Oracle Service Cloud.

2 Click Analytics.

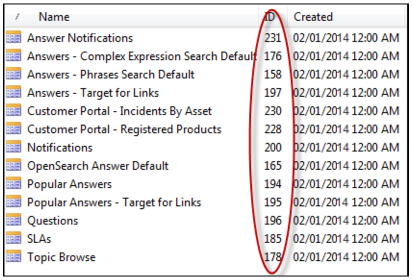
3 Double-click Reports Explorer.

4 **Drill down** through the tree of reports until the report you want appears in the list on the right.

Note Standard Customer Portal reports are located in the *\Public Reports\Service\Views–Service\Customer Portal* folder.

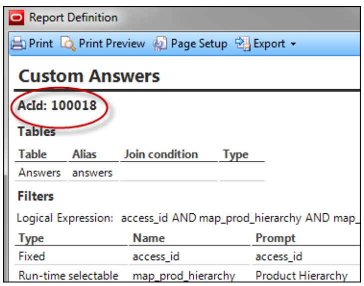
5 If the list does not contain an ID column, click Choose Details on the explorer **ribbon**, select the check box for ID in the Hide or Display Details window, and click OK. The Report ID column now appears in the list of reports.

Click to view



Or, you can open a report by right-clicking it and selecting Open. Then click Definition on the report ribbon and select View. The AcId value in the upper left corner is the report ID.

Click to view



[Continue changing the report on the Answers page] or [Continue configuring the Answers page.]

Using a grid report

By default, the Answers page displays search results in a multiline format, which puts the answer summary, answer text, and date updated on separate lines. If you like, you can substitute a grid report, which displays the information in tabular form.

Click to view

To use a grid report on the Answers page

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following code.

```
<rn:widget path="reports/Multiline"/>
```

3 Replace the Multiline widget with the Grid widget by editing the line as follows.

```
<rn:widget path="reports/Grid" />
```

4 Save *list.php*.

Continue changing the report on the Answers page or Continue configuring the Answers page.

Changing the number of displayed answers

You may want to change the number of answers that are displayed on the report on the Answers page. By default, the report displays the number specified in a report, but you can edit the *per_page* attribute of the report to change that number.

To change the number of displayed answers

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code for the Multiline report widget.

```
<rn:widget path="reports/Multiline"/>
```

3 Change the number of displayed answers by adding the *per_page* attribute.

```
<rn:widget path="reports/Multiline" per_page="5" />
```

4 Add the *per_page* attribute to the ResultInfo widget so that it displays the same number of answers as the report does. Your code will resemble the following.

```
<rn:widget path="reports/ResultInfo" per_page="5"/>
```

5 Add the *per_page* attribute to the Paginator widget so that it displays the same number of answers as the report does. Your code will resemble the following.

```
<rn:widget path="reports/Paginator" per_page="5"/>
```

6 Save *list.php*.

Continue changing the report on the Answers page or Continue configuring the Answers page.

Truncating answer length

By default, answer summaries (the first line of an answer on the Answers page report) and the answer itself are truncated if they exceed 200 characters. You can change the length of truncated summaries and answers if you want to shorten these fields or if you want to display more information than the default.

To modify answer truncation

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code for the Multiline report widget.

```
<rn:widget path="reports/Multiline"/>
```

3 Change the truncation length by editing the widget code to add the *truncate_size* attribute.

```
<rn:widget path="reports/Multiline" truncate_size="50" />
```

4 Save *list.php*.

Continue changing the report on the Answers page or Continue configuring the Answers page.

Opening answers in a separate window

You may prefer to open **URL answers** and **file attachment answers** in a separate browser window to keep your customers on your site. You can accomplish that by first creating a custom report to open URL and file attachment type answers in a separate window. Then you must replace the standard report in the */views/pages/answers/list.php* file with the custom report you created.

To copy the standard Answers report

1 Log in to Oracle Service Cloud.

2 Click Analytics.

3 Double-click Reports Explorer.

4 Click Find in the Navigation group on the ribbon.

5 Select ID in the Find Using drop-down menu.

6 Select the Equal To radio button.

7 Type `176` in the field.

8 Click Find. The Answers–Complex Expression Search Default report displays in the right column.

9 Right-click the report and select Copy. The Copy Answers window opens.

10 Type a name for the custom report you are going to create in the Name field, for example, `Custom Answers`.

11 Click OK.

Next, you'll edit the report so it will open URL and file attachment answers in a separate window.

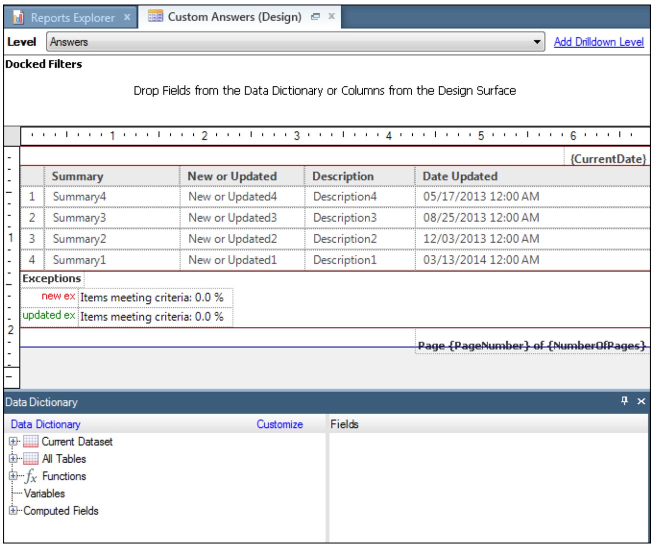
Editing a custom report

To edit a custom report

1 With the Reports explorer still open, locate the custom report you just created. (In the previous procedure, we called it Custom Answers.)

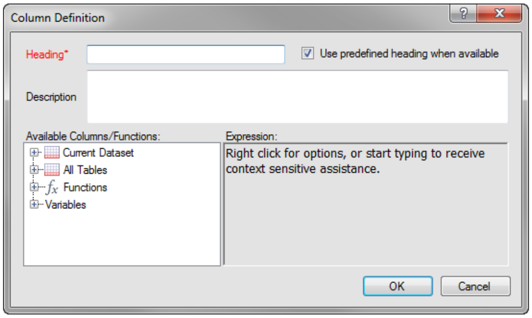
2 Right-click the report and select Edit. The report design center opens.

Click to view



3 Right-click the Summary column and select Insert New Column Before. The Column Definition window opens.

Click to view



4 Type `Link Target` in the Heading field.

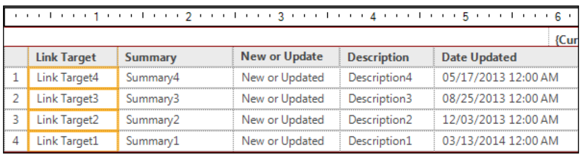
5 Place the cursor in the Expression field to the right of the Available Columns/Functions. The field is activated.

6 Type the following in the Expressions field.

```
if((answers.type = 2 | answers.type = 3), '_blank')
```

7 Click OK to close the Column Definition window. The column now appears in the report definition before the Summary column and is selected.

Click to view



	Link Target	Summary	New or Update	Description	Date Updated
1	Link Target4	Summary4	New or Updated	Description4	05/17/2013 12:00 AM
2	Link Target3	Summary3	New or Updated	Description3	08/25/2013 12:00 AM
3	Link Target2	Summary2	New or Updated	Description2	12/03/2013 12:00 AM
4	Link Target1	Summary1	New or Updated	Description1	03/13/2014 12:00 AM

8 Right-click the Link Target column and select Hide Column.

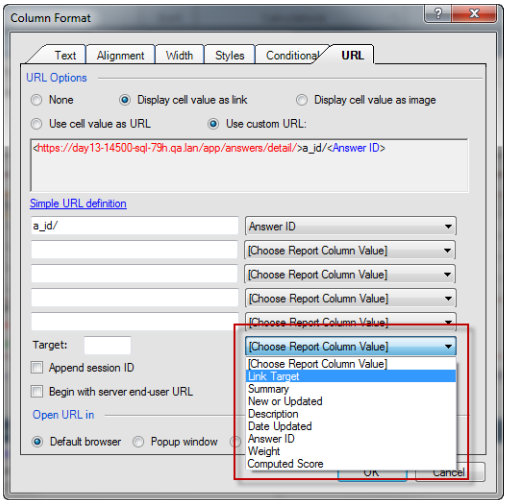
9 Right-click the Summary column and select Edit Format. The Column Format window opens with the Text tab on top.

10 Click the URL tab. URL options display on the tab.

11 Click the Advanced URL Definition link. The advanced URL options display.

12 Click the drop-down menu to the right of the Target field (the last drop-down menu labeled Choose Report Column Value on the right) and select Link Target.

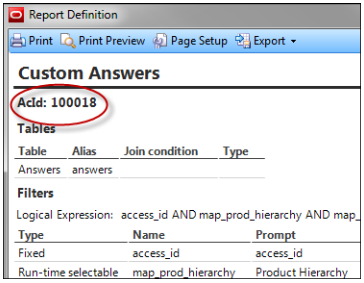
Click to view



13 Click OK to close the Column Format window.

14 Click the Home tab on the ribbon, click the Definition button in the Properties group, and select View to open the Report Definition window. Note the AcId number in the upper left corner. This is the report ID you will use to replace the standard report in the */views/pages/answers/list.php* file.

Click to view



15 Close the Report Definition window.

16 Save the report by clicking Save on the Quick Access toolbar.

Now you'll edit the file for the Answers page so it will use the custom report you've created.

Modifying the Answers page to open answers in a separate window

To modify the Answers page to open answers in a separate window

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:container report_id="176">
```

3 Replace `176` with the ID number for the custom report you created. (This is the ID you found in step 14 of Editing a custom report.)

4 Save *list.php*.

Continue changing the report on the Answers page or Continue configuring the Answers page.

Changing the number of days an answer displays New or Updated

By default, answers reports append New to answers that have been created within the last 30 days and Updated to answers that have been edited within the last 30 days. If you want to change the length of time that an answer is considered new or updated, you can create a custom report and edit the variables that define the new and updated time periods. Then you'll need to replace the standard report in the */views/pages/answers/list.php* file with the custom report you created.

To copy the standard Answers report

1 Log in to Oracle Service Cloud.

2 Click Analytics.

3 Double-click Reports Explorer.

4 Click Find in the Navigation group on the ribbon.

5 Select ID in the Find Using drop-down menu.

6 Select the Equal To radio button.

7 Type `176` in the field.

8 Click Find. The Answers–Complex Expression Search Default report displays in the right column.

9 Right-click the report and select Copy. The Copy Answers window opens.

10 Type a name for the custom report you are going to create in the Name field, for example, `Custom Answers New and Updated`.

11 Click OK.

Next, you'll edit the report to change the New and Updated variables.

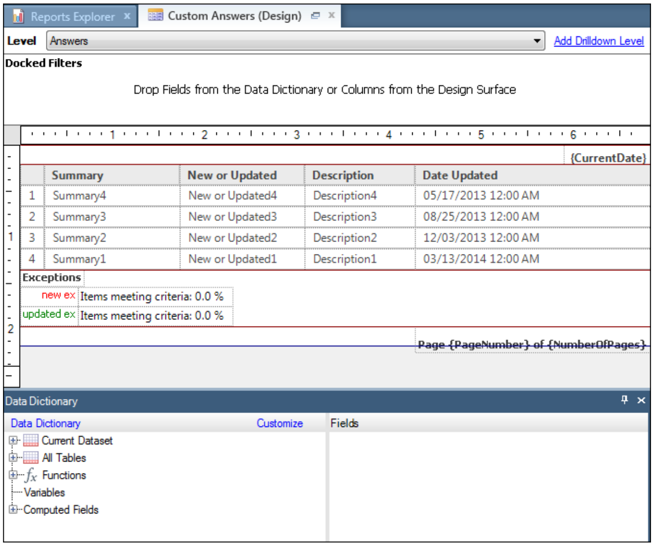
Editing a custom report to change New and Updated variables

To edit a custom report

1 With the Reports explorer still open, locate the custom report you just created. (In the previous procedure, we called it Custom Answers New and Updated.)

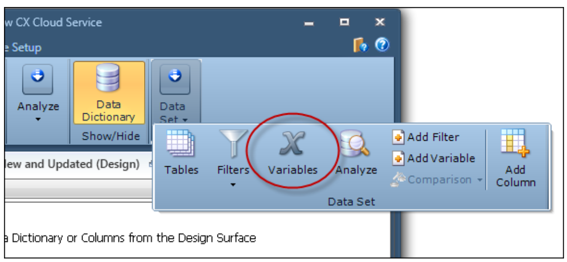
2 Right-click the report and select Edit. The report design center opens.

Click to view



3 Click the Variables button in the Data Set group on the ribbon. (If the group is collapsed, as shown in the figure, click the arrow and select Variables.) The Edit Variables window opens.

Click to view



4 To change the number of days an answer summary will be marked as New, double-click $new. The Edit Variable window opens.

a Double-click “30” in the Expression field and type the number of days you want to designate an answer as new.

b Click OK to close the window.

5 To change the number of days an answer summary will be marked as Updated, double-click $updated. The Edit Variable window opens.

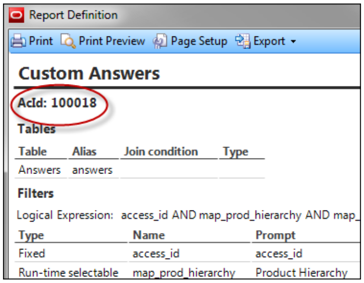
a Double-click “30” in the Expression field and type the number of days you want to designate an answer as updated.

b Click OK to close the window.

6 Click OK to close the Edit Variables window.

7 Click the Home tab on the ribbon, click the Definition button in the Properties group, and select View to open the Report Definition window. Note the AcId number in the upper left corner. This is the report ID you will use to replace the standard report in the */views/pages/answers/list.php* file.

Click to view



8 Close the Report Definition window.

9 Save the report by clicking Save on the Quick Access toolbar.

Now you’ll edit the file for the Answers page so it will use the custom report you’ve created.

Modifying the Answers page

To modify the Answers page with different New and Updated values

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:container report_id="176">
```

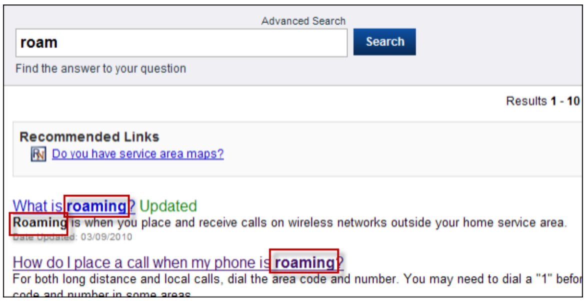
3 Replace `176` with the ID number for the custom report you created. (This is the ID you found in step 7 of this procedure.)

4 Save *list.php*.

Continue changing the report on the Answers page or Continue configuring the Answers page.

Editing search term highlighting

The words that customers type into the search field are stemmed and all versions of the stemmed words are highlighted in the search results. So if your customer enters “roam,” for example, “roam” and “roaming” are highlighted in the results on both the Answers page and the answer details page. (However, forms of the word that include punctuation are not highlighted.) The highlighting is done with bold text.



Do you want search terms to appear in bold text in the search results?

- **Yes.** This is the default, so continue configuring the Answers page.
- **No,** I’d like to change how search terms appear in the search results.
- **No,** I’d like to remove all highlighting from search terms.

Changing the appearance of search terms

If you want to change how search terms are highlighted in the results, you’ll need to edit the *site.css* file. The following procedure shows you how to do this. For the sake of this example, we’ll assume you want to change the search terms to italic font and highlight the background with yellow.

To change the appearance of search terms

1 Open the *site.css* file in the */cp/customer/assets/themes/standard* folder.

2 Locate the following code, which begins around line 701.

```
.rn_Highlight {
        font-style:normal;
        font-weight:bold;
        text-decoration:inherit;
}
```

3 Change the font style of the search terms to italic by editing the `font-style:normal;` line and replacing it with the following code.

```
font-style:italic;
```

4 Add yellow highlighting to the search terms by adding the following line of code after the font-style code.

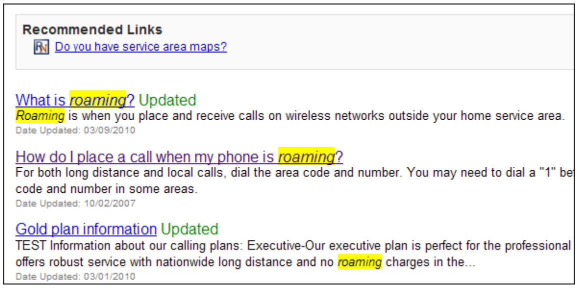
```
background-color:#FFFF00;
```

5 Delete the following line of code.

```
font-weight:bold;
```

6 Save *site.css*.

Continue changing the report on the Answers page or Continue configuring the Answers page.



Disabling search term highlighting

By default, search term highlighting is enabled, but you can disable it by editing the code for the report widget.

To disable search term highlighting

1. Open the *list.php* file in the */views/pages/answers* folder.
2. Locate the following line of code for the Multiline report widget.

```
<rn:widget path="reports/Multiline" />
```

3. Disable highlighting by editing the widget code to add the *highlight* attribute.

```
<rn:widget path="reports/Multiline" highlight="false" />
```

4. Save *list.php*.

Continue changing the report on the Answers page or Continue configuring the Answers page.

Configuring search feedback

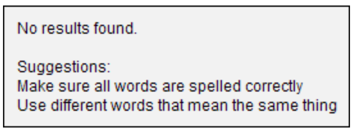
The default Answers page uses the ResultInfo widget to provide feedback to your customers when they conduct a search. This feedback includes the following options that you can modify or disable.

- Customize the message and suggestions when no results are returned.
- Display spelling suggestions if a search term appears to have been misspelled.
- Display suggested searches.

Continue configuring the Answers page.

Customizing messages when no results are returned

When the search terms your customers enter have no match in your knowledge base, the default Answers page displays a “No results found” message.



Instead of the default message, you might want to direct customers to the Ask a Question tab or refer them to your Search Tips page.

To customize messages when no search results are returned

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code for the ResultInfo widget.

```
<rn:widget path="reports/ResultInfo"/>
```

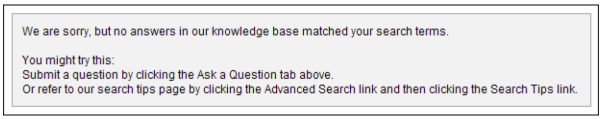
3 To change the “No results found” message, edit the widget code to add the *label_no_results* attribute.

```
<rn:widget path="reports/ResultInfo" label_no_results="We are sorry,
but no answers in our knowledge base matched your search terms." />
```

4 To change the “Suggestions” message as well, edit the widget code to add the *label_no_results_suggestions* attribute.

```
<rn:widget path="reports/ResultInfo" label_no_results="We are sorry,
but no answers in our knowledge base matched your search terms."
label_no_results_suggestions="You might try this:<ul><li>Submit a
question by clicking the Ask a Question tab above.</li><li>Or refer to
our search tips page by clicking the Advanced Search link and then
clicking the Search Tips link.</li></ul>" />
```

5 Save *list.php*.



Continue configuring search term feedback or Continue configuring the Answers page.

Displaying spelling suggestions

When customers enter a search term the application considers to be a misspelling, the default Answers page provides suggested replacements under a “Did You Mean?” heading.

Do you want to offer your customers suggested replacements for misspelled words?

- **Yes.** This is the default, and EU_SEARCH_TERM_FEEDBACK_ENABLE (RightNow User Interface > End-User Interface > General) must also be set to Yes, which is its default setting. Continue configuring search term feedback.
- **Yes,** but I’d like to change the label from “Did you mean?”
- **No.** Show me how to disable it.

Changing the "Did you mean?" label

To change the "Did you mean?" label

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code for the ResultInfo widget.

```
<rn:widget path="reports/ResultInfo"/>
```

3 Add the *label_spell* attribute to the widget. Your code will resemble the following.

```
<rn:widget path="reports/ResultInfo" label_spell="Try these terms
instead:" />
```

4 Save *list.php*.

Continue configuring search term feedback or Continue configuring the Answers page.

Disabling spelling suggestions

To disable spelling suggestions

1 Log in to Oracle Service Cloud.

2 Use the procedure described in To locate and edit configuration settings to locate EU_-SEARCH_TERM_FEEDBACK_ENABLE under RightNow User Interface > End-User Interface > General.

3 Click the drop-down menu in the Value field and select No.

4 Click the Save button on the ribbon.

Continue configuring search term feedback or Continue configuring the Answers page.

Displaying suggested searches

The suggested searches feature builds links between search words and phrases based on similar answer search results. It then displays suggested search terms on the Answers page to help customers search for answers by suggesting terms they may not have thought of or known the terminology for.

Do you want to offer your customers suggested searches?

- **Yes.** This is the default, and EU_SUGGESTED_SEARCHES_ENABLE (RightNow User Interface > End-User Interface > General) must also be set to Yes, which is its default setting. If you haven't changed it, you don't need to do anything. Continue configuring search term feedback.
- **Yes,** but I'd like to change the label.
- **No.** Show me how to disable it.

Changing the suggested searches label

To change the suggested searches label

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code for the ResultInfo widget.

```
<rn:widget path="reports/ResultInfo"/>
```

3 Add the *label_suggestion* attribute to the widget. Your code will resemble the following.

```
<rn:widget path="reports/ResultInfo" label_suggestion="You might try
these other searches too:" />
```

4 Save *list.php*.

Continue configuring search term feedback or Continue configuring the Answers page.

Disabling suggested searches

To disable suggested searches

1 Log in to Oracle Service Cloud.

2 Use the procedure described in To locate and edit configuration settings to locate EU_-SUGGESTED_SEARCHES_ENABLE under RightNow User Interface > End-User Interface > General.

3 Click the drop-down menu in the Value field and select No.

4 Click the Save button on the ribbon.

Continue configuring search term feedback or Continue configuring the Answers page.

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Answer Details Page

When customers select an answer on an answers report, such as the Most Popular Answers report on the Support Home page or the Answers report on the Answers page, the answer details page opens.

Important Depending on how an answer was configured, it may or may not be visible to all customers on the answer details page. Many factors control answer visibility, including its **status**, **access level**, **language**, associated **products** and **categories**, **conditional sections**, and the customers' **SLAs**.

This is also true of answers that have been reached through a **guide** on your customer portal. For example, if an answer or section of an answer is available only to customers whose SLAs give them permission to view certain answer access levels, that answer will not be visible to customers without that SLA even if they click an answer in a guide. Refer to Controlling answer visibility.

If you want to keep the answers in your knowledge base from being available to the general public, you must require login on both the Answers and the answer details page. If both pages do not have the same login requirement, a warning will appear when you stage and promote your customer portal. The most secure way to do this is to require login on all pages of your customer portal.

The top of the answer details page displays the answer summary, question and answer text, and dates when the answer was published and updated. Additional information includes any files that are attached to the answer, an answer feedback section, sections for related and previously viewed answers, and links for sharing, printing, emailing, and subscribing to the answer. The page also contains the GuidedAssistant widget, which walks customers through a series of questions, called a guide, to help them locate information that may provide additional information to answer their questions.

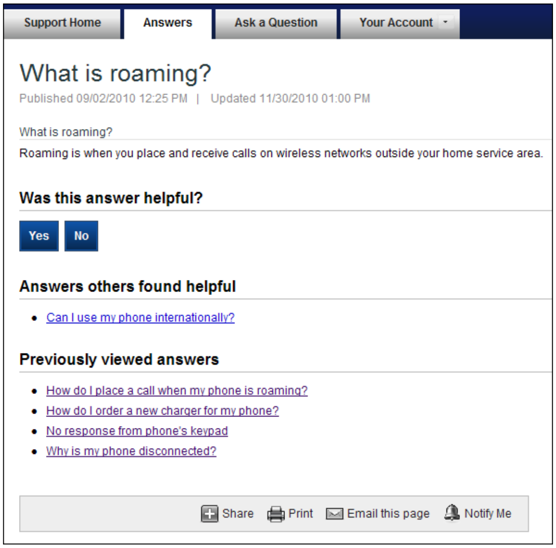
Note For search engine optimization, the source code for the answer details page includes a tag that contains the title of the answer. The title is all lowercase and the words are separated by hyphens. Punctuation in a title is escaped and the title uses a maximum of 80 characters. The link tag is automatically added to the <head> section of the answer and uses the following form.

```
<link rel="canonical" href="http://www.example.com/app/
answers/detail/a_id/<answerID>/~/<answer-title>" />
```

To view this tag, view the source code for an answer page in your web browser. Here is an example.

```
<link rel="canonical" href="http://www.example.com/app/
answers/detail/a_id/1575/~/how-do-i-place-a-call-when-my-
phone-is-roaming%3F"/>
```

Click to view



The customer portal lets you modify the answer details page in the following ways.

- Edit the Published/Updated information.
- Configure search term highlighting for the answer.
- Modify the file attachments display.
- Configure guided assistance.
- Edit the answer feedback section.
- Add the AnswerComments widget so customers can post comments to answers.
- Change the number of related answers or remove them.
- Change the number of previously viewed answers or remove them.
- Add answer details.
- Edit the Share, Print, Email, and Notify Me links.

If you are finished editing this page and want to configure another page on your customer portal, select the page you want to edit.

- Support Home Page
- Answers Page
- Ask a Question Page
- Your Account Pages
- Log In page
- Live Help page or Chat page

Editing Published/Updated information

By default, the answer details page lists the publication date of the answer and the date it was last updated. These dates appear right below the answer summary.

Do you want the published/updated dates to appear on the answer details page?

- **Yes.** This is the default, so continue configuring the answer details page.
- **Yes,** but I'd like to change the labels for these dates.
- **No,** I'd like to remove these dates from the page.

Editing date labels

To edit the date labels on the answer details page

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following code.

```
#rn:msg:PUBLISHED_LBL# <rn:field name="Answer.CreatedTime" />
  |   
#rn:msg:UPDATED_LBL# <rn:field name="Answer.UpdatedTime" />
```

3 Edit the code to reflect your label changes. Your code will resemble the following.

```
This answer was first published on <rn:field name="Answer.CreatedTime"
/>
  |   
This answer was last updated on <rn:field name="Answer.UpdatedTime" />
```

4 Save *detail.php*.

[Continue configuring the answer details page.]

Removing dates

To remove the dates on the answer details page

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Delete the following code.

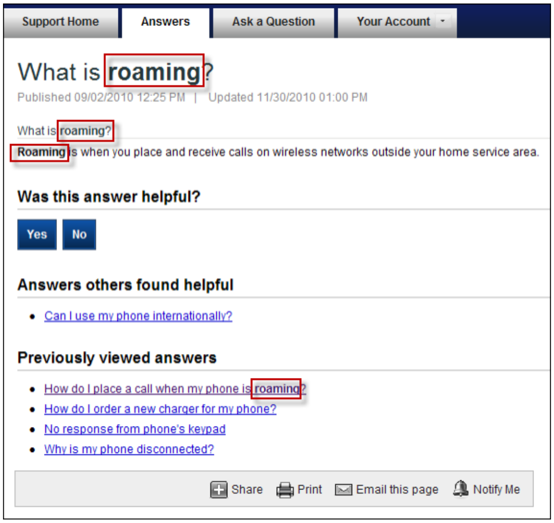
```
#rn:msg:PUBLISHED_LBL# <rn:field name="Answer.CreatedTime" />
  |   
#rn:msg:UPDATED_LBL# <rn:field name="Answer.UpdatedTime" />
```

3 Save *detail.php*.

[Continue configuring the answer details page.]

Configuring search term highlighting

The words that customers type in the search field are stemmed, and all versions of the stemmed words are highlighted in the search results. So if a customer enters “roam,” for example, “roam” and “roaming” will be highlighted in the results on both the Answers page and the answer details page. (However, forms of the word that include punctuation will not be highlighted.) By default, highlighting is done with bold text.



Do you want search terms to appear in bold text on the answer details page?

- **Yes.** This is the default, so continue configuring the answer details page.
- **No,** I'd like to change how search terms appear in the answer.
- **No,** I'd like to remove all highlighting from search terms in the answer.

Changing the appearance of search terms

If you want to change how search terms are highlighted in the results, you'll need to edit the *site.css* file. The following procedure shows you how to do this. For the sake of this example, we'll assume you want to change the search terms to italic font and highlight the background with yellow.

To change the appearance of search terms

1 Open the *site.css* file in the */cp/customer/assets/themes/standard* folder.

2 Locate the following code, which begins around line 706.

```
.rn_Highlight {
      font-style:normal;
      font-weight:bold;
      text-decoration:inherit;
}
```

3 Change the font style of the search terms to italic by deleting the `font-style:normal;` line and replacing it with the following code.

```
font-style:italic;
```

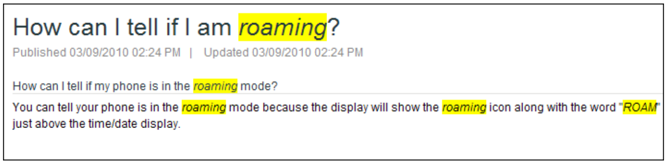
4 Add yellow highlighting to the search terms by adding the following line of code after the font-style code.

```
background-color:#FFFF00;
```

5 Delete the following line of code.

```
font-weight:bold;
```

6 Save *site.css*.



Continue configuring the answer details page.

Disabling search term highlighting

By default, search term highlighting is enabled on the answer details page, but you can disable it by editing the code for report widget.

To disable search term highlighting

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following lines of code. Note that these three lines are not sequential.

```
<h1 id="rn_Summary"><rn:field name="Answer.Summary" highlight="true"/
></h1>
<rn:field name="Answer.Question" highlight="true"/>
<rn:field name="Answer.Solution" highlight="true"/>
```

3 In each of the three lines of code, replace `highlight="true"` with `highlight="false"`.

4 Save *detail.php*.

Continue configuring the answer details page.

Modifying the file attachments display

By default, the answer details page lists any files attached to the answer and displays the file size as well.

Do you want to display file attachments on the answer details page?

- **Yes.** This is the default, so continue configuring the answer details page.
- **Yes,** and I want to display the list of file attachments sorted numerically and alphabetically.
- **Yes,** but I want to remove the file size information.
- **Yes**, but I want to remove file attachment thumbnail.
- **No,** I want to prevent the display of answer file attachments.

Sorting the file attachments

To sort the file attachment list numerically and alphabetically

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following code.

```
<rn:widget path="output/DataDisplay" name="Answer.FileAttachments"
label="#rn:msg:ATTACHMENTS_LBL#"/>
```

3 Edit the DataDisplay widget to add the *sort_by_filename* attribute. (This attribute is actually an attribute of the FileListDisplay widget, which is contained in the DataDisplay widget. Refer to Widget attributes to learn how attributes of a widget contained in another widget can be passed to the “parent” widget.)

```
<rn:widget path="output/DataDisplay" name="Answer.FileAttachments"
label="#rn:msg:ATTACHMENTS_LBL#" sort_by_filename="true" />
```

4 Save *detail.php*.

Continue configuring the answer details page.

Removing file attachment size information

To remove the file attachment size information

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following code.

```
<rn:widget path="output/DataDisplay" name="Answer.FileAttachments"
label="#rn:msg:ATTACHMENTS_LBL#" />
```

3 Edit the DataDisplay widget to add the *display_file_size* attribute. (This attribute is actually an attribute of the FileListDisplay widget, which is contained in the DataDisplay widget. Refer to Widget attributes to learn how attributes of one widget contained in another widget can be passed to the parent widget.)

```
<rn:widget path="output/DataDisplay" name="Answer.FileAttachments"
label="#rn:msg:ATTACHMENTS_LBL#" display_file_size="false" />
```

4 Save *detail.php*.

Continue configuring the answer details page.

Removing file attachment thumbnail

To remove file attachment thumbnail

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following code.

```
<rn:widget path="output/DataDisplay" name="Answer.FileAttachments"
label="#rn:msg:ATTACHMENTS_LBL#" />
```

3 Edit the DataDisplay widget to add the *display_file_size* attribute. (This attribute is actually an attribute of the FileListDisplay widget, which is contained in the DataDisplay widget. Refer to Widget attributes to learn how attributes of one widget contained in another widget can be passed to the parent widget.)

```
<rn:widget path="output/DataDisplay" name="Answer.FileAttachments"
label="#rn:msg:ATTACHMENTS_LBL#" display_thumbnail="false"/>
```

4 Save *detail.php*.

Continue configuring the answer details page.

Preventing the display of answer file attachments

To prevent displaying answer file attachments on the answer details page

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Delete the following code.

```
<div id="rn_FileAttach">
    <rn:widget path="output/DataDisplay"
    name="Answer.FileAttachments" label="#rn:msg:ATTACHMENTS_LBL#" />
</div>
```

3 Save *detail.php*.

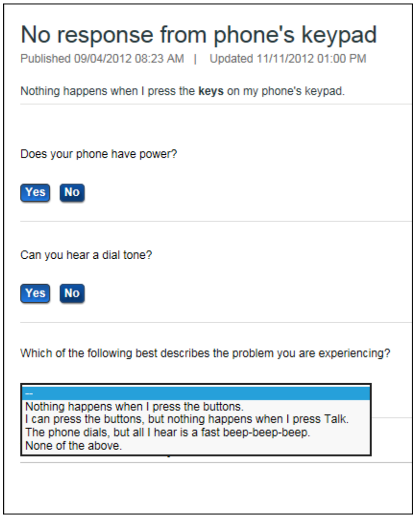
Continue configuring the answer details page.

Configuring the GuidedAssistant widget

The default answer details page includes the GuidedAssistant widget, which helps your customers locate solutions to their problems when they answer questions presented to them on the customer portal. These branching sets of questions are called **guides**, and they are created on the **administration interface** by your knowledge engineer. (Refer to Guided Assistance.)

Note Be sure to check your guides as they appear on the customer portal. Image type questions, in particular, benefit from additional configuration to display effectively. For instance, it's a good idea to leave additional white space to the left of the image and, if possible, include the caption as part of the image rather than separately. Additionally, images that are roughly 350 by 200 pixels display optimally. Don't forget to check your guides on your mobile customer portal as well.

The following figure shows an example of the default GuidedAssistant widget after a customer has answered the first few questions.



Note All text fields are automatically marked as required on the customer portal.

Guides can be associated with individual answers so that when your customers select an answer, the GuidedAssistant widget appears on the answer details page. (If the selected answer is not associated with a guide, the widget will not appear.) Or you can select one guide you want to always appear on the page regardless of which answer is opened. If you define a guide ID in the widget code, that guide will be displayed even if another guide is already associated with the selected answer. If the widget code does not specify a guide, the page displays the guide associated with the answer that is selected, if it has one.

In addition, guides can be configured to pass parameters to the Ask a Question page. If, for instance, your customer reaches the end of a guide and still doesn't have the answer to a question, you can ask for product and category information that will be passed in the URL to the Ask a Question page to populate those fields automatically. Refer to Passing parameters through Call URL nodes.

The GuidedAssistant widget appears by default on the answer details page when the displayed answer is associated with a guide. You can configure the widget to open the guide in a separate window or to display only one question at a time.

Note When a guide uses an inline web page as an answer to a question and the customer repeatedly changes responses to earlier questions, intensive JavaScript loading may cause errors in iFrames with Internet Explorer.

Do you want to display the GuidedAssistant widget on the answer details page?

- **Yes.** This is the default, so continue configuring the answer details page.
- **Yes,** but I want to open a general guide for every answer instead of the one associated with that answer.
- **Yes,** but I want to open guides in a separate window.
- **Yes,** but I want to open any called URLs in a separate window.
- **Yes,** but I want to display only one question at a time.
- **Yes,** but I want to edit the widget labels.
- **No,** I want to remove the GuidedAssistant widget from the answer details page.

Another configuration option for the GuidedAssistant widget is available when customer responses to the guide lead to another answer in your knowledge base. By default, the answer opens in a pop-up window, but you can configure the widget to open answers inline.

The procedures in this section describe configuring the GuidedAssistant widget on the answer details page, but the procedures are similar for any other customer portal page.

Opening the same guide on every answer

Even if the answers that customers select are associated with a guide, you can override that association and specify one guide to open on the answer details page regardless of the answer. To do that, you define the ID of the guide in the widget's code.

To open the same guide on every answer

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following code.

```
<rn:widget path="knowledgebase/GuidedAssistant" />
```

3 Edit the GuidedAssistant widget to add the *static_guide_id* attribute and specify the ID of the guide. (Click here if you need help finding a guide's ID.)

```
<rn:widget path="knowledgebase/GuidedAssistant" static_guide_id="21"
/>
```

4 Save *detail.php*.

Continue configuring the answer details page.

Finding the ID for a guide

To find a guide ID

1 Log in to Oracle Service Cloud.

2 Click the Configuration button.

3 Double-click Guided Assistance Explorer in the configuration list under Service. The list of guides is displayed on the right.

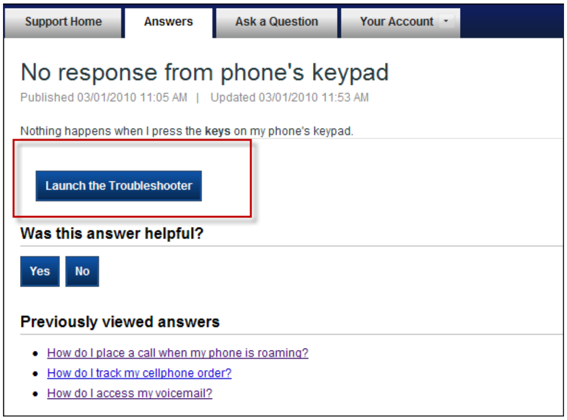
4 If the list does not contain an ID column, click Choose Details on the explorer **ribbon**, select the check box for ID in the Hide or Display Details window, and click OK. The ID column now appears in the list of guides.

Opening guides in a separate window

By default, guides open on the answer details page by displaying the first question of the guide, but you might want them to open in a separate pop-up window instead. First, you must create the page that opens in the window and place another GuidedAssistant widget on that page. Then you must configure the GuidedAssistant widget on the answer details page so it opens the new guide page. When you configure the GuidedAssistant widget to open on a separate page, the answer details page displays a Launch the Troubleshooter button instead of the first guide question.

Note You should not open guides in pop-up windows if the guides include Microsoft file attachments such as Word or Excel because the attachments will not open properly in Internet Explorer 7 or Internet Explorer 8. (For information about adding answers to guides, refer to Adding answers and text explanations to responses.)

Click to view



To create a guide page

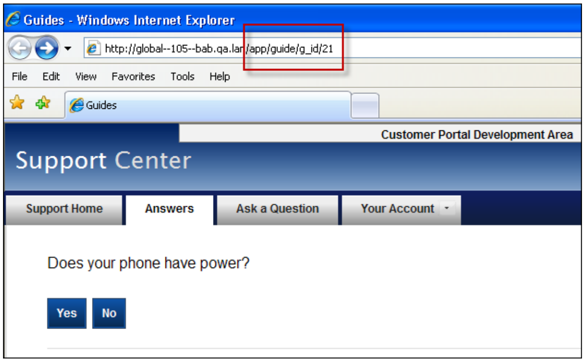
Create a PHP page that contains the GuidedAssistant widget and place it in a *development* folder. In this example, we'll call the page *guide.php* and place it in the */development/views/pages* folder.

The following code is an example of a page you might use.

```
<rn:meta title="Guides" template="standard.php" />
<div id="rn_PageContent">
    <div class="rn_AnswerDetail">
        <dl class="rn_Overview">
            <rn:widget path="knowledgebase/GuidedAssistant"/>
        </dl>
    </div>
</div>
```

The page uses the *standard.php* template and the URL passes the ID of the guide associated with the answer from which the guide was launched.

Click to view



To open guides in a separate window

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following code.

```
<rn:widget path="knowledgebase/GuidedAssistant"/>
```

3 Edit the GuidedAssistant widget to add the *popup_window_url* attribute to specify the guide page you just created. Be sure to add */app/* to the beginning of the page path.

```
<rn:widget path="knowledgebase/GuidedAssistant" popup_window_url="/
app/guide" />
```

4 Save *detail.php*.

Continue configuring the answer details page.

Opening URLs in a separate window

When a question within a guide has a Call URL action, the URL defined in the guide opens by default in the same window. (Refer to Creating guides for information about the various actions that can occur when customers respond to a guide question.) Customers may find it unsettling to respond to a guide question and suddenly be directed to a different URL. To prevent that potential confusion, you may want the GuidedAssistant widget to open URLs in a separate window instead of the same window.

To open guide URLs in a separate window

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following code.

```
<rn:widget path="knowledgebase/GuidedAssistant"/>
```

3 Edit the GuidedAssistant widget to add the *call_url_new_window* attribute.

```
<rn:widget path="knowledgebase/GuidedAssistant"
call_url_new_window="true" />
```

4 Save *detail.php*.

Continue configuring the answer details page.

Opening answers inline

When a guide leads customers to a solution that consists of directing them to another answer in your knowledge base, that answer opens in a separate window by default. The following procedure describes how to open answers inline instead of in a separate window.

To open answers inline

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following code.

```
<rn:widget path="knowledgebase/GuidedAssistant"/>
```

3 Edit the GuidedAssistant widget to add the *target* attribute.

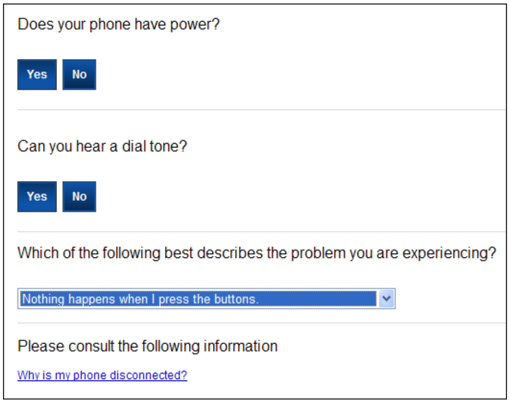
```
<rn:widget path="knowledgebase/GuidedAssistant" target="_self" />
```

4 Save *detail.php*.

Continue configuring the answer details page.

Displaying only the current question

When customers answer a question in a guide, the default GuidedAssistant widget displays the next question while continuing to display all the previous questions.



If you prefer, you can configure the widget to display only the current question. When you do so, a back button is automatically added to the page to let customers return to previous questions.

Note The following procedure edits the widget on the answer details page so that the guide questions are displayed on that page. If you have configured the GuidedAssistant widget on the answer details page to open the guide in a separate window, you'll want to edit the GuidedAssistant widget on your custom guide page, not the answer details page.

To display only the current question

1 Open the *detail.php* file in the */views/pages/answers* folder.

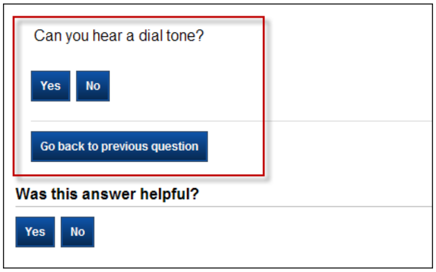
2 Locate the following code.

```
<rn:widget path="knowledgebase/GuidedAssistant"/>
```

3 Edit the GuidedAssistant widget to add the *single_question_display* attribute.

```
<rn:widget path="knowledgebase/GuidedAssistant"
single_question_display="true" />
```

4 Save *detail.php*.



Continue configuring the answer details page.

Editing widget labels

To edit labels on the GuidedAssistant widget

1. Open the *detail.php* file in the */views/pages/answers* folder.
2. Locate the following code.

```
<rn:widget path="knowledgebase/GuidedAssistant"/>
```

3. Use the following table to identify the default message and its corresponding widget attribute so you can edit the GuidedAssistant widget and change the label. For example, to edit the label on the button that opens the guide in a separate window, your code might resemble the following.

```
<rn:widget path="knowledgebase/GuidedAssistant" popup_window_url="/
app/guide" label_popup_launch_button="Open Help System" />
```

Table 381: GuidedAssistant Widget Labels

To edit this default label	Edit this attribute of GuidedAssistant
Please consult the following information	label_answer_result
Launch the Troubleshooter	label_popup_launch_button
Go back to previous question	label_question_back
Start over	label_start_over
OK	label_text_response_button
(Null)	label_text_result

4 Save *detail.php*.

Continue configuring the answer details page.

Removing the GuidedAssistant widget

To remove the GuidedAssistant widget

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Delete the following code.

```
<rn:widget path="knowledgebase/GuidedAssistant"/>
```

3 Save *detail.php*.

Continue configuring the answer details page.

Editing the answer feedback section

By default, the answer details page lets customers submit a Yes or No response to the “Was this answer helpful?” question. You can offer up to five options in response to this question. If the customer answers No and provides information in the Your Feedback field, the question is converted automatically into an incident in the knowledge base.

Do you want to offer the Yes and No options to provide answer feedback?

- **Yes.** This is the default, so continue configuring the answer details page.
- **Yes,** but I'd like to change the answer feedback page that opens.
- **No,** I'd like to offer a wider range of feedback options.
- **No,** I'd like to remove the answer feedback section.

Other options for editing the answer feedback section include:

- Changing the rating threshold that opens the feedback dialog for customers to provide additional feedback about an answer.
- Editing the feedback dialog, including the width of the dialog and its label.

Changing the answer feedback page

You might want to create a different answer feedback page where your customers will be redirected when they submit feedback that is below the threshold you specify. You must first create the page and then note its location. For this example, let's assume that your page name is *new_answer_feedback_page.php* and that you have stored it in *views/pages/answers* folder.

To change the answer feedback page

1. Open the *detail.php* file in the */views/pages/answers* folder.
2. Locate the following line of code.
```
<rn:widget path="feedback/AnswerFeedback"/>
```
3. Add the *feedback_page_url* attribute to the AnswerFeedback widget by editing the widget code as follows.
```
<rn:widget path="feedback/AnswerFeedback" feedback_page_url="/app/
answers/new_answer_feedback_page" />
```
4. Save *detail.php*.

Continue configuring the answer details page.

Offering multiple feedback options

If you want to offer your customers more than the default Yes and No options as a response to the answer feedback question, you can define up to five options. These options appear as stars by default, but you can also display a percentage rating.

To offer more than Yes and No feedback options

1. Open the *detail.php* file in the */views/pages/answers* folder.
2. Locate the following line of code.
```
<rn:widget path="feedback/AnswerFeedback"/>
```
3. Edit the code to add the *options_count* attribute to the widget. The modified code will resemble the following.
```
<rn:widget path="feedback/AnswerFeedback" options_count="5" />
```
4. If you want the options to appear in descending order rather than the default ascending order, add the *options_descending* attribute to the code, which will resemble the following.
```
<rn:widget path="feedback/AnswerFeedback" options_count="5"
```

```
options_descending="true" />
```

5 If you want to explain the rating scale, you can edit the *label_title* attribute as well. The following code is an example of what you might add.

```
<rn:widget path="feedback/AnswerFeedback" options_count="5"
label_title="Rate this answer for helpfulness by selecting between 1
(low) and 5 (high) stars" />
```

6 If you want to display a numerical percentage rating instead of the default stars that are used when more than two responses are offered, add the *use_rank_labels* attribute, shown in the following example.

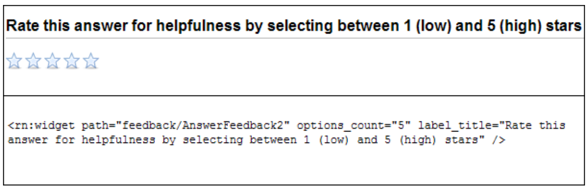
```
<rn:widget path="feedback/AnswerFeedback" options_count="5"
label_title="How useful is this answer?" use_rank_labels="true" />
```

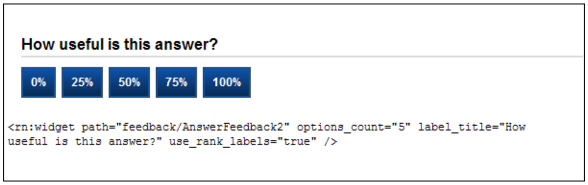
Note The rank labels have default values in the message base. RANK1_LBL is 0%, RANK2_LBL is 25%, RANK3_LBL is 50%, RANK4_LBL is 75%, and RANK5_LBL is 100%. As a result, if you define *options_count* to be 3 or 4 instead of 5, the scale will be incorrect. For example, selecting three options means the labels will be 0%, 25%, and 50%. To have your scale span the full 0-100% range with fewer than five options, you must edit the message bases.

For three options, set RANK1_LBL to 0%, RANK2_LBL to 50%, and RANK3_LBL to 100%. With four options, you'll set RANK1_LBL to 0%, RANK2_LBL to 33%, RANK3_LBL to 67%, and RANK4_LBL to 100%. To find these message bases, first open the Message Base editor. (Click the Configuration button and double-click Message Bases under Site Configuration.) In the Search window, type `rank*` in the Key field and locate the labels in the report. Refer to Editing message bases if you need more help.

You can also edit these message bases to label the options with non-numeric terms, for example, "No," "Partially," "Mostly," and "Yes."

7 Save *detail.php*.





Continue configuring the answer details page.

Removing answer feedback

To remove answer feedback from the answer details page

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Delete the following line of code.

```
<rn:widget path="feedback/AnswerFeedback"/>
```

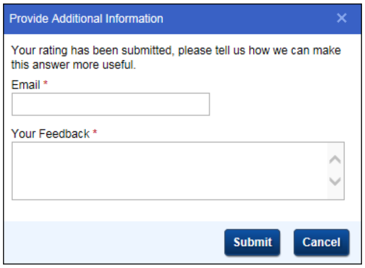
3 Save *detail.php*.

Continue configuring the answer details page.

Setting the rating threshold for opening the feedback dialog

By default, if a customer clicks Yes in response to the “Was this answer helpful?” question, the feedback rating is submitted without offering the customer a chance to provide more detailed feedback. In contrast, if the rating is No, the AnswerFeedback widget displays a Rating Submitted dialog and asks the customer to provide feedback on how the answer could be more useful. If the customer is logged in, the only field on the dialog is the Your Feedback field. If the customer is not logged in, the Email field is a required field on the dialog.

Click to view



Maybe you've offered multiple feedback options and therefore want to set the threshold higher than just the default value of 1. In that case, you would edit the *dialog_threshold* attribute of the AnswerFeedback widget. This attribute specifies the number of feedback options that ask the customer for additional information.

To change the rating threshold

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="feedback/AnswerFeedback" />
```

3 Edit the code to add the *dialog_threshold* attribute to the widget. If you never want to let customers provide feedback on the answer, set the threshold to 0. If you want to offer every customer the ability to provide feedback, regardless of the answer rating, set the threshold to the total number of feedback options (2 for the default Yes/No buttons, 5 for the default multiple feedback options). If you have implemented multiple feedback options, you can set the threshold you want. For example, for a five-option rating scale, you might want to solicit feedback from everyone who ranks the answer at a 3 or lower. Your modified code will resemble the following.

```
<rn:widget path="feedback/AnswerFeedback" dialog_threshold="3" />
```

4 Save *detail.php*.

Continue configuring the answer details page.

Editing the feedback dialog

You can configure the AnswerFeedback widget that opens when the customer submits feedback that an answer wasn't helpful. By default, the dialog width is 375 pixels and the label says, "Your rating has been submitted, please tell us how we can make this answer more useful."

To edit the feedback dialog

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="feedback/AnswerFeedback"/>
```

3 To change the width of the dialog from 375 pixels, edit the *dialog_width* attribute to the width you want.

4 To edit the label on the dialog, edit the *label_dialog_description* attribute. Your edited code may resemble the following.

```
<rn:widget path="feedback/AnswerFeedback" dialog_width="500px"
label_dialog_description="How could we have been more helpful?" />
```

5 Save *detail.php*.

Continue configuring the answer details page.

Related answers

Related answers are part of **SmartAssistant**, which evaluates the language of a customer's question and suggests possible answers. (You can use SmartAssistant to offer answers to your customers before they submit their questions on the Ask a Question page.) The default answer details page uses the RelatedAnswers widget to display a list of related answers to help your customers find the answers they need. These appear under the heading "Answers others found helpful."

Relationships among answers are generated when staff members manually relate answers on the **agent desktop** (refer to Managing answer relationships) or when customers use your site. Links are created when customers move from one answer to another within a visit to your customer portal. As these links are generated between answers in multiple customer visits over time, the related answers feature is better able to suggest answers based on what customers have viewed during the current visit.

By default, a maximum of five related answers are displayed on the answer details page. You can change that number by editing the *limit* attribute of the RelatedAnswers widget, or you can disable the display of related answers.

To change the number of related answers

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="knowledgebase/RelatedAnswers" />
```

3 Edit the code to add the *limit* attribute. (If you do not want a limit on the number of answers, set the attribute to 0.) Your edited code will resemble the following.

```
<rn:widget path="knowledgebase/RelatedAnswers" limit="3" />
```

4 Save *detail.php*.

To remove related answers from the answer details page

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Delete the following line of code.

```
<rn:widget path="knowledgebase/RelatedAnswers" />
```

3 Save *detail.php*.

Continue configuring the answer details page.

Previously viewed answers

By default, up to five previously viewed answers are displayed on the answer details page. You can change that number by editing the *limit* attribute of the PreviousAnswers widget, or you can remove previously viewed answers from the page.

To change the number of previously viewed answers

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="knowledgebase/PreviousAnswers" />
```

3 Edit the code to add the *limit* attribute. (If you do not want a limit on the number of answers, set the attribute to 0.) Your edited code will resemble the following.

```
<rn:widget path="knowledgebase/PreviousAnswers" limit="3" />
```

4 Save *detail.php*.

To remove previously viewed answers from the answer details page

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Delete the following line of code.

```
<rn:widget path="knowledgebase/PreviousAnswers" />
```

3 Save *detail.php*.

Continue configuring the answer details page.

Adding answer details

You might want to provide additional information about the answer being viewed on the answer details page. This procedure shows you how to add fields to the page.

To add fields on the answer details page

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following line of code and add the details in the following steps below this line.

```
<rn:field name="Answer.Solution" highlight="true"/>
```

3 To add the answer's ID, add the following line of code.

```
<p>Answer ID <rn:field name="Answer.ID" /></p>
```

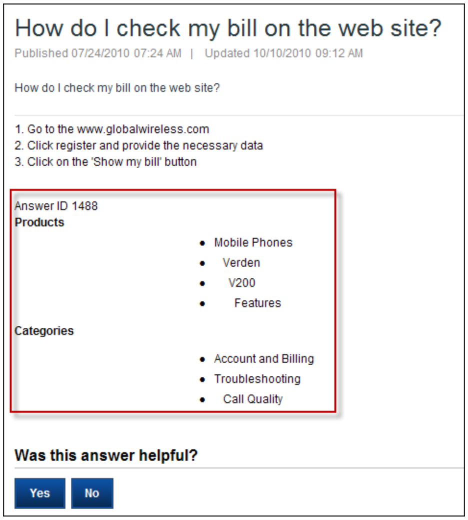
4 To add product information for the answer, add the following line of code.

```
<rn:widget path="output/DataDisplay" name="Answer.Products" />
```

5 To add category information for the answer, add the following line of code.

```
<rn:widget path="output/DataDisplay" name="Answer.Categories" />
```

6 Save *detail.php*.



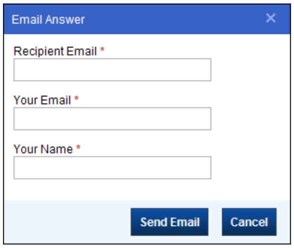
Continue configuring the answer details page.

Editing links

By default, the answer details page includes four links at the bottom of the page that customers can click to access answer features.

- **Share**—Click to share the answer on social networking sites. The default sites are Facebook, Twitter, Linked In, and Reddit.

- **Print**—Click to open a print dialog that lets you print the answer.
- **Email This Page**—Click to send a link to the answer by email. If the customer viewing the answer is not logged in, a form asks for the recipient's email address and the customer's email address and name. If the customer is logged in, only the recipient's email address is requested.



- **Notify Me**—Click to be notified by email when the answer is updated.

Note The Notify Me link appears only if the customer is logged in.

Do you want to keep all links on the answer details page?

- **Yes.** This is the default, so continue configuring the answer details page.
- **Yes,** but I want to edit the list of social networking sites on the Share link.
- **No.** I want to remove one or more links.

Editing social networking links

By default, the Share link lets you share answer content with the Facebook, Twitter, Linked In, and Reddit social networking sites. You can add, remove, or rearrange the options displayed by editing the SocialBookmarkLink widget.

Important To correctly display the icons associated with each social network when you edit the answer details page, you will also need to edit the CSS file for the SocialBookmarkLink widget.

To edit the list of social networking sites on the Share link

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="utils/SocialBookmarkLink" />
```

3 Edit the code as follows to individually list each site as a comma-separated values of the *sites* attribute.

```
<rn:widget path="utils/SocialBookmarkLink"
```

```
sites="Facebook > Post to Facebook > http://facebook.com/
sharer.php?u=|URL|,
Twitter > Tweet this > http://twitter.com/
home?status=|TITLE|+|URL|,
LinkedIn > Post to LinkedIn > http://www.linkedin.com/
shareArticle?mini=true&url=|URL|&title=|TITLE|&summary=|TITLE|&so
urce=|URL|,
Reddit > Post to Reddit > http://reddit.com/
submit?url=|URL|&title=|TITLE|" />
```

4 To remove one or more of the default links, delete the associated code from the *sites* attribute. To rearrange the links, select the code for the link you want to move and place it where you want it to appear. Each link includes the site name, site title, the URL, and page title. Assume, for example, that you want to remove the link for LinkedIn and rearrange the remaining links in the following order: Twitter, Reddit, and Facebook. You'll edit the code to look like the following.

```
<rn:widget path="utils/SocialBookmarkLink"
    sites="Twitter > Tweet this > http://twitter.com/
    home?status=|TITLE|+|URL|,
    Reddit > Post to Reddit > http://reddit.com/
    submit?url=|URL|&title=|TITLE|,
    Facebook > Post to Facebook > http://facebook.com/
    sharer.php?u=|URL|" />
```

5 Now, edit the CSS file for the SocialBookmarkLink widget. Click here.

6 To add links for other supported social media services, insert one or more of the following code lines as additional comma-separated values for the *sites* attribute.

```
Digg > Post to Digg > http://digg.com/
submit?url=|URL|&title=|TITLE|,
Delicious > Post to Delicious > http://del.icio.us/
post?url=|URL|&title=|TITLE|,
StumbleUpon > Post to StumbleUpon > http://stumbleupon.com/
submit?url=|URL|&title=|TITLE|,
Tumblr > Post to Tumblr > http://www.tumblr.com/
share?v=3&u=|URL|&t=|TITLE|,
```

For example, if adding links for Digg and StumbleUpon, your edited code will resemble the following.

```
<rn:widget path="utils/SocialBookmarkLink"
    sites="Facebook > Post to Facebook > http://facebook.com/
    sharer.php?u=|URL|,
    Twitter > Tweet this > http://twitter.com/
    home?status=|TITLE|+|URL|,
```

```
LinkedIn > Post to LinkedIn > http://www.linkedin.com/
shareArticle?mini=true&url=|URL|&title=|TITLE|&summary=|TITLE|&so
urce=|URL|,
Reddit > Post to Reddit > http://reddit.com/
submit?url=|URL|&title=|TITLE|,
Digg > Post to Digg > http://digg.com/
submit?url=|URL|&title=|TITLE|,
StumbleUpon > Post to StumbleUpon > http://stumbleupon.com/
submit?url=|URL|&title=|TITLE|," />
```

7 To add your own custom links, add code to the *sites* attribute using the following format for each link you want to add. If you have multiple links, separate them with commas.

```
site name > title to display for site > URL with page title
```

Important When you change the links displayed by the SocialBookmarkLink widget, you'll also need to edit the widget's CSS file to add images for the links. Click here for an example of editing the CSS file with the default images.

8 Save *detail.php*.

Editing the CSS file for the SocialBookmarkLink widget

The SocialBookmarkLink widget uses a sprite, which is a single image file comprised of all the icons that are displayed next to the social media links. (To view this sprite image, go to */cp/customer/assets/themes/standard/images/icons/socialBookmark.png*.) The CSS file for the widget (*SocialBookmarkLink.css)* calls the sprite and uses the *background-position* attribute to define the pixel position of each icon, including Facebook at -32px, Twitter at -80px, LinkedIn at -96px, and Reddit at -48px.

The *SocialBookmarkLink.css* file associates each icon with its corresponding social media link by referencing the link order defined by the widget. If you customize the link order in the widget, you must also edit the CSS file to indicate the link order and icon position for each link. For example, when four links are defined, Link1 is the far left link and Link4 is on the far right. If you edit the widget to make Twitter the far left link, you must update the CSS file to associate Link1 with the position of the Twitter icon, which is -80px.

The following procedure describes how to edit the CSS file to position the links according to the edits you made to the SocialBookmarkLink widget on the answer details page.

To edit the CSS file for the SocialBookmarkLink widget

1 Open the *SocialBookmarkLink.css* file in the */cp/customer/assets/themes/standard/widgetCss* folder.

2 Locate the following lines of code.

```
/* Facebook */
.rn_SocialBookmarkLink li.rn_Link1 {
    background-position:0 -32px;
}
/* Twitter */
.rn_SocialBookmarkLink li.rn_Link2 {
    background-position:0 -80px;
}
/* LinkedIn */
.rn_SocialBookmarkLink li.rn_Link3 {
    background-position:0 -96px;
}
/* Reddit */
.rn_SocialBookmarkLink li.rn_Link4 {
    background-position:0 -48px;
```

3 Edit the code as follows to position the icons in the order they are defined on the widget. For example, if the defined order is Twitter, Reddit, Facebook, and LinkedIn, your edited code will resemble the following.

```
/* Twitter */
.rn_SocialBookmarkLink li.rn_Link1 {
    background-position:0 -80px;
}
/* Reddit */
.rn_SocialBookmarkLink li.rn_Link2 {
    background-position:0 -48px;
}
/* LinkedIn */
.rn_SocialBookmarkLink li.rn_Link3 {
    background-position:0 -96px;
}
/* Facebook */
.rn_SocialBookmarkLink li.rn_Link4 {
    background-position:0 -32px;
}
```

4 If you have added a social media service to the Share link, enter custom code in the same format to define its link order and logo location. Your added code will resemble the following.

```
/* StumbleUpon */
.rn_SocialBookmarkLink li.rn_Link5 {
    background-position:0 -64px;
}
```

Note The *background-position* attributes for icons of other supported social media services—Delicious, Digg, and StumbleUpon—are listed at the bottom of the *SocialBookmarkLink.css* file.

5 If you have removed a social media service from the Share link, remove the code that defined its link order and logo location, and adjust the link orders defined for the remaining links accordingly.

6 Save *SocialBookmarkLink.css*.

Continue configuring the answer details page.

Removing links

To remove links on the answer details page

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 To remove the Share link, delete the following line of code.

```
<rn:widget path="utils/SocialBookmarkLink" />
```

3 To remove the Print link, delete the following line of code.

```
<rn:widget path="utils/PrintPageLink" />
```

4 To remove the Email This Page link, delete the following line of code.

```
<rn:widget path="utils/EmailAnswerLink" />
```

5 To remove the Notify Me link, delete the following lines of code.

```
<rn:condition logged_in="true">
    <rn:widget path="notifications/AnswerNotificationIcon" />
</rn:condition>
```

6 If you removed the Notify Me link, remove the Notifications option on the Your Account tab drop-down menu.

Then remove the Notifications section of the Account Overview page.

7 Save *detail.php*.

Continue configuring the answer details page.

Turning off answer notifications

If you turn off the ability for customers to subscribe to be notified when an answer is updated, you should also turn off the Notifications option on the Your Account tab, remove the Notifications section of the Account Overview page, and remove the reference to notifications on the Log In page. Click here for the full procedure.

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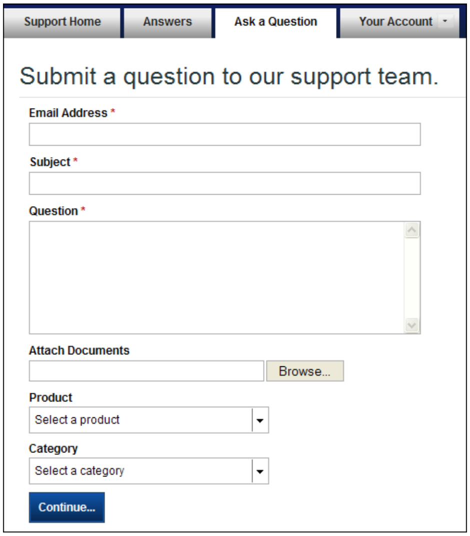
Ask a Question Page

The Ask a Question page lets your customers submit questions to your customer support group when they cannot find the information they are looking for on your customer portal. If the customer is not logged in, the Email Address field is displayed and is required before the question can be submitted. If the customer is logged in, the Email Address field does not appear on the page. When a customer submits a question, the customer portal automatically converts the question into an incident in the knowledge base, where it can then be solved.



Workflow configuration options

As an alternative to using the default workflow where accounts are automatically created for customers who do not already have one when they submit a question, you have the option of configuring other workflows for the Ask a Question page. [Review workflow options here](), or click one of the following workflows for a description and configuration procedure.

- The default email-only workflow automatically creates an account when customers who do not have an account submit a question.
- The email check workflow requires customers without an account to create one before asking a question.
- The login required workflow requires customers to log in before asking a question.
- The additional contact fields workflow requires customers to complete other contact fields you have placed on the page before they can submit a question.

Additional Ask a Question page configuration options

Besides setting up the workflow, the following configuration options are also available on the Ask a Question page.

- Require customers to view answers or conduct searches before the Ask a Question tab is visible.
- Require customers to have an SLA (service level agreement) before submitting a question.
- Remove the Subject field.
- Populate the Subject field.
- Specify the number of levels of products and categories customers must select.
- Automatically populate the products and categories.
- Display +/– symbols for expanding and collapsing product and category trees.
- Restrict or prevent file attachments on the Ask a Question page.
- Define the amount of time a customer has to complete the Ask a Question form before it expires.
- Configure the confirmation page that tells customers their question has been submitted.
- Send an email incident receipt when customers submit a question.
- Use the SmartAssistant feature.
  - ▷ Set up SmartAssistant on the administration interface.
  - ▷ Configure the SmartAssistant dialog that opens before customers complete submitting their question.
  - ▷ Use SmartAssistant with a Do Not Create Incident rule.
- Create Siebel service requests on the Customer Portal.

If you are finished editing this page and want to configure another page, select the page you want to edit.

- Support Home Page

- Answers Page
- Answer Details Page
- Your Account Pages
- Log In page
- Live Help page or Chat page

Ask a Question page workflows

The standard Ask a Question workflow in the Customer Portal reference implementation was designed to address usability studies that suggest it offers the best customer experience. This workflow asks for only an email address, letting customers complete that field quickly and then submit their incident without requiring account creation or login. However, we recognize that your site may have different needs, so the Customer Portal supports each of the following workflows.

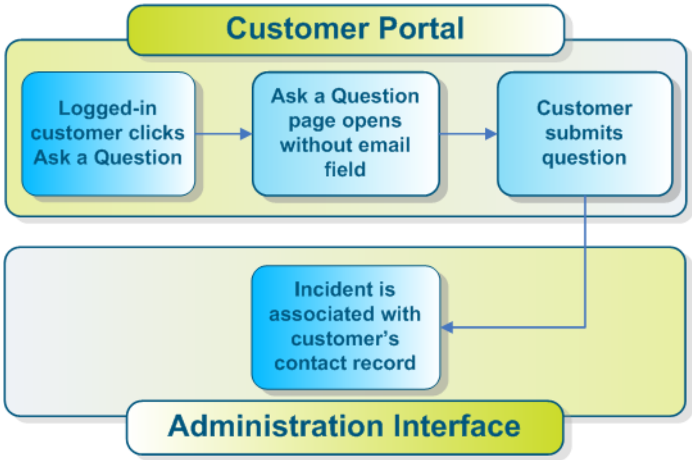
- **Email-only**—If your organization finds an email address to be adequate customer identification, this default workflow is ideal. It can also be useful when most of your customers update their incidents through email instead of logging in to your customer portal. Refer to Email-only default workflow.
- **Email check**—Use this workflow when you require customers to have an account before they can submit a question. The customer portal checks the email address, letting customers with an associated contact record submit the question while requiring those without contact records to create an account first. Refer to Email check.
- **Login required**—When you not only want customers to have an account, but you also want them logged in prior to asking questions, you can set up the Ask a Question page to require login. Refer to Requiring login.
- **Additional contact fields**—This workflow is similar to the email-only flow, but it requires customers to complete additional fields on the Ask a Question page before they can submit a question. Refer to Additional contact fields workflow.

Important If your organization needs a dynamic Ask a Question form, that is, you need to display or hide certain fields based on a customer's response to another field, you can create a custom widget and a customized Ask a Question page to accomplish your objectives. See Dynamic forms.

Logged-in customers

The differences among the workflows described in this section are apparent only when customers are not logged in. When customers are logged in, the Ask a Question process is the same for all workflows:

- Because the customer is logged in (and, therefore, the email address is known), the Ask a Question page opens without an Email Address field.
- The customer completes the fields and submits the question.
- Oracle Service Cloud converts the question into an incident, which is associated with the customer's contact record.



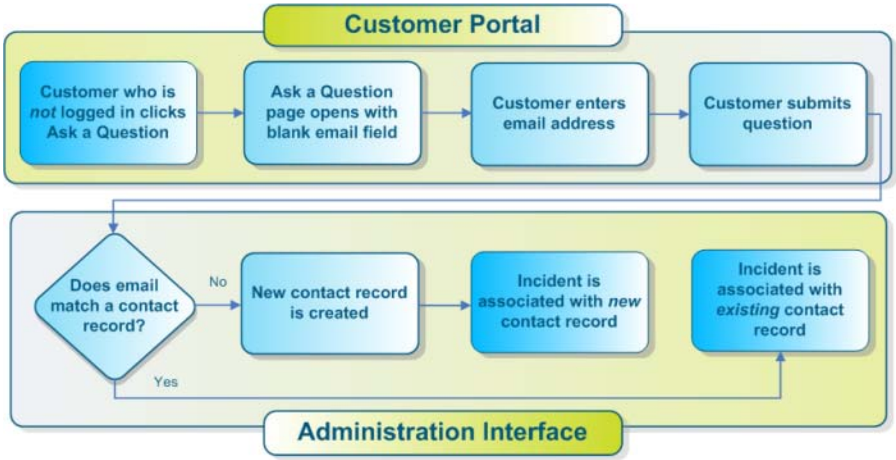
Email-only default workflow

The default Ask a Question page on the reference implementation has been designed to let your customers complete their question quickly without being required to log in. If customers are not logged in when they click the Ask a Question tab, they must enter their email address before submitting their question. If the email address is associated with a contact record in the knowledge base, the resulting incident is associated with the existing contact record. (All email correspondence related to the incident is directed to the email address the customer entered, even if it is not the customer's primary email address, when OE_SVC_SEND-MAIL_SINGLE_ADDRESS is enabled. See Modifying general customer portal settings.) If the email address does not match an existing contact record, a new record is created for the customer and the incident is associated with that record. The new contact record contains only the email address, so customers will be required to use account assistance if they want to log in to the customer portal in the future.

Note Customers are not logged in to the customer portal after submitting a question, whether their contact record already exists or is created through the question submission.

This workflow is useful when:

- Your organization accepts an email address as adequate customer information.
- Most customers update their incidents through email instead of logging in to the customer portal.



Usability studies show this workflow offers customers a good experience because it lets them quickly fill out their email address and then submit their incident without being interrupted to create an account first. It offers the following advantages and disadvantages.

Pros

- The workflow offers a positive customer experience.
  - ▷ Existing customers don't need to remember their user name and password.
  - ▷ New customers don't have to create an account before submitting a question.
- Incidents can be submitted quickly with a minimal number of steps.
- The easier process means less page abandonment by customers.

Cons

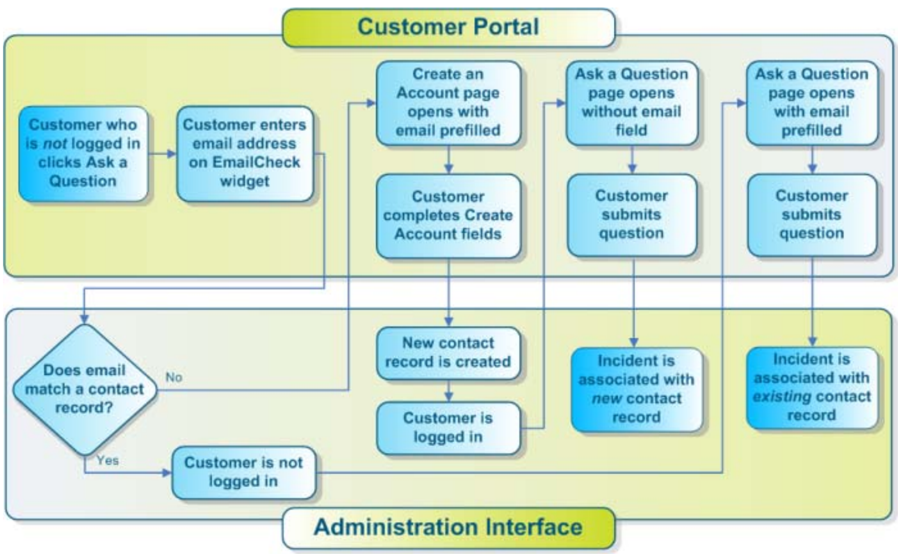
- Customers who create contact records in this workflow must use account assistance the first time they log in to the customer portal.
- At least some of the contact records in your knowledge base contain only an email address so the customer's name is unknown.

Because this is the behavior of the standard Ask a Question page, this workflow is implemented by default.

Email check

As described in Email-only default workflow, the standard Ask a Question page creates a contact record when a customer enters an email address that is not already in the knowledge base. Although this workflow has been tested for its usability and adopted in the reference implementation, your organization may require more customer information than just an email address. The best way to ensure getting this information is to require customers to create an account before they can ask a question.

The following workflow can be accomplished by editing the standard Ask a Question and Create an Account pages. ProgressBar widgets on the pages increase usability by showing customers where they are in the workflow.



This workflow is most useful when your organization requires valid data in every field of a contact record.

Pros

- Your organization's contact records include complete customer information.
- The ProgressBar widgets let customers see where they are in the workflow.
- Existing customers are minimally impacted by this workflow.

Cons

- New customers must create an account before asking a question, which may lead to form abandonment.
- The sequence of multiple steps may lead to abandonment.

To implement this workflow, you'll first need to modify the Ask a Question page to display the EmailCheck and ProgressBar widgets. Then you'll add the ProgressBar widget to the Create an Account page.

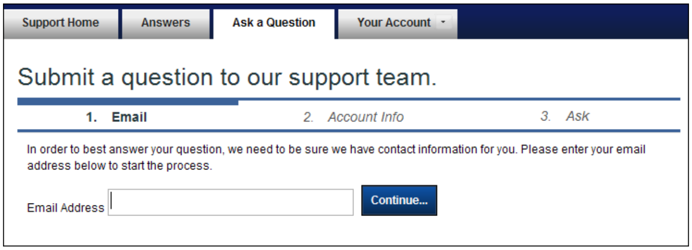
Editing the Ask a Question page for the email check workflow

First, you'll edit the default Ask a Question page to achieve the following objectives.

- Display the EmailCheck widget when customers are not logged in so they can enter their email address.
  - ▷ If the email address matches an existing contact record, return customers to the Ask a Question page, where the Email Address field is populated.
  - ▷ If the submitted email address does not match a contact record in the knowledge base, take customers to the Create an Account page. The Email Address field on this page is populated with the submitted information.
- Display the ProgressBar widget so customers who are in this workflow can determine which step of the process they're currently on.

Note Because the only step for logged-in customers is to complete the Ask a Question fields, the ProgressBar widget is enclosed in conditional tags so it won't appear to them. The ProgressBar widget includes a *current_step* attribute that gets set from the EmailCheck widget's *redirect_after_contact_creation* attribute.

Customers who click the Ask a Question navigation tab or sidebar link will see the following page when they are not logged in. The progress bar below the heading lets customers know they are on the Email step of the process.



Here is the code for the revised Ask a Question page. It includes the EmailCheck and ProgressBar widgets and the conditions for displaying them.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#" template="standard.php"
clickstream="incident_create"/>
<div id="rn_PageTitle" class="rn_AskQuestion">
    <h1>#rn:msg:SUBMIT_QUESTION_OUR_SUPPORT_TEAM_CMD#</h1>
    <rn:condition logged_in="false" url_parameter_check="step != null">
        <rn:condition url_parameter_check="step == null">
            <rn:widget path="utils/ProgressBar"/>
        <rn:condition_else/>
            <rn:widget path="utils/ProgressBar"
            current_step="#rn:url_param_value:step#"/>
        </rn:condition>
    </rn:condition>
</div>
<div id="rn_PageContent" class="rn_AskQuestion">
    <div class="rn_Padding">
        <!--Logged in or on final step of process-->
        <rn:condition logged_in="true" url_parameter_check="step == 3">
            <form id="rn_QuestionSubmit" method="post" action="/ci/
            ajaxRequest/sendForm">
                <div id="rn_ErrorLocation"></div>
                <rn:condition logged_in="false">
                <rn:widget path="input/FormInput"
                name="Contact.Emails.PRIMARY.Address" required="true"
                label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
                <rn:widget path="input/FormInput" name="Incident.Subject"
                required="true" initial_focus="true" />
                </rn:condition>
                <rn:condition logged_in="true">
                <rn:widget path="input/FormInput" name="Incident.Subject"
```

```
                    required="true" initial_focus="true"/>
                    </rn:condition>
                    <rn:widget path="input/FormInput" name="Incident.Threads"
                    required="true" label_input="#rn:msg:QUESTION_LBL#"/>
                    <rn:widget path="input/FileAttachmentUpload"/>
                    <rn:widget path="input/ProductCategoryInput"
                    name="Incident.Product" />
                        <rn:widget path="input/ProductCategoryInput"
                        name="Incident.Category"
                        label_input="#rn:msg:CATEGORY_LBL#"
                        label_nothing_selected="#rn:msg:SELECT_A_CATEGORY_LBL
                        #"/>
                    <rn:widget path="input/CustomAllInput" table="Incident"/>
                    <rn:widget path="input/FormSubmit"
                    label_button="#rn:msg:CONTINUE_ELLIPSIS_CMD#"
                    on_success_url="/app/ask_confirm"
                    error_location="rn_ErrorLocation" />
            <rn:condition answers_viewed="2" searches_done="1">
            <rn:condition_else/>
                <rn:widget path="input/SmartAssistantDialog"/>
            </rn:condition>
            </form>
            <rn:condition_else/>
                <!-- Not logged in or on one of initial steps-->
                <rn:condition url_parameter_check="step == null">
                    <p>In order to best answer your question, we need to have
                    contact information for you. Please enter your email
                    address below to start this process. </p>
                    <rn:widget path="input/EmailCheck" initial_focus="true"
                    redirect_existing_contact="/app/ask/step/3"
                    redirect_after_contact_creation="/app/ask/step/3"
                    redirect_new_contact="/app/utils/create_account/step/2" /
                    >
                </rn:condition>
            </rn:condition>
        </div>
    </div>
```

Next, go to Editing the Create an Account page.

Editing the Create an Account page

Next, you'll edit the Create an Account page. You want customers who access the page from the email check workflow to see the progress bar so they know how far along they are in the process of asking their question. However, it's not necessary or helpful to display it to customers who click the Sign Up link and access the page normally.

Although this procedure modifies the standard Create an Account page, you may want to create a separate page for this workflow if your standard page contains many fields. Because you've interrupted a customer who is trying to submit a question, we recommend that you display only the minimum number of fields your organization requires to create an account. Customers can then return quickly to the initial task.

The following procedure checks the step parameter you added to the EmailCheck widget on the Ask a Question page. If the step parameter in the URL is not null, the ProgressBar widget appears on the Create an Account page. The EmailCheck widget on the Ask a Question page uses the default value for the *redirect_after_contact_creation* attribute. (The default value is `/app/ask/step/3`.) Clicking Submit on the Create an Account page then redirects the customer to the Ask a Question page, where the progress bar shows step 3.

To edit the Create an Account page

1 Open the *create_account.php* file in the */views/pages/utils* folder.

2 Locate the following line of code.

```
<h1>#rn:msg:CREATE_AN_ACCOUNT_CMD#</h1>
```

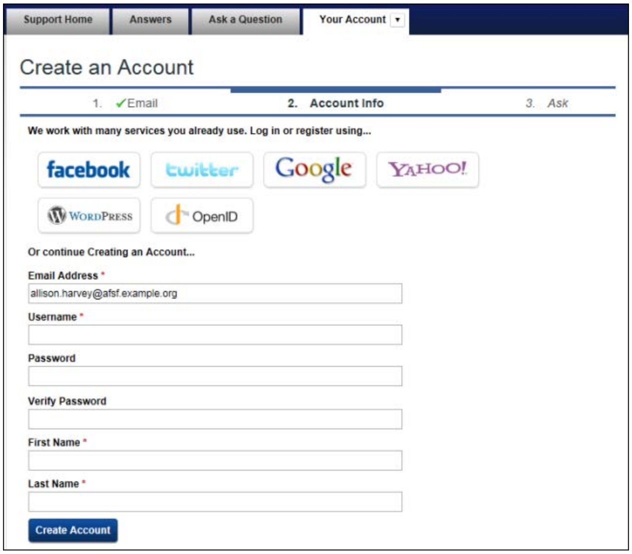
3 Add the following lines of code immediately below the line you located in step 2.

```
<rn:condition url_parameter_check="step != null">
    <rn:widget path="utils/ProgressBar"
    current_step="#rn:url_param_value:step#"/>
</rn:condition>
```

4 Save *create_account.php*.

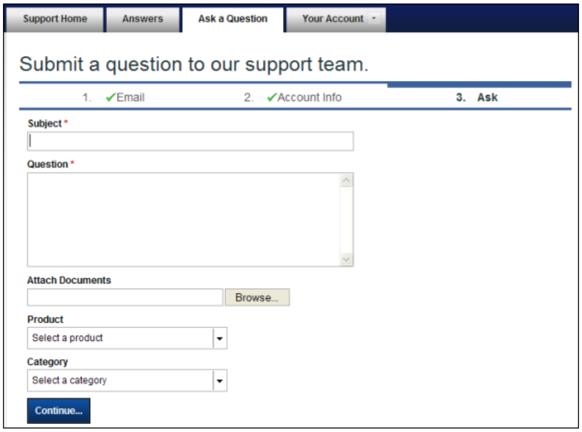
After customers enter their email address and click the Continue button on the EmailCheck widget, the Create an Account page opens. Notice that the Email Address field is populated and the progress bar indicates the Account Info step of the flow.

Click to view



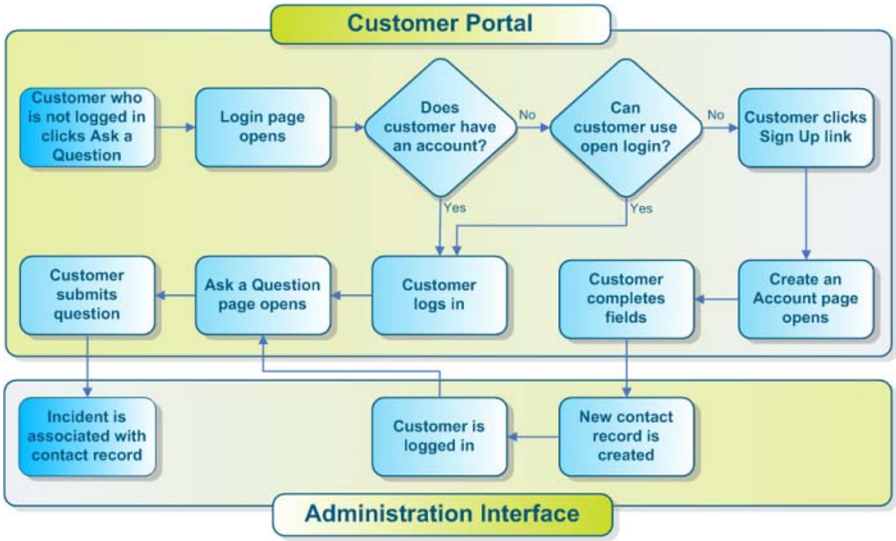
When customers complete the information on the Create an Account page and click Continue, they are logged in and redirected to the Ask a Question page.

Click to view



Requiring login

Another workflow approach is to simply require customers to log in before they can submit a question. (You'll recall that the email check workflow requires customers to have an account, but does not require them to log in prior to submitting questions.)



The open login feature enhances the ease of customer login by letting them log in through their Facebook, Twitter, Google, and other open login accounts. (Refer to Customer portal open login.) Requiring login for submitting questions can be a useful approach when you encourage open login or when your customer portal is used internally within your organization more than externally by customers. As with every Ask a Question workflow, it has advantages and disadvantages.

Pros

- The required login workflow is easy to implement.
- It is easy for customers to understand.
- You can collect whatever customer information you want.

Cons

- Requiring login can be a frustrating experience for customers.

By default, the *login_required* page meta tag attribute is false, so setting it to true requires you to add the attribute to the page code. After you've completed the following procedure, customers who click the Ask a Question tab when they're not logged in will be redirected to the Login page. After logging in or creating an account, the Ask a Question page opens.

Note The Ask a Question confirmation page should have the same value for the *login_required* page meta tag as the Ask a Question page. The following procedure adds the *login_required* attribute to both pages.

To require login on the Ask a Question page

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code at the top of the file.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#"
template="standard.php"
clickstream="incident_create"/>
```

3 Edit the code to add the *login_required* page meta tag.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#"
template="standard.php"
clickstream="incident_create" login_required="true" />
```

4 Save *ask.php*.

5 Open the *ask_confirm.php* file in the */views/pages* folder.

6 Locate the following line of code at the top of the file.

```
<rn:meta title="#rn:msg:QUESTION_SUBMITTED_LBL#"
template="standard.php"
clickstream="incident_confirm"/>
```

7 Edit the code to add the *login_required* page meta tag.

```
<rn:meta title="#rn:msg:QUESTION_SUBMITTED_LBL#"
template="standard.php"
clickstream="incident_confirm"
login_required="true" />
```

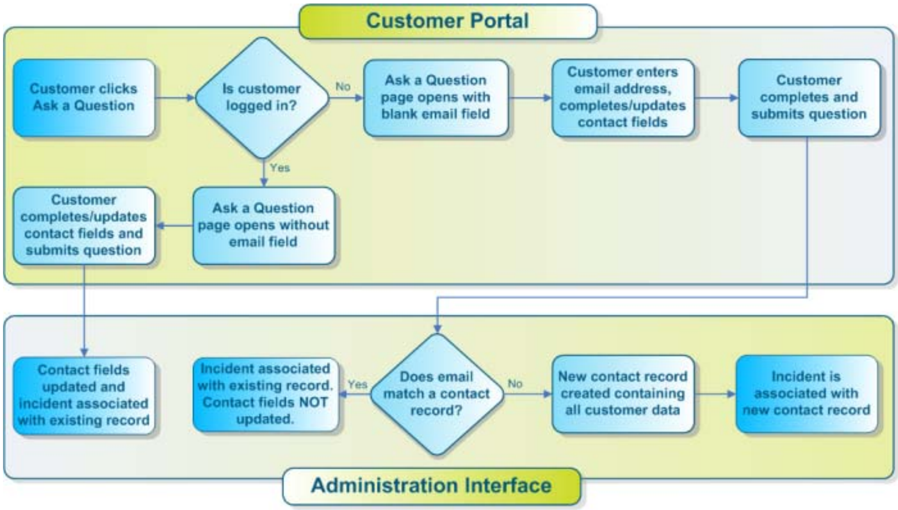
8 Save *ask_confirm.php*.

Additional contact fields workflow

You may find yourself wanting to collect more customer information than just an email address (the only information provided by the default email-only workflow) from a new customer who wants to ask a question on your site, but you don't want to redirect them to the Create an Account page (as you do with the email check workflow). One way you can accomplish this is by adding contact fields on the Ask a Question page and requiring (or simply allowing) your customers to answer them prior to submitting a question.

Before you develop this approach, however, you should understand how the application treats the data that is entered into these fields. There are three primary situations where contact information is handled differently.

- **A customer who does not have a contact record in your knowledge base asks a question.** At a minimum, the customer is required to enter an email address to submit the question. The customer must also enter information in any additional contact fields you require, and the data from the required fields is stored in the new contact record for that customer. If you have also added optional contact fields to the Ask a Question page, customer information in these fields becomes part of the contact record too.
- **An existing customer is logged in and submits a question.** The email address field does not appear on the Ask a Question page because page conditions in the code hide the field when the customer is logged in. Any additional contact fields on the page are populated with the customer's information if it is available in the contact record. If there are blank required fields on the page, the customer must complete them before submitting the question. Optional and required fields can also be edited to update the customer's contact record. (This assumes that you did not hide the additional fields for logged-in customers with the `<rn:condition logged_in="false">` tag. Obviously, if the fields are not visible to logged-in customers, they cannot edit them.)
- **An existing customer is not logged in and submits a question.** The email address field is visible because the customer is not logged in, and the customer must enter the address and other required contact fields on the page before the question is submitted. Although the additional contact fields appear on the page and the customer can add or edit them, **none of the changes made by the customer on the Ask a Question page to required or optional contact fields will be saved to the contact record if the customer enters an email address that is already in the knowledge base.** This prevents persons who know the customer's email address from being able to update the customer's information. Customers with contact records in the knowledge base must be logged in before they can edit their contact information.



It's a good idea to limit the number of additional contact fields on the Ask a Question page, and to think carefully about whether you want those fields to be visible to logged-in customers. Remember that existing customers can always update information in their contact record from the Account Settings (*profile.php*) page after they have logged in, so it's not necessary to offer that opportunity on the Ask a Question page as well.

This workflow can be most useful when you require a minimal number of additional contact fields in order to create a contact record.

Pros

- The additional contact fields workflow lets you collect more customer information than just the email address.
- It doesn't require existing customers to log in.
- It doesn't require new customers to go to the Create an Account page.

Cons

- Confusion can result when existing customers who are not logged in add new information or update fields on the page but their information is not updated in the contact record.

The following procedure shows you how to add first and last names and an alternate email address to the Ask a Question page and make the name fields required. We'll display these fields only to customers who are not logged in, remembering that any additions or changes made by customers who are not logged in but who already have an email address in the knowledge base will not be recorded.

Note Find the names of the contact fields you can use by clicking Framework > Business Objects on the Customer Portal Administration site.

To add contact fields to the Ask a Question page

1. Open the *ask.php* file in the */views/pages* folder.

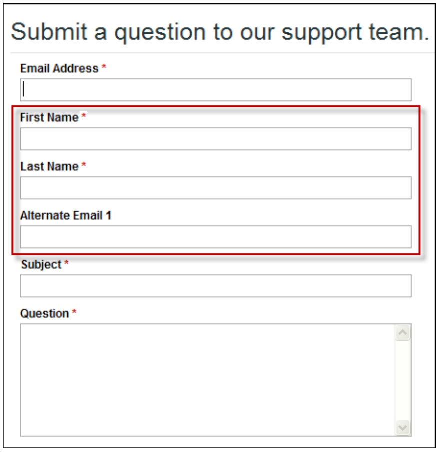
2. Locate the following lines of code between the `<rn:condition logged_in="false">` condition tags.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
initial_focus="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
<rn:widget path="input/FormInput"
name="Incident.Subject"
required="true" />
```

3. Add the following code between the two lines you located in step 2.

```
<rn:widget path="input/FormInput"
name="Contact.Name.First"
required="true" />
<rn:widget path="input/FormInput"
name="Contact.Name.Last"
required="true" />
<rn:widget path="input/FormInput"
name="Contact.Emails.ALT1.Address"
label_input="Alternate Email 1" />
```

4. Save *ask.php*.



Continue configuring the Ask a Question page.

Ask a Question page configuration options

The following configuration options are available on the Ask a Question page.

- Require customers to view answers or conduct searches before the Ask a Question tab is visible.
- Require customers to have an SLA (service level agreement) before submitting a question.
- Remove the Subject field.
- Populate the Subject field.
- Specify the number of levels of products and categories customers must select.
- Automatically populate the products and categories.
- Display +/– symbols for expanding and collapsing product and category trees.
- Restrict or prevent file attachments on the Ask a Question page.
- Define the amount of time a customer has to complete the Ask a Question form before it expires.
- Configure the confirmation page that tells customers their question was submitted.
- Send an email incident receipt when customers submit a question.
- Configure the SmartAssistant dialog that opens before customers complete submitting their question.

Removing the Subject field

When a customer asks a question, an **incident** is created in **Oracle RightNow Cloud Service**, and the Subject field of the incident is the same as the Subject field the customer completes on the Ask a Question page.

You have the option of removing the Subject field from the Ask a Question page. If you do so, the incident's Subject field is automatically populated with the first 80 characters of the customer's question.

To remove the Subject field from the Ask a Question page

1. Open the *ask.php* file in the */views/pages* folder.
2. Delete the following line of code from the file to remove the Subject field when the customer is not logged in.

```
<rn:widget path="input/FormInput"
name="Incident.Subject"
required="true" />
```

3. Delete the following lines of code from the file to remove the Subject field when the customer is logged in.

```
<rn:condition logged_in="true">
    <rn:widget path="input/FormInput"
    name="Incident.Subject"
    required="true"
    initial_focus="true"/>
</rn:condition>
```

4. Save *ask.php*.

Continue configuring the Ask a Question page.

Setting the required levels of products and categories

The standard Ask a Question page does not require that customers select a minimum number of **product** or **category** levels related to their question. (If none of your products have end-user visibility specified (refer to Adding and editing products, categories, and dispositions for the step to define visibility), the product selection drop-down menu will not appear on the page. Similarly, the category menu will not appear if no categories have end-user visibility.)

We recommend that you do not require product and category selection, since doing so may result in customers abandoning the page.

Do you want to allow your customers to submit a question without specifying product or category levels?

- **Yes.** This is the default, so you can continue configuring the Ask a Question page.
- **No.** Show me how to require customers to select a certain number of product or category levels.

Requiring product and category levels

To require product and category levels on the Ask a Question page

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following lines of code in the file.

```
<rn:widget path="input/ProductCategoryInput" name="Incident.Product"
/>
<rn:widget path="input/ProductCategoryInput"
name="Incident.Category"  />
```

3 Add the *required_lvl* attribute to both ProductCategoryInput widgets to specify how many levels you want your customers to select. If you want to require two levels of products and one level of categories, your code will look like the following.

```
<rn:widget path="input/ProductCategoryInput"
name="Incident.Product"
required_lvl="2" />
<rn:widget path="input/ProductCategoryInput"
name="Incident.Category"
required_lvl="1" />
```

4 To specify how many levels will be displayed to the customer, add the *max_lvl* attribute to the ProductCategoryInput widgets. (If the value for *required_lvl* is greater than the value for *max_lvl*, the *max_lvl* value will be set equal to the *required_lvl* value.) Your code will resemble the following.

```
<rn:widget path="input/ProductCategoryInput"
name="Incident.Product"
required_lvl="2"
max_lvl="4" />
<rn:widget path="input/ProductCategoryInput"
name="Incident.Category"
required_lvl="1"
max_lvl="3" />
```

5 Save *ask.php*.

Continue configuring the Ask a Question page.

Populating products and categories

The default Ask a Question page contains fields for **products** and **categories**, which are empty until the customer makes a menu selection in the fields. If you want, you can open the Ask a Question page with the product or category already populated. In order to do that, you must know the product's ID number. The following procedures show you first how to determine a product's ID and then how to modify the Ask a Question page to populate the Product field when the page opens.

Note The procedure is the same to populate the Category field.

To identify a product's ID number

1 Log in to Oracle Service Cloud.

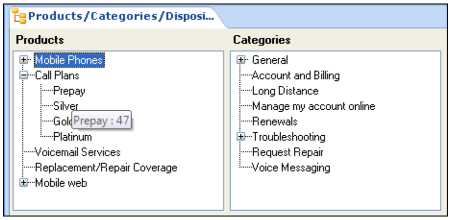
2 Click the Configuration button.

3 Double-click Products/Categories/Dispositions under Service.

4 Expand the product or category tree if necessary to view the product or category you want to add.

5 Hover over the product or category to display the ID number, and make a note of it.

6 If you are selecting a sub-product, you also need to know the ID numbers of its parent product or products. For example, in the following figure, the ID for the Prepay sub-product is 47, but you also need to know that its parent product Call Plans has an ID of 421. The full ID for Prepay is then 421,47.



Now edit the Ask a Question page to populate the Product field when the page opens.

Editing Ask a Question page to populate the Product field

To edit the Ask a Question page to populate the Product field

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="input/ProductCategoryInput"
name="Incident.Product" />
```

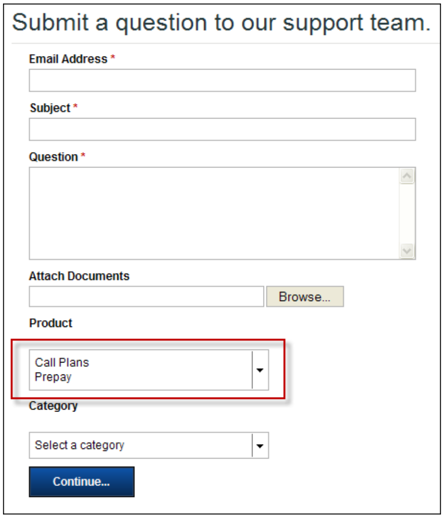
3 Add the *default_value* attribute to the ProductCategoryInput widget to specify the product you just identified the ID number for. Your code will resemble the following.

```
<rn:widget path="input/ProductCategoryInput"
name="Incident.Product"
default_value="421,47" />
```

4 Save *ask.php*.

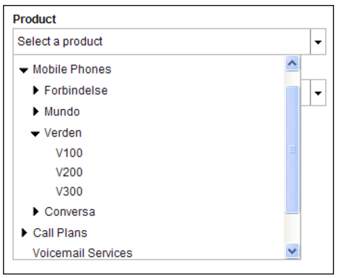
Although the *default_value* attribute takes precedence over any other method of populating the products and categories for the ProductCategoryInput widget, you can also populate the product and category fields by passing the ID numbers in the URL used to open the page. This lets you populate different products and categories when customers access the Ask a Question from different external pages. Refer to Populating fields with URLs from external pages. You can also use POST parameters, but the URL parameters will override the POST parameter if both are used.

Continue configuring the Ask a Question page.



Changing product and category tree symbols

By default, the ProductCategoryInput widget displays the hierarchical product and category trees with triangle bullets for expanding and collapsing the folders, as shown here.



If you prefer to display +/– signs for expanding and collapsing the folders, you can edit the Ask a Question page according to the following procedure.

To change the folder structure display

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following lines of code.

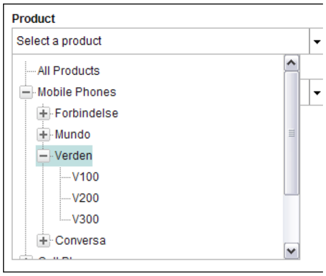
```
<rn:widget path="input/ProductCategoryInput" name="Incident.Product"
```

```
/>
<rn:widget path="input/ProductCategoryInput"
name="Incident.Category" />
```

3 Add the *treeview_css* attribute to the ProductCategoryInput widgets to change the display using the following code.

```
<rn:widget path="input/ProductCategoryInput" name="Incident.Product"
treeview_css="#rn:php:\RightNow\Utils\Url::getYUICodePath('gallery-
treeview/assets/treeview-skin.css')#" />
<rn:widget path="input/ProductCategoryInput" name="Incident.Category"
treeview_css="#rn:php:\RightNow\Utils\Url::getYUICodePath('gallery-
treeview/assets/treeview-skin.css')#" />
```

4 Save *ask.php*.



The ProductCategorySearchFilter widget, which is part of the AdvancedSearchDialog widget, also uses the *treeview_css* attribute. Refer to Changing AdvancedSearchDialog product/category tree display for the procedure to change the Answers page.

Continue configuring the Ask a Question page.

Controlling file attachments

The standard Ask a Question page lets your customers attach an unlimited number of files to the question they submit, but you can restrict the number or type of file attachments or prevent them from attaching files at all. When you restrict the number of attachments, the Browse button on the Ask a Question page is disabled after customers select the maximum number of attachments. You can also require customers to attach a minimum number of files before submitting their question.

Although you can control the number and type of file attachments that are uploaded, the size of file attachments is defined on the **administration interface** with the FATTACH_MAX_SIZE configuration setting. (The setting is located in RightNow User Interface > General >

File Attach. See To locate and edit configuration settings.) Regardless of the file attachment limits defined on the customer portal or administration interface, file upload will fail if the upload takes more than five minutes.

For a discussion about file attachment security and recommended practices, refer to File attachment security.

Refer to the following sections for additional information about security practices.

- Security-Related Configuration Settings
- Developing a Security Plan
- Recommendations for Security-Related Configuration Settings

Do you want to allow your customers an unlimited number of file attachments on the Ask a Question page?

- **Yes.** This is the default, so you can continue configuring the Ask a Question page.
- **Yes,** but I want to restrict the type of files that can be attached.
- **No,** I want to restrict the number of attachments.
- **No,** I want to remove the option of attaching files to a question.
- **No,** I want to require a minimum number of file attachments.

Restricting the type of file attachments

To restrict the type of file attachments

1. Open the *ask.php* file in the */views/pages* folder.

2. Locate the following line of code.

```
<rn:widget path="input/FileAttachmentUpload"/>
```

3. Add the *valid_file_extensions* attribute to the FileAttachmentUpload widget. Your code will resemble the following.

```
<rn:widget path="input/FileAttachmentUpload"
valid_file_extensions="doc,docx,xls,xlsx" />
```

4. To change the default label that displays if customers try to attach a file type that is not valid, add the *label_invalid_extension* attribute and define the label. (The default label in this example would be “Only the following file types are allowed: .doc, .docx, .xls, xlsx.”) Your code will resemble the following.

```
<rn:widget path="input/FileAttachmentUpload"
valid_file_extensions="doc,docx,xls,xlsx"
label_invalid_extension="You may attach only the following file
types:%s" />
```

5 Save *ask.php*.

Continue configuring the Ask a Question page.

Restricting the number of file attachments

When you restrict the number of allowable file attachments using the following procedure and customers have added the maximum number, they will see a message telling them that they have reached the limit. The Browse button is also disabled when the maximum number of files have been attached.

To restrict the number of file attachments

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="input/FileAttachmentUpload"/>
```

3 Add the *max_attachments* attribute to the FileAttachmentUpload widget. Your code will resemble the following.

```
<rn:widget path="input/FileAttachmentUpload"
max_attachments="5" />
```

4 To change the default label that displays if customers exceed the allowable number of attachments, add the *label_max_attachment_limit* attribute and define the label. (The default label is "You have reached the limit of files that may be uploaded. To add another file, you must first remove one of the files above.") Your code will resemble the following.

```
<rn:widget path="input/FileAttachmentUpload"
max_attachments="5"
label_max_attachment_limit="You may upload only 5 files to your
question."/>
```

5 Save *ask.php*.

Continue configuring the Ask a Question page.

Removing file attachments

To remove the ability to attach files to a question

1 Open the *ask.php* file in the */views/pages* folder.

2 Delete the following line of code.

```
<rn:widget path="input/FileAttachmentUpload"/>
```

3 Save *ask.php*.

Continue configuring the Ask a Question page.

Requiring file attachments

When you set a value for the *min_required_attachments* attribute, the Attach Documents field displays an asterisk to show customers that file attachments are required.

To require a minimum number of file attachments

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="input/FileAttachmentUpload"/>
```

3 Add the *min_required_attachments* attribute to the FileAttachmentUpload widget. Your code will resemble the following.

```
<rn:widget path="input/FileAttachmentUpload"
min_required_attachments="2" />
```

4 To change the default label that displays if customers do not attach the minimum number of attachments, add the *label_min_required* attribute and define the label. (The default label in this example would be "Attach Documents requires 2 file(s).") Your code will resemble the following.

```
<rn:widget path="input/FileAttachmentUpload"
min_required_attachments="2"
label_min_required="You must attach at least 2 files before submitting
your question."/>
```

5 Save *ask.php*.

Continue configuring the Ask a Question page.

Defining maximum form completion time

Your customers might begin filling out the Ask a Question page and then become distracted. By default, their partially completed information remains valid for 30 minutes, but you can change that value. Five minutes prior to the form's expiration (that is, 25 minutes in the default condition), customers are prompted with a warning that the form is about to expire. If they click OK in the warning message, they now have 30 minutes (or the value you set) to finish completing the form. This process will be repeated until the customer either submits the question or fails to respond to the warning message before the form expires.

To define form completion time

1 Use the procedure described in To locate and edit configuration settings to locate SUBMIT_TOKEN_EXP under RightNow User Interface > General > Security.

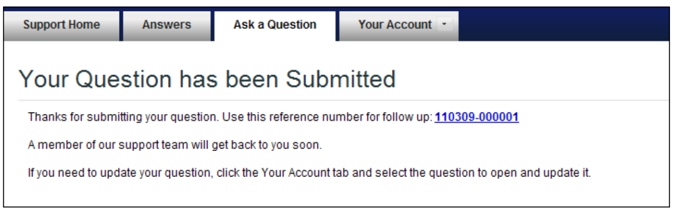
2 Click the Value field and type a value to indicate the number of minutes at which you want the form to expire.

3 Click the Save button on the ribbon.

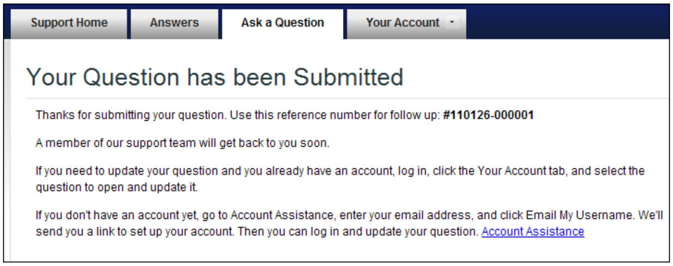
Continue configuring the Ask a Question page.

Configuring the confirmation page

By default, the Ask a Question page displays a confirmation page when a customer finishes submitting a question. The confirmation page looks like this when the customer is logged in, and the customer can click the link for the incident reference number to open the incident on the question details page.



If the customer is not logged in, the following message appears.



Do you want to display the default confirmation page when a customer submits a question?

- **Yes.** This is the default, so you can continue configuring the Ask a Question page.
- **No.** Show me how to change the confirmation page.

Editing the confirmation page

You can either edit the standard confirmation page that opens when a customer submits a question on the Ask a Question page, or you can display a different confirmation page.

To edit the standard confirmation page

1 Open the *ask_confirm.php* file in the */views/pages* folder.

2 To change the "Your Question has been Submitted" heading, locate the following line of code.

```
<h1>#rn:msg:QUESTION_SUBMITTED_HDG#</h1>
```

3 Edit the code with your revised heading. Your code will resemble the following.

```
<h1>Thank you for submitting your question.</h1>
```

4 To change any of the other **message bases** on the page, follow the example in steps 2 and 3 to locate and change the message base. (Learn about editing message bases here.)

5 Save *ask_confirm.php*.

To display a different confirmation page

Note You must edit the *ask.php* file to indicate the confirmation page.

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="input/FormSubmit"
label_button="#rn:msg:CONTINUE_ELLIPSIS_CMD#"
on_success_url="/app/ask_confirm"
error_location="rn_ErrorLocation" />
```

3 Edit the code to replace `"/app/ask_confirm"` with the page of your choice.

4 Save *ask.php*.

Continue configuring the Ask a Question page.

Sending an incident receipt

You may want to send an email receipt to your customers when they submit a question on the Ask a Question page. By setting up an **incident rule**, you can ensure this process happens automatically. (If you need more detailed information about rules than is offered in the following procedure, refer to Business Rules Management.)

To create an incident rule for incident receipts

1 Click the Configuration button on the **navigation pane**.

2 Double-click Rules under Site Configuration. The Rules editor displays on the content pane.

3 If the Incident button is not selected on the ribbon, click it.

4 Click the Edit button on the ribbon.

5 If an initial state does not already exist for the incident rule base, create one.

- **a** Right-click States in the Rules tree and select New State.
- **b** Type a name, such as Initial State, in the State Name field.
- **c** Select the Initial State check box.
- **d** Click Save.

6 Right-click the initial state and select New Rule.

Note The incident receipt rule must be the first rule in the initial state.

7 Type a name for the incident rule in the Rule Name field.

8 Click Add IF Condition Based On. Select Incident from the menu, and then select Source from the incident conditions menu.

9 Click the arrow in the Select Operator field and select Equals.

10 Expand the End-User Pages heading in the incident source menu and select the check box for Ask a Question.

11 Click Add Action–Then. The actions menu opens.

12 Select Email and then select Send Receipt Email.

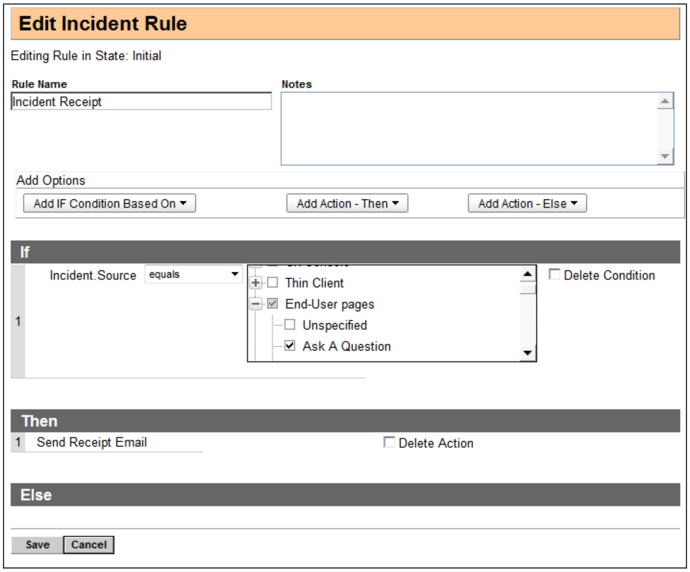
13 Click Save.

14 Expand the initial state again and determine the location of the incident receipt rule. If it is not at the top of the list, drag it to the top position.

15 Click Activate, click OK at the confirmation message, and OK again at the message that says the rule base compiled without errors.

16 If incidents are in the Null state or a state that has been removed, you should move them into an active state in the rule base. Click the drop-down arrow to select a state where the incidents should be moved and click Save. Refer to Objects in the Null state.

Continue configuring the Ask a Question page.

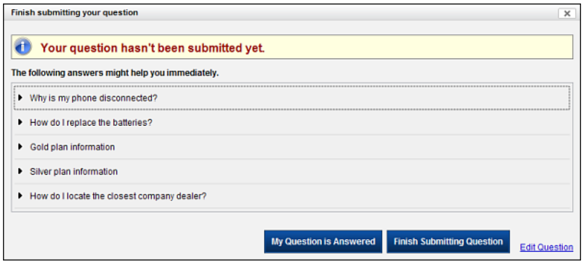


Using SmartAssistant on the Ask a Question page

When your customers can't find an answer to their question in your knowledge base, they can submit it on the Ask a Question page. Then, if you have an incident **business rule** defined to do so, the **SmartAssistant** suggested answers feature uses natural language processing to display a list of answers from your knowledge base that may contain the information your customers are seeking. The list of **suggested answers** is presented to customers before they finish submitting their questions.

Note Besides displaying a list of proposed answers to customer questions, SmartAssistant can also display standard text or a single, specific answer.

You'll first need to set up SmartAssistant on the administration interface. Then you'll configure the SmartAssistantDialog widget on the Ask a Question page.



You'll have special considerations if you're combining the SmartAssistant rule with a rule containing the Do Not Create Incident action. Click here to see the setup for that situation.

Setting up SmartAssistant on the administration interface

To set up SmartAssistant on the **administration interface**, you need to create an incident rule and then configure options for the feature, such as how many answers are displayed and how long the customer has to fill out the form before it expires.

Complete the following tasks to use SmartAssistant.

- Create an incident rule to display the SmartAssistant suggested answers to customers who submit a question on the Ask a Question page.
- Configure SmartAssistant options.

You can also specify the maximum amount of time a customer has to complete the Ask a Question page.

If you plan to use a rule with the Do Not Create Incident action, learn how to combine it with the SmartAssistant rule.

When you're finished configuring SmartAssistant on the administration interface, you can configure the SmartAssistantDialog widget on the Ask a Question page.

Creating an incident rule for SmartAssistant

If you need more detailed information about rules than is offered in the following procedure, refer to Business Rules Management.

To create an incident rule for SmartAssistant

1 Click the Configuration button on the **navigation pane**.

2 Double-click Rules under Site Configuration. The Rules editor displays on the content pane.

3 If the Incident button is not selected on the ribbon, click it.

4 Click the Edit button on the ribbon.

5 If an initial state does not already exist for the incident rule base, create one.

   a Right-click States in the Rules tree and select New State.
   b Type a name in the State Name field.
   c Select the Initial State check box.
   d Click Save.

6 Right-click the state you want to add the rule to and select New Rule.

7 Type a name for the incident rule in the Rule Name field.

8 Click Add IF Condition Based On. Select Incident from the menu, and then select Source from the incident conditions menu.

9 Click the arrow in the Select Operator field and select Equals.

10 Expand the End-User Pages heading in the incident source menu and select the check box for SmartAssistant on Ask a Question.

11 Click Add Action–Then. The actions menu opens.

12 Select Append Thread and then select Append SmartAssistant Response to Response Field. (You may need to widen the window to view and select the Append Thread options.)

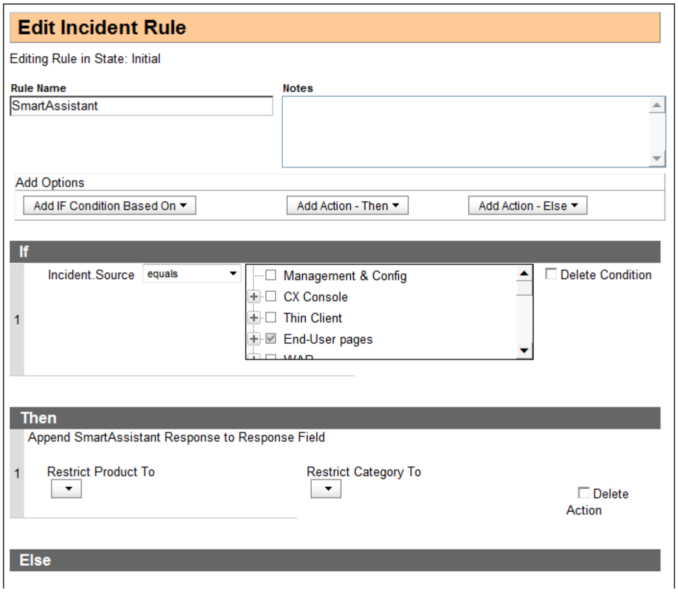
Note In addition to displaying a list of suggested answers, you can also append either standard text or the text of a specific answer. To display standard text, select Append Thread > Append Response Template to Response Field and select the standard text response from the drop-down menu. To display an answer, select Append Thread > Append Existing Solution (by Answer ID) to Response Field and type the ID of the answer you want to display.

13 Click Save.

14 Click Activate, click OK at the confirmation message, and OK again at the message that says the rule base compiled without errors.

15 If incidents are in the Null state or a state that has been removed, you should move them into an active state in the rule base. Click the drop-down arrow to select a state where the incidents should be moved and click Save. Refer to Objects in the Null state.

Now you can configure SmartAssistant options.



Configuring SmartAssistant options

If you want, you can change any of the following SmartAssistant options.

- Enable SmartAssistant optimization.
- Configure the number of days SmartAssistant optimization data remains valid.
- Define how many answers should include the full question and answer instead of just a link.
- Define the number of suggested answers displayed to the customer.
- Limit suggested answers by category or product.
- Modify the weights of answers for impacting SmartAssistant relevancy.

When you've finished configuring SmartAssistant on the **administration interface**, you can configure the SmartAssistantDialog widget for the Ask a Question page on the customer portal.

Enabling SmartAssistant optimization

By default, SmartAssistant optimization is disabled. You can enable optimization so that the parameters that control SmartAssistant accuracy are analyzed to determine their optimum values.

To enable SmartAssistant optimization

1. Use the procedure described in To locate and edit configuration settings to locate KF_SA_OPTIMIZATION_ENABLE under Common > Knowledge Base > Knowledge Foundation.

2. Click the Value field and select Yes from the drop-down menu.

3. Click the Save button on the ribbon.

Continue configuring SmartAssistant options or Configure the SmartAssistantDialog widget.

Configuring the number of days SmartAssistant optimization data is valid

SmartAssistant is optimized so that the parameters that control SmartAssistant accuracy are analyzed to determine their optimum values. By default, this data is not removed, but you can set it to expire after the number of days you specify.

To configure the number of days optimization data is valid

1 Use the procedure described in To locate and edit configuration settings to locate KF_SA_OPTIMIZATION_DATA_PURGE_DAYS under Common > Knowledge Base > Knowledge Foundation.

2 Click the Value field and type the number of days after which the optimization data is removed.

3 Click the Save button on the ribbon.

Continue configuring SmartAssistant options or Configure the SmartAssistantDialog widget.

Defining the number of answers to display as text solutions instead of links

By default, all suggested answers are displayed as links consisting of the question part of the answer, and none are expanded into the full question and answer. You can display some or all of the suggested answers as full solutions instead of links by editing a configuration setting.

To define the number of answers to display as solutions instead of links

1 Use the procedure described in To locate and edit configuration settings to locate SA_WF_SOLNS_EXPAND_CNT under RightNow User Interface > Support > SmartAssistant.

2 Click the Value field and type the number of expanded suggested answers you want to appear on the customer portal. To display all, type 5.

3 Click the Save button on the ribbon.

Continue configuring SmartAssistant options or Configure the SmartAssistantDialog widget.

Defining the number of suggested answers

By default, five answers are suggested to the customer.

To define how many answers are suggested

1 Use the procedure described in To locate and edit configuration settings to locate SA_NL_MAX_SUGGESTIONS under RightNow User Interface > Support > SmartAssistant.

2 Click the Value field and type the number of suggested answers you want to appear on the customer portal.

3 Click the Save button on the ribbon.

Continue configuring SmartAssistant options or Configure the SmartAssistantDialog widget.

Limiting suggested answers by category or product

To limit suggested answers by category or product

1 Use the procedure described in To locate and edit configuration settings to locate the following configuration settings under RightNow User Interface > Support > SmartAssistant.

2 To limit by categories, click the Value field for SA_SUGGEST_LIMIT_CAT_LVL and type a value to indicate how you want to restrict suggested answers by category sub-levels. Refer to the setting's description of the options.

3 To limit by products, click the Value field for SA_SUGGEST_LIMIT_PROD_LVL and type a value to indicate how you want to restrict suggested answers by products sub-levels. Refer to the setting's description of the options.

4 Click the Save button on the ribbon.

Continue configuring SmartAssistant options or Configure the SmartAssistantDialog widget.

Modifying SmartAssistant relevancy

Two configuration settings let you control how an incident's subject and body are treated to influence the way answers are returned in SmartAssistant. The value for SA_SUBJ_BODY_-WEIGHTS includes three values: one for the weight of the incident subject text, one for the weight of the incident body text, and one for the bonus that is added when both subject and body text are matched.

The SA_DISPATCH_RATIO value includes two values to define whether the answers are returned based on the hybrid mode used by SA_SUBJ_BODY_WEIGHTS or on the standard SmartAssistant mode. The default value "100 0" means that they will always be returned by the first mode, while "0 100" means they will always be returned by the standard mode.

Note The two values do not have to add up to 100. Instead they represent the odds that the first or second mode will be chosen. For example, a value of "50 20" means that for every 70 requests, the first mode will be chosen 50 times, and the standard mode will be chosen 20.

To modify SmartAssistant relevancy

1 Use the procedure described in To locate and edit configuration settings to locate the configuration settings under Common > Knowledge Base > Answer Search.

2 In the SA_SUBJ_BODY_WEIGHTS value field, type three values, separated by a single space, to indicate how you want to weight an incident's subject, body, and bonus value for the hybrid SmartAssistant mode. Refer to the setting's description for details.

3 In the SA_DISPATCH_RATIO value field, type two values, separated by a single space, to define the ratio for returning SmartAssistant answers using the mode from SA_SUBJ_BODY_WEIGHTS. Refer to the setting's description for details.

4 Click the Save button on the ribbon.

Note These configuration settings are also used to identify similar answers for the Smart Merge feature in **Service**. (To learn how this feature is used, refer to Merging similar answers.) If you notice that the behavior defined by these settings has changed, you might want to check to see if a knowledge base engineer changed them for use with Smart Merge.

Continue configuring SmartAssistant options or Configure the SmartAssistantDialog widget.

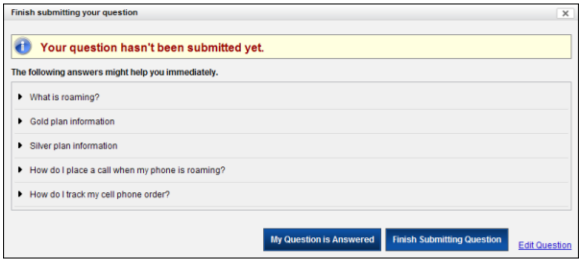
Configuring the SmartAssistantDialog widget

When your customers click the Continue button after filling out the fields on the Ask a Question page, the default response is to display the "Finish submitting your question" dialog, which is generated by the SmartAssistantDialog widget that appears in the *ask.php* file for the Ask a Question page. However, this dialog appears only if you have first configured an **incident rule** that appends **SmartAssistant** responses. (To create an incident rule and configure other SmartAssistant options, log in to the **administration interface** and click here.)

Customers can then open any of the suggested answers to see if it answers the question they are about to submit. If it does, they can click the My Question is Answered button on the dialog to close it and return to the Ask a Question page without submitting the question.

Note Anytime the SmartAssistant dialog appears and the customer clicks the My Question is Answered button, no additional SmartAssistant suggested answers appear, even if the question is modified and resubmitted.

Click to view



If you do not have a SmartAssistant incident rule set up on the administration interface, this dialog does not open. Instead, the Ask a Question confirmation page appears immediately after the customer clicks the Continue button.

By default, the SmartAssistantDialog does not open if the customer has either opened two answers or conducted one search. You can configure the condition to different values or remove the condition so the dialog always opens.

Note If you have a rule that has a Do Not Create Incident action, you will want to edit the Ask a Question page to remove the conditions that control the display of the SmartAssistantDialog. If you do not, the conditions that control the widget display will override the conditions that trigger the rule, and a warning message displays to tell customers there was a problem with their submission.

Do you want to display the SmartAssistantDialog widget when customers submit a question?

- **Yes,** and I have already configured a SmartAssistant incident rule and other SmartAssistant options. Continue configuring the Ask a Question page.
- **Yes,** but I first need to configure a SmartAssistant incident rule and other SmartAssistant options.
- **Yes,** but I want to change the number of answers viewed or searches conducted.
- **Yes,** and I want to always display the dialog, regardless of answers viewed or searches done.
- **Yes,** and I want to let customers open the suggested answers in a separate window instead of inline.

- **Yes,** but I want to change the button labels or their display order, or change the buttons to links.
- **Yes,** and I want to redirect customers when their question is answered.
- **Yes,** but I want to change the width of the dialog.
- **No,** I want to remove the SmartAssistantDialog widget.

Changing the widget display conditions

The default Ask a Question page uses a condition tag to determine whether the SmartAssistantDialog widget opens when the customer clicks the Continue button on the Ask a Question page, or whether the confirmation page appears immediately. The conditions on the default page are two answers viewed or one search conducted.

To change the answers viewed or searches done condition

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:condition answers_viewed="2"
searches_done="1">
```

3 Edit the code to either delete or change the value of the *answers_viewed* or *searches_done* attributes. If, for example, you want to change the number of answers viewed and remove the requirement to perform a search, your code will resemble the following.

```
<rn:condition answers_viewed="3">
```

4 Save *ask.php*.

Continue configuring the Ask a Question page.

Removing widget display conditions

If you remove the condition tags around the SmartAssistantDialog widget, it will always propose answers to your customers before they can finish submitting their question, regardless of the number of answers they've viewed or searches they've conducted. (You must still set up SmartAssistant incident rules and other SmartAssistant options before the widget appears on the Ask a Question page.)

To remove conditions for the SmartAssistant Dialog widget

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following lines of code.

```
<rn:condition answers_viewed="2"
searches_done="1">
<rn:condition_else/>
    <rn:widget path="input/SmartAssistantDialog"/>
</rn:condition>
```

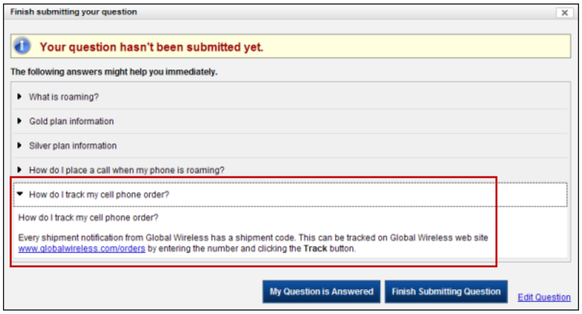
3 Delete the two lines of code beginning with <rn:condition and the </rn:condition> line. All that should remain is the code that calls the SmartAssistantDialog widget.

4 Save *ask.php*.

Continue configuring the Ask a Question page.

Opening answers in a separate window

When customers click a suggested answer on the default Ask a Question page, the answer opens inline, as shown in the following figure. (Any links in suggested answers open in a separate window.)



If you prefer to display the answer in a separate window instead, add the *display_answers_inline* attribute for the SmartAssistantDialog widget and set it to false.

To open answers in a separate window

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="input/SmartAssistantDialog"/>
```

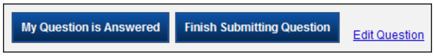
3 Edit the code to add the *display_answers_inline* attribute. Your code will resemble the following.

```
<rn:widget path="input/SmartAssistantDialog"
display_answers_inline="false" />
```

4 Save *ask.php*.

Changing the buttons

By default, the SmartAssistantDialog widget on the standard Ask a Question page contains a solved button (My Question is Answered), a submit button (Finish Submitting Question), and a cancel link (Edit Question). You can edit the labels for these items, change their display order on the dialog, or change the buttons to links.



To change the buttons on the SmartAssistantDialog widget

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code.

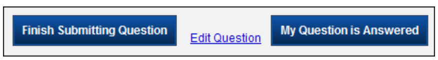
```
<rn:widget path="input/SmartAssistantDialog"/>
```

3 To change the labels on the buttons and link, add the *label_solved_button*, *label_submit_button*, and *label_cancel_button* attributes. Your code will resemble the following.

```
<rn:widget path="input/SmartAssistantDialog"
label_solved_button="This answered my question"
label_submit_button="I still need an answer"
label_cancel_button="Return to my question" />
```

4 To change the buttons' display order, add the *button_ordering* attribute. Your code will resemble the following.

```
<rn:widget path="input/SmartAssistantDialog"
button_ordering="label_submit_button, label_cancel_button,
label_solved_button" />
```



5 To change the buttons to links, add them as values to the *display_button_as_link* attribute. By default, this attribute includes only the cancel button. Items not included in this attribute display as buttons by default. For example, the following code will display the solved and submit buttons as links and the cancel link as a button.

```
<rn:widget path="input/SmartAssistantDialog"
display_button_as_link="label_solved_button, label_submit_button" />
```

6 Save *ask.php*.

Redirecting customers when their questions are answered

By default, customers who click the My Question is Answered button are redirected to the Support Home page. If you want to direct them to a different page, you can add the *solved_url* attribute to the SmartAssistantDialog widget.

To redirect customers when questions are answered

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="input/SmartAssistantDialog"/>
```

3 Edit the widget code to add the *solved_url* attribute. Your code will resemble the following.

```
<rn:widget path="input/SmartAssistantDialog"
solved_url="/app/answers/list" />
```

4 Save *ask.php*.

Changing the dialog width

By default, the width of the SmartAssistantDialog widget on the Ask a Question page is 600 pixels. You can change the width by first deleting the widget's CSS width rule and then adding the *dialog_width* attribute. (If the widget CSS and the *dialog_width* attribute have differing values, the widget CSS takes precedence.)

To delete the CSS width rule

1 Open the *SmartAssistantDialog.css* file in the */customer/assets/themes/standard/widgetCss* folder.

2 Delete the following lines of code (beginning around line 86).

```
.rn_SmartAssistantDialogContainer {
    width: 600px;
}
```

3 Save *SmartAssistantDialog.css*.

To change the dialog width

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following line of code.

```
<rn:widget path="input/SmartAssistantDialog"/>
```

3 Add the *dialog_width* attribute. Your code will resemble the following.

```
<rn:widget path="input/SmartAssistantDialog"
dialog_width="500px"/>
```

4 Save *ask.php*.

Removing the SmartAssistantDialog widget

If you remove the SmartAssistantDialog widget, answers will never be suggested to your customers after they click the Continue button. Instead, the Ask a Question confirmation page opens immediately.

To remove the SmartAssistant Dialog widget

1 Open the *ask.php* file in the */views/pages* folder.

2 Delete the following lines of code.

```
<rn:condition answers_viewed="2" searches_done="1">
<rn:condition_else/>
    <rn:widget path="input/SmartAssistantDialog"/>
</rn:condition>
```

3 Save *ask.php*.

Continue configuring the Ask a Question page.

Using the Do Not Create Incident action with SmartAssistant

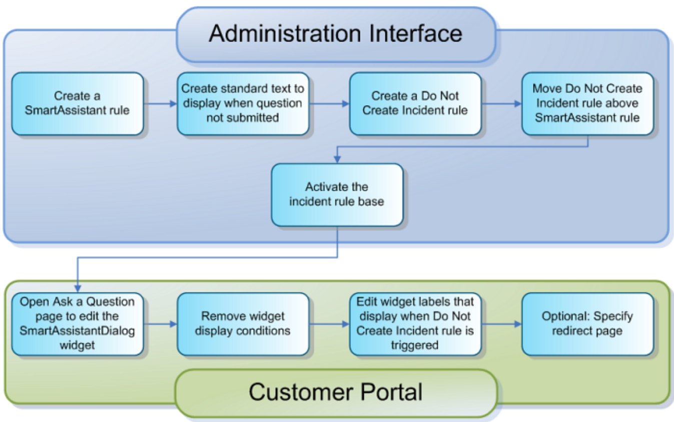
Incident business rules include an action called Do Not Create Incident. You might use this action if, for example, your organization has stopped supporting an older product. Instead of creating an incident for an unsupported product, you might want to direct customers to the

Answers page, where they can search the knowledge base for an answer to their question. In this case, the SmartAssistantDialog widget notifies them that their question hasn't been submitted and then directs them to the Answers page.

Another time you might want to combine a Do Not Create Incident rule with a SmartAssistant rule is when your organization requires additional information before a customer's question can be submitted. In this case, the rule base performs a basic form validation. It checks to see if the information is complete and, if it isn't, directs the customer back to the Ask a Question page without creating an incident from the partial question. You might use this when you have a field on the Ask a Question page that you need customers to answer only under certain conditions. For example, assume you have an Urgency field that is not required except when customers select the Troubleshooting category. When customers select Troubleshooting without selecting an Urgency option, you can automatically direct them back to the Ask a Question form to complete the field before submitting the question.

The following flow chart summarizes the steps you'll take when using a Do Not Create Incident rule with a SmartAssistant rule. The specific setup depends on which of the two preceding scenarios you want to define. Both are described in greater detail in the following sections.

Using a Do Not Create Incident rule with Smart Assistant



Preventing incident creation and redirecting customers to the Answers page

You'll use this scenario when you want to redirect customers without creating an incident from their question. When the question meets the conditions specified in the Do Not Create Incident rule and the customer clicks the Continue button, the SmartAssistantDialog widget appears. Instead of displaying the suggested answers and standard message bases, the widget displays the labels you have designed specifically for this situation.

For the sake of this example, let's assume that when customers submit an incident from the Ask a Question page that specifies the product Call Plans > Prepay, you want to tell them that the incident cannot be submitted because your organization no longer offers that product. Instead, you want to direct them to the Answers page, where they can search the knowledge base for the answer to their question. However, customers who select any other product will see the normal suggested answers presented by the SmartAssistantDialog widget.

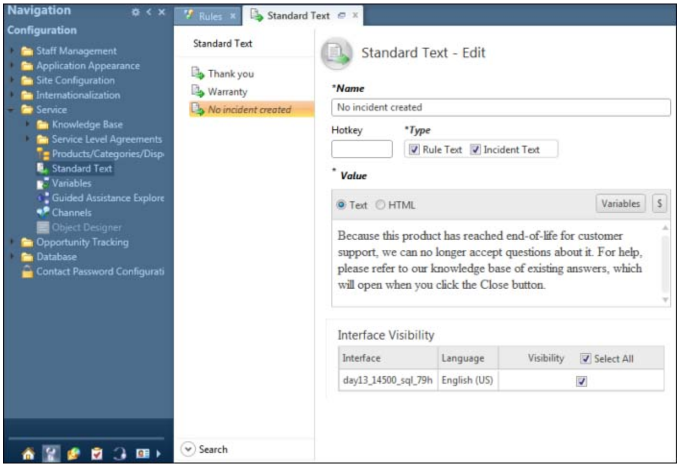
To prevent incident creation

1 Create the SmartAssistant rule. Refer to Setting up SmartAssistant on the administration interface.

2 Create the standard text message you want to display when the SmartAssistant window opens to tell customers their question has not been submitted. In this example, you might create standard text that says something like the following:

"Because this product has reached end-of-life for customer support, we can no longer accept questions about it. For help, please refer to our knowledge base of existing answers, which will open when you click the Close button."

Refer to Adding standard text.



3 Create the Do Not Create Incident rule. Follow the example in Creating an incident rule for SmartAssistant (or refer to Adding rules if you need more direction) to create the following rule.

IF Incident.Source equals End-User Pages > SmartAssistant on Ask a Question

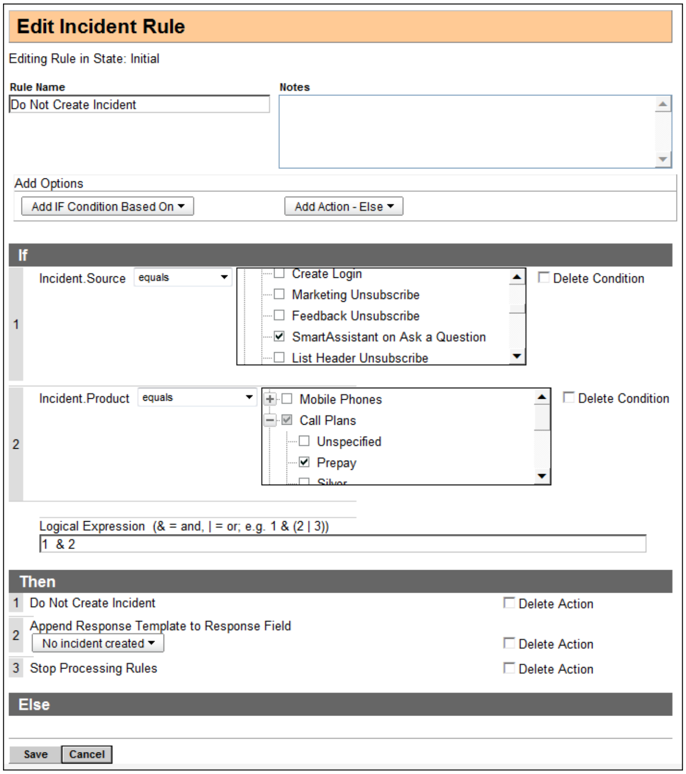
AND Incident.Product equals Call Plans > Prepay

THEN Do Not Create Incident

AND Append Response Template to Response Field (Select the standard text you created in step 2.)

AND Stop Processing Rules

Note A rule that contains the Do Not Create Incident action must include the Stop Processing Rules action as its final action.



4 On the Rules editor, drag the Do Not Create Incident rule so it appears above the SmartAssistant rule in the list of rules within the state. Refer to Modifying rule bases.

Note You'll want the rules engine to hit the Do Not Create Incident rule before it hits the SmartAssistant rule. Otherwise, customers will see suggested answers first, but will still have the option to submit their question, triggering an error message if Call Plans > Prepay is selected.

5 Activate the rule base. Refer to Compiling and activating rule bases.

6 Edit the Ask a Question page to make changes to the SmartAssistantDialog widget.

Editing the Ask a Question page for SmartAssistant redirects

To redirect customers

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following lines of code.

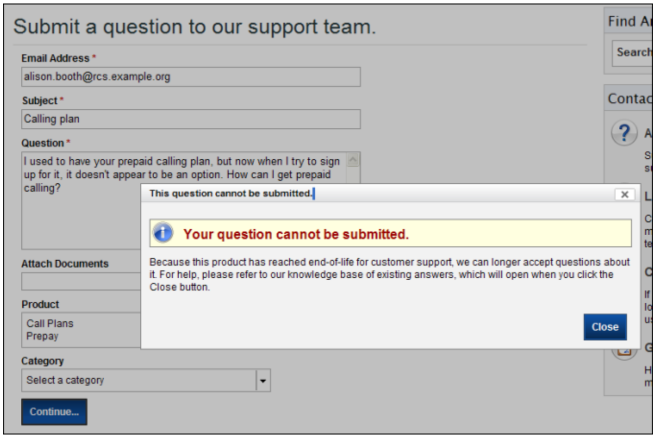
```
<rn:condition answers_viewed="2" searches_done="1">
<rn:condition_else/>
    <rn:widget path="input/SmartAssistantDialog"/>
</rn:condition>
```

3 In the code you located in step 2, delete the three lines with condition tags. If you don't remove the conditional text tags around the widget, the widget won't appear to customers who have viewed the necessary number of answers or performed searches, even if they select the Call Plans > Prepay product. All they will see is an error message telling them their question cannot be submitted.

4 Edit the SmartAssistantDialog widget code to add the *dnc_label_* attributes, which change the labels on the widget when the Do Not Create rule is encountered, and the *dnc_redirect_url*, which defines the page where the customer will be redirected. Your code will resemble the following.

```
<rn:widget path="input/SmartAssistantDialog"
dnc_label_cancel_button="Close"
dnc_label_banner="Your question cannot be submitted."
dnc_label_dialog_title="This question cannot be submitted."
dnc_redirect_url="/app/answers/list" />
```

5 Save *ask.php*.



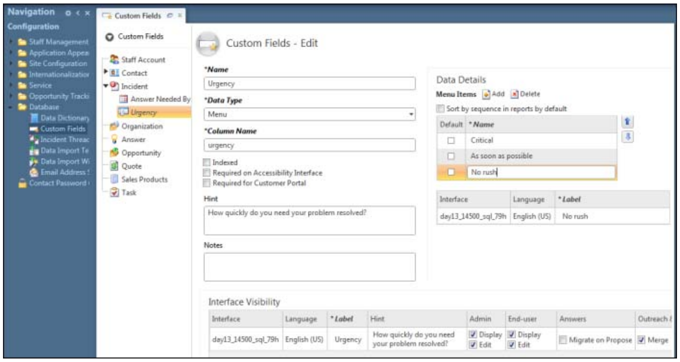
Preventing incident creation when additional information is required

The other time you might want to combine a Do Not Create Incident rule with a SmartAssistant rule is when you need a basic form validation tool. Assume, for example, that a customer selects a product on the Ask a Question page, but does not complete an optional custom field. If you want to make the custom field required only when a certain product is selected (but not when all other products are selected), you can create a rule that sends the customer back to the Ask a Question page to resubmit the form without creating an incident from the initial submission.

This example assumes you want customers to specify an urgency level whenever they select the Troubleshooting category.

To prevent incident creation

1 First create a custom field and name it Urgency. Refer to To add or edit a custom field.



2 Create the SmartAssistant rule. Refer to Setting up SmartAssistant on the administration interface.

3 Create the standard text message you want to display when the SmartAssistant window opens to tell customers their question has not been submitted. In this example, you might create standard text that says something like the following:

"When you select the Troubleshooting category, we need you to tell us how urgent your problem is. Please click the Complete Form button to return to the Ask a Question page and complete the Urgency field."

Refer to Adding standard text.

4 Create the Do Not Create Incident rule. Follow the example in Creating an incident rule for SmartAssistant (or refer to Adding rules if you need more direction) to create the following rule.

IF Incident.Source equals End-User Pages>SmartAssistant on Ask a Question

AND Incident.Category equals Troubleshooting

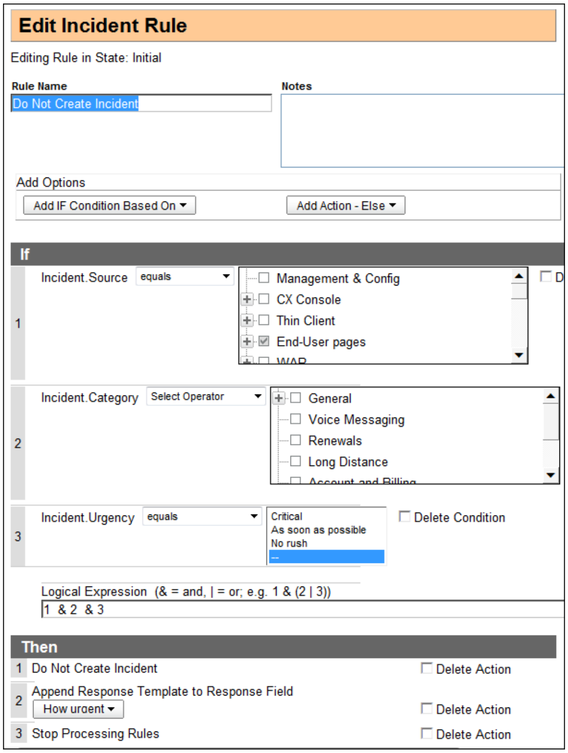
AND Incident.Urgency equals -- (that is, none of the options are selected)

THEN Do Not Create Incident

AND Append Response Template to Response Field (Select the standard text you created in step 3.)

AND Stop Processing Rules

Note A rule that contains the Do Not Create Incident action must include the Stop Processing Rules action as its final action.



5 On the Rules editor, drag the Do Not Create Incident rule so it appears above the SmartAssistant rule in the list of rules within the state. Refer to Modifying rule bases.

Note You'll want the rules engine to hit the Do Not Create Incident rule before it hits the SmartAssistant rule. Otherwise, customers will see suggested answers first, but will still have the option to submit their question, triggering an error message if Troubleshooting is selected when the Urgency field is null.

6 Activate the rule base. Refer to Compiling and activating rule bases.

7 Edit the Ask a Question page to make changes to the SmartAssistantDialog widget.

Editing the Ask a Question page to require additional information

To require additional information on the Ask a Question page

1 Open the *ask.php* file in the */views/pages* folder.

2 Locate the following lines of code.

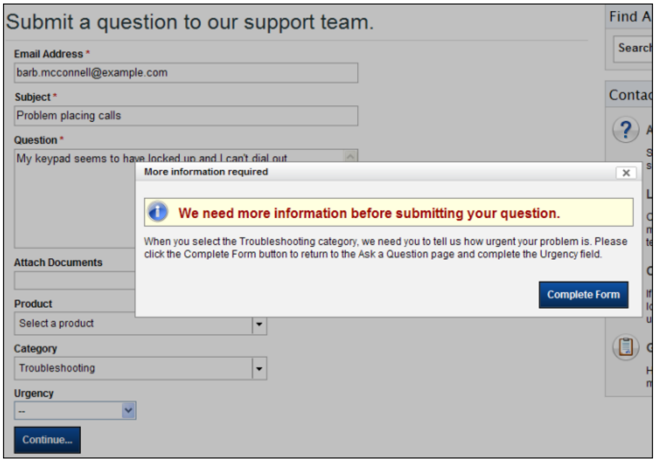
```
<rn:condition answers_viewed="2" searches_done="1">
<rn:condition_else/>
    <rn:widget path="input/SmartAssistantDialog"/>
</rn:condition>
```

3 In the code you located in step 2, delete the three lines with condition tags. If you don't remove the conditional text tags around the widget, the widget won't appear to customers who have viewed the necessary number of answers or performed searches, even if they select the Troubleshooting category. All they will see is an error message telling them their question cannot be submitted.

4 Edit the SmartAssistantDialog widget code to add the *dnc_label_* attributes, which change the labels on the widget when the Do Not Create rule is encountered. Your code will resemble the following.

```
<rn:widget path="input/SmartAssistantDialog"
dnc_label_cancel_button="Complete Form"
dnc_label_banner="We need more information before submitting your
question."
dnc_label_dialog_title="More information required" />
```

5 Save *ask.php*.



Creating Siebel service requests on the Customer Portal

You can let your customers use your customer portal to create service requests in versions 8.1.1.7 and 8.1.1.11 of your Siebel CRM system. This allows you to deliver the superior web experience of the Customer Portal without having to implement the complete Oracle Service Cloud solution.

When customers submit their questions on the Customer Portal Ask a Question page, their questions are converted to Siebel service requests. (The time of service request creation is determined by the time zone configuration of the Siebel application, not by Oracle Service Cloud.) By default, the customer experience includes SmartAssistant-suggested answers for customer self-help before the question is submitted. The Oracle Service Cloud application creates a contact for customers who submit a question, but it does not create an incident in the knowledge base.

Important If customers log in to your customer portal through Facebook, the Siebel integration will not work. When they submit a question on the Ask a Question page, an incident is created in the Oracle Service Cloud knowledge base instead of a service request being created in the Siebel application.

Configuring the page set for Siebel integration

Your customers will not be able to view their service requests from the Customer Portal, so it's not necessary for them to log in. Logging in to the Customer Portal is feasible, but may provide a confusing experience. We recommend the following best practices for the most straightforward, intuitive customer experience.

Integrating Customer Portal with the Siebel CRM system

- Remove the ability to log in, create an account, or manage an account.
- Set limits on the maximum length of the Subject and Question fields.
- Remove the file attachment field from the Ask a Question page.
- Do not use any contact menu fields on the Ask a Question page. If necessary, create custom menu fields for incidents to mimic the contact menu fields you want.

Disabling login and account management functions

You'll need to edit the template to remove the Log In and Sign Up links, remove navigation to the Your Account pages, and delete the Your Account pages from your customer portal.

To disable login and account management functions

1 Open the *standard.php* file in the */views/templates* folder.

2 Delete the following lines of code to remove the Log In and Sign Up links.

```
<rn:condition_else />
    <rn:condition config_check="PTA_ENABLED == true">
        <a href="javascript:void(0);"
        id="rn_LoginLink">#rn:msg:LOG_IN_LBL#</a> | <a
        href="javascript:void(0);">#rn:msg:SIGN_UP_LBL#</a>
    <rn:condition_else />
        <a href="javascript:void(0);"
        id="rn_LoginLink">#rn:msg:LOG_IN_LBL#</a> | <a
        href="/app/utils/
        create_account#rn:session#">#rn:msg:SIGN_UP_LBL#</a>
        <rn:condition hide_on_pages="utils/create_account, utils/
        login_form, utils/account_assistance">
            <rn:widget path="login/LoginDialog"
            trigger_element="rn_LoginLink"/>
```

```
            </rn:condition>
            <rn:condition show_on_pages="utils/create_account, utils/
            login_form, utils/account_assistance">
                <rn:widget path="login/LoginDialog"
                trigger_element="rn_LoginLink"
                redirect_url="/app/account/overview"/>
            </rn:condition>
        </rn:condition>
```

3 Delete the following two lines of code to remove navigation to the Your Account pages.

```
<li><rn:widget path="navigation/NavigationTab"
label_tab="#rn:msg:YOUR_ACCOUNT_LBL#"
link="/app/account/overview"
pages="utils/account_assistance, account/overview, account/profile,
account/notif, account/change_password, account/questions/list,
account/questions/detail, account/notif/list, utils/login_form,
utils/create_account, utils/submit/password_changed, utils/submit/
profile_updated"

subpages="#rn:msg:ACCOUNT_OVERVIEW_LBL# > /app/account/overview,
#rn:msg:SUPPORT_HISTORY_LBL# > /app/account/questions/list,
#rn:msg:ACCOUNT_SETTINGS_LBL# > /app/account/profile,
#rn:msg:NOTIFICATIONS_LBL# > /app/account/notif/list"/></li>
```

4 Save *standard.php*.

5 Open the *ask.php* file in the */views/pages* folder so you can remove the logged in conditions.

6 Delete the following line of code from the file.

```
<rn:condition logged_in="false">
```

7 Delete the following lines of code.

```
</rn:condition>
<rn:condition logged_in="true">
    <rn:widget path="input/FormInput" name="Incident.Subject"
    required="true" initial_focus="true"
    label_input="#rn:msg:SUBJECT_LBL#"/>
</rn:condition>
```

8 Save *ask.php*.

9 Delete the *account* folder from */cp/customer/development/views/pages.*

10 Delete the *account_assistance.php, create_account.php, and login_form.php* files from the */cp/customer/development/views/pages/utils* folder.

Limiting Subject and Question field length

The Ask a Question page's Subject field, which allows a maximum length of 240 characters, maps to the Siebel Abstract field, which allows a maximum of only 100 characters. Characters may also be escaped before sending data to Siebel, adding even more characters to the string. (For example, the **<** character becomes **<** after being escaped.) A server-side check prevents the Subject field from sending more than 100 characters to the Siebel application and sends an error message to the customer if that number has been exceeded. To prevent customers from typing an unacceptably long value in the field only to receive an error message upon submitting, best practice recommends using the *maximum_length* attribute to limit the number of characters customers can enter to 80.

The same situation exists with Siebel's Description field, which is mapped from the Email Address and Question fields. The Question field on the customer portal can hold 4,000 characters, but the Siebel field holds only 2,000. The server-side check for this field restricts the number of characters that are sent to Siebel to 1,900, but customers will receive an error message until you limit the number of characters they can enter on the Customer Portal. Best practice in this case involves limiting the Question field to between 1,200 and 1,500 characters using the *maximum_length* attribute. You'll want to use the lower number if you have many fields on the Ask a Question page, while you can increase the value if you have few additional fields.

If the combination of the Email Address field, Question field, and any other completed fields exceeds 2,000 characters (the maximum length of the Siebel Description field), the contents will be truncated to 2,000 characters. As a result, part of the customer's submission may be missing from the service request, but the truncation process should ensure that the customer's email address and thread field are available, even if additional fields may be missing.

Important If your Siebel installation has inbox workflows enabled, the Description field length is limited to only 250 characters.

The following procedure shows you how to add the *maximum_length* attribute to the input widgets that render the Subject and Question fields.

Note If you have not already removed the logged in condition from the Ask a Question page, complete steps 5 through 8 of To disable login and account management functions before beginning this procedure.

To limit the length of the Subject and Question fields

1 Open the *ask.php* file in the */views/pages* folder.

2. Locate the following lines of code in the file.

```
<rn:widget path="input/FormInput" name="Incident.Subject"
required="true" label_input="#rn:msg:SUBJECT_LBL#"/>
<rn:widget path="input/FormInput" name="Incident.Threads"
required="true" label_input="#rn:msg:QUESTION_LBL#"/>
```

3. Edit the code so that it resembles the following.

```
<rn:widget path="input/FormInput" name="Incident.Subject"
required="true" label_input="#rn:msg:SUBJECT_LBL#"
maximum_length="80" />
<rn:widget path="input/FormInput" name="Incident.Threads"
required="true" label_input="#rn:msg:QUESTION_LBL#"
maximum_length="1200" />
</rn:condition>
```

4. Save *ask.php*.

Removing the file attachments option

The submission of file attachments with a service request is not supported so you should remove that option from the Ask a Question page.

To remove the file attachments option

1. Open the *ask.php* file in the */views/pages* folder.
2. Delete the following line of code.

```
<rn:widget path="input/FileAttachmentUpload"/>
```

3. Save *ask.php*.

Configuring Oracle Service Cloud for Siebel integration

In addition to configuring your customer portal pages for integration with the Siebel CRM system, you must configure the Oracle Service Cloud application to allow communication between the two applications. The settings are not sandboxed, that is, they apply to the development, staging, and production environments.

To define Siebel integration configuration settings

1. Use the procedure described in To locate and edit configuration settings to locate the list of settings under RightNow Common > Siebel Integration > General.

2 To edit any of the following settings, click the Value field and type a value in the field.

Table 382: Siebel Integration Configuration Settings

Setting	Description
SIEBEL_EAI_HOST	The host name of the Siebel server instance.
SIEBEL_EAI_LANGUAGE	The three-letter language code for the Siebel server instance.
SIEBEL_EAI_PASSWORD	The password for accessing the EAI inbound web services on the Siebel server instance.
SIEBEL_EAI_USERNAME	The user name for accessing the EAI inbound web services on the Siebel server instance.

3 Click the Save button on the ribbon.

Using hooks in Siebel integration

When a customer completes the Ask a Question page, the information is used to create an incident object. But the incident object is not saved in the Oracle Service Cloud knowledge base. Instead, a SOAP request is made to Siebel to create a service request. By default, the request populates only the Siebel Abstract field (from the Subject field of the Ask a Question page) and the Description field (from the Email Address and Question fields).

The following hooks are available to change existing fields, add fields, analyze and return error information, and prevent recommended actions.

pre_siebel_incident_submit

This hook lets you manipulate the data sent to Siebel, either by changing the existing Abstract and Description fields or by adding additional fields.

The hook data content includes:

- **siebelUrl**—URL of the Siebel service to create a Service Request (https://{SIEBEL_EAI_HOST}/eai_{SIEBEL_EAI_LANGUAGE}/start.swe?SWEExtSource=SecureWebService&SWEExtCmd=Execute&WSSOAP=1).
- **soapAction**—SOAPAction to put in the request (document/http://siebel.com/Service/FS/ServiceRequests:ServiceRequestInsert).
- **requestHeader**—XML data in the request before the <data:ServiceRequest> fields.
- **requestFooter**—XML data in the request after the <data:ServiceRequest> fields.

- **formData**—Same as the $formData sent to the create function in the Incident model.
- **incident**—Populated Connect Incident object.
- **siebelData**—Array of data to send to Siebel, with the keys referring to the name of each XML field to put it in (e.g. array('Abstract' => 'subject info', 'Description' => 'question thread')).

As an example, assume you have a Severity field on your Siebel application and you want all Customer Portal service requests to be set to severity level 1-Critical. Your hook function would resemble the following.

```
function preSiebelIncidentSubmit(&$hookData)
{
    // the Severity field in Siebel will now be set
    $hookData['siebelData']['Severity'] = '1-Critical';
}
```

post_siebel_incident_error

This hook lets you process errors that are found when a service request is submitted. It can either send the error information to a custom location or analyze the error information and return a custom error message back to the user.

The hook data content includes:

- **errors**—Array containing a generic error message that will be displayed to the user.
- **requestErrorNumber**—Result of curl_errno.
- **requestErrorMessage**—Result of curl_error.
- **responseInfo**—Result of curl_getinfo.
- **requestBody**—The <data:ServiceRequest> fields sent in the Siebel request.
- **incident**—Populated Connect Incident object.

You can provide a custom error message to customers in one of two ways. The first method returns a custom string:

```
function postSiebelIncidentError(&$hookData)
{
    return "Whoops! Please try again later.";
}
```

The second method is to reset the errors array:

```
function postSiebelIncidentError(&$hookData)
{
    $hookData['errors'][0] = "We're currently experiencing issues.
    Please try again later.";
```

```
}
```

pre_incident_create_save

This hook facilitates use of the framework with the Siebel integration. Although it is not recommended, you could use it to prevent saving an incident in the database.

The hook data content includes:

- **formData**—Same as the $formData sent to the create function in the Incident model.
- **incident**—Populated Connect Incident object.
- **shouldSave**—Boolean set to true.

The following hook function prevents the incident from being saved in the database.

```
function preIncidentCreateSave(&$hookData)
{
    $hookData['shouldSave'] = false;
}
```

You can also use this hook to display a custom error message to the customer using a custom string, although using the pre_incident_create hook is the recommended option.

```
function preIncidentCreateSave(&$hookData)
{
    return "Whoops! Please try again later.";
}
```

pre_register_smart_assistant_resolution

This hook facilitates use of the framework with the Siebel integration. Although it is not recommended, you could use it to prevent registering SmartAssistant resolutions with the Knowledge Foundation API.

The hook data content includes:

- **knowledgeApiSessionToken**—KFAPI session token.
- **smartAssistantToken**—SmartAssistant token.
- **resolution**—KFAPI SmartAssistantResolution object.
- **incident**—Populated Connect Incident object.
- **shouldSave**—Boolean set to true.

You can use this hook to prevent the SmartAssistant resolution from being sent to the Knowledge Foundation API.

```
function preRegisterSmartAssistantResolution(&$hookData)
{
```

```
        $hookData['shouldRegister'] = false;
    }
```

Contact records

When a customer submits a service request from the Customer Portal, Oracle Service Cloud creates a contact record in the Oracle knowledge base. If the customer already has a contact record in the knowledge base, the Customer Portal passes along the contact data that the customer has entered rather than submitting the knowledge base data.

To prevent complications when a customer already has a contact record in the knowledge base, the information that is sent to create the service record includes the customer’s raw input. Best practice recommends against adding contact menu fields because the data that is passed contains IDs rather than the field’s actual value (for example, “5” instead of “US”).

If customers with an existing contact record enter data that differs from the information in the knowledge base, the knowledge base is **not** updated with the new information.

Error handling

When an error occurs on your production customer portal, customers will see a generic error message. If you’re working in development mode, error information is appended to the generic message to provide you with better information for debugging the error.

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Your Account Pages

The Your Account pages let your customers manage their account. Using these pages, they can view, open, and update questions they have submitted to your support team. They can update their contact information and change their account password. They can also view, renew, and delete any product/category or **answer notifications** they have subscribed to.

You can configure the following Your Account pages.

- Account Overview
- Support History
- Question details (accessed by opening a question on the Support History page)
- Account Settings
- Notifications

This section also describes the Change Your Password page.

If you are finished editing these pages and want to configure another page on your customer portal, select the page you want to edit.

- Support Home Page
- Answers Page
- Answer Details Page
- Ask a Question Page
- Log In page
- Live Help page or Chat page

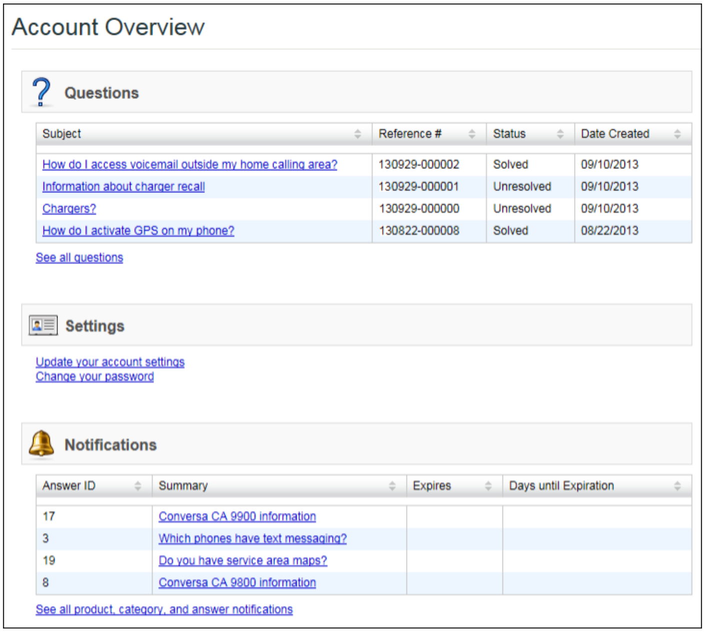
Editing the Account Overview page

When customers click the Your Account tab, the Account Overview page opens. On this page, your customers can view recent questions they've submitted and **notifications** they've requested, as well as change their account information and password. In addition, you can modify this page to display the **SLAs** applied to their account.

The configuration options for the Account Overview page include the following.

- Editing page headings, for example, the Questions or Settings heading, or other message bases on the page.
- Removing the Support History section if your organization doesn't use the Ask a Question tab to allow customers to submit questions.
- Removing the Notifications section and the ability for customers to subscribe to answers.
- Displaying the Service Contracts section if your organization uses SLAs and you want your customers to see them.
- Displaying recent logins and login attempts.

When you've finished editing the Account Overview page, continue configuring other Your Account pages.



Changing the headings on the Account Overview page

To change the Account Overview page headings

1 Open the *overview.php* file in the */views/pages/account* folder.

2 To change the Questions heading (which is also a link), locate the following line of code.

```
<h2><a class="rn_Questions"
href="/app/account/questions/
list#rn:session#">#rn:msg:QUESTIONS_HDG#</a></h2>
```

3 Edit the code with your revised heading. Your code will resemble the following.

```
<h2><a class="rn_Questions"
href="/app/account/questions/list#rn:session#">Incidents You Have
Submitted</a></h2>
```

4 To change any of the other **message bases** on the page, follow the example in steps 2 and 3 to locate and change the message base. (Learn about editing message bases here.)

5 Save *overview.php*.

Continue editing the Account Overview page or Continue configuring other Your Account pages.

Removing Support History from Account Overview

If your organization doesn't let customers submit questions through your support site, you can remove the Support History section of the Account Overview page (although you might decide to keep it for tracking incidents created through email or phone channels).

To remove Support History from the Account Overview page

1 Open the *overview.php* file in the */views/pages/account* folder.

2 Delete the following lines of code.

```
<h2><a class="rn_Questions" href="/app/account/questions/
list#rn:session#">#rn:msg:QUESTIONS_HDG#</a></h2>
<div class="rn_Questions">
    <rn:widget path="reports/Grid" report_id="196" per_page="4"
    label_caption="<span
    class='rn_ScreenReaderOnly'>#rn:msg:YOUR_RECENTLY_SUBMITTED_QUEST
    IONS_LBL#</span>"/>
    <a href="/app/account/questions/
    list#rn:session#">#rn:msg:SEE_ALL_QUESTIONS_LBL#</a>
</div>
```

3 Save *overview.php*.

Continue editing the Account Overview page or Continue configuring other Your Account pages.

Removing Notifications from your customer portal

If you don't want to let customers subscribe to answers, you'll need to remove the Notify Me link, which appears only when a customer is logged in, from the answer details page. Then you'll want to remove the Notifications option from the Your Account tab and the Notifications section from the Account Overview page. You don't have to remove the *list.php* file from the */views/pages/account/notif* folder, but you can if you're concerned that customers will accidentally access it. First we'll remove the Notify Me icon on the answer details page.

To remove the Notify Me icon from the answer details page

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Delete the following lines of code.

```
<rn:condition logged_in="true">
    <rn:widget path="notifications/AnswerNotificationIcon" />
</rn:condition>
```

3 Save *detail.php*.

Next, we'll modify the template to remove the Notifications option from the Your Account tab.

Removing the Notifications option from the Your Account tab

To remove the Notifications option from the Your Account tab

1 Open the *standard.php* file in the */views/templates* folder.

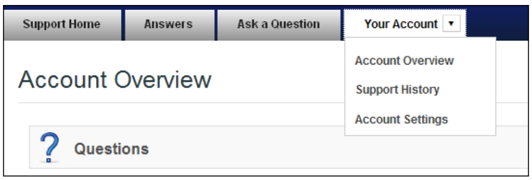
2 Locate the following line of code.

```
subpages="#rn:msg:ACCOUNT_OVERVIEW_LBL# > /app/account/overview,
#rn:msg:SUPPORT_HISTORY_LBL# > /app/account/questions/list,
#rn:msg:ACCOUNT_SETTINGS_LBL# > /app/account/profile,
#rn:msg:NOTIFICATIONS_LBL# > /app/account/notif/list"/></li>
```

3 Edit the line to delete the Notifications option as shown in the following code.

```
subpages="#rn:msg:ACCOUNT_OVERVIEW_LBL# > /app/account/overview,
#rn:msg:SUPPORT_HISTORY_LBL# > /app/account/questions/list,
#rn:msg:ACCOUNT_SETTINGS_LBL# > /app/account/profile"></li>
```

4 Save *standard.php*.



Now we'll remove the Notifications section from the Account Overview page.

Removing the Notifications section from the Account Overview page

To remove the Notifications section from the Account Overview page

1 Open the *overview.php* file in the */views/pages/account* folder.

2 Delete the following lines of code.

```
<h2><a class="rn_Notifs" href="/app/account/notif/
list#rn:session#">#rn:msg:NOTIFICATIONS_HDG#</a></h2>
<div class="rn_Notifs">
    <rn:widget path="reports/Grid" report_id="231" per_page="4"/>
    <a href="/app/account/notif/
    list#rn:session#">#rn:msg:PRODUCT_CATEGORY_ANS_NOTIFICATIONS_LBL#
    </a>
</div>
```

3 Save *overview.php*.

Displaying Service Contracts on Account Overview

If your organization uses **SLAs** and you want them to be visible to your customers, you can add the Service Contracts section to the Account Overview page.

To display Service Contracts on the Account Overview page

1 Open the *overview.php* file in the */views/pages/account* folder.

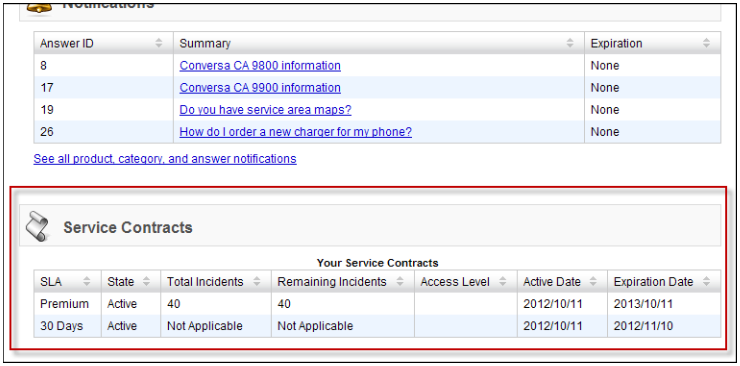
2 Locate the following lines of code at the end of the file.

```
    </div>
</div>
```

3 Add the following code just above the code you located in step 2.

```
<h2><strong class="rn_Contracts">#rn:msg:SERVICE_CONTRACTS_LBL#</
strong></h2>
<div class="rn_Contracts">
    <rn:widget path="reports/Grid" report_id="185"
    label_caption="#rn:msg:YOUR_SERVICE_CONTRACTS_LBL#"/>
</div>
```

4 Save *overview.php*.



Continue editing the Account Overview page or Continue configuring other Your Account pages.

Displaying recent logins

You can add two reports to the Account Overview page to display your customers' most recent logins as well as the number of failed login attempts since the most recent successful login.

- **Contact Login Statistics**—Displays the contact's name, the login date of the current session, the last successful login date, last successful login IP address, last unsuccessful login attempt date, and last unsuccessful login attempt IP address. By default, only login attempts from the last 60 days are available. You can drill down to find the number of unsuccessful login attempts since the previous successful login. Although the report is not visible in the Reports explorer, you can reference it with ID 10046.
- **Unsuccessful Login Attempts by Contact**—Displays the contact's name and the dates and IP addresses for the unsuccessful login attempts since the previous successful login. The report ID is 10047.

Note These reports are not part of the reference implementation but can be added to any customer portal page, not just the recommended Account Overview page. Or you can add them to a custom page and then create a link to that page from the Account Overview page or any other customer portal page.

To add login information to the Account Overview page

1 Open the *overview.php* file in the */views/pages/account* folder.

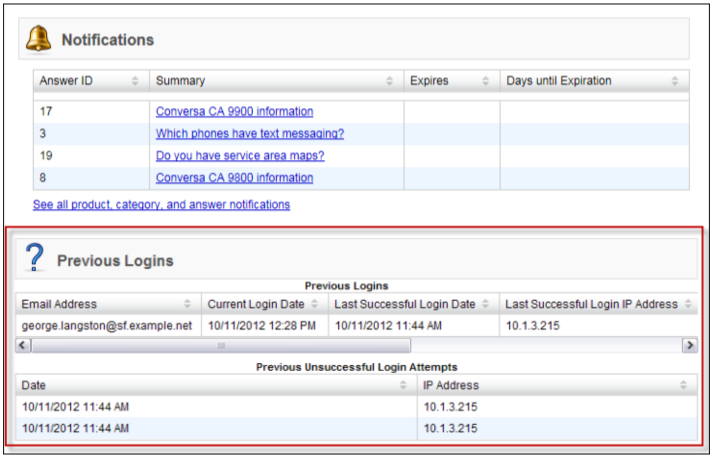
2 Locate the following lines of code at the end of the file.

```
        </div>
    </div>
```

3 Add the following code just above the code you located in step 2.

```
    <h2><strong>Previous Logins</strong></h2>
        <rn:widget path="reports/Grid" report_id="10046"
        label_caption="Previous Logins" date_format="date_time"/>
        <rn:widget path="reports/Grid" report_id="10047"
        label_caption="Previous Unsuccessful Login Attempts"
        date_format="date_time"/>
```

4 Save *overview.php*.



Editing the Your Account subpages

Besides the Account Overview page, the Your Account pages include the following.

- Support History page
- Question details page
- Account Settings page
- Notifications page

Editing the Support History page

The Support History section on the Account Overview page lists the most recent questions submitted by your customers. Customers can click the “See all questions” link on the Account Overview page to open the Support History page. Or they can select Support History from the drop-down menu on the Your Account tab.

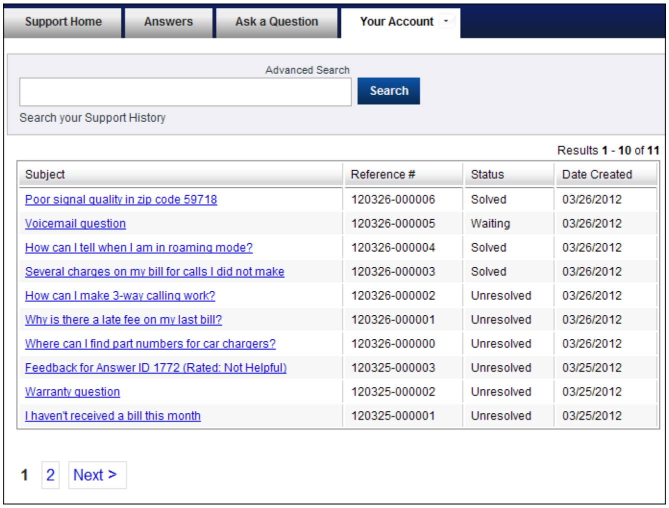
Note This page includes off-screen <h1> and <h2> tags that are made visible to screen readers using the rn_ScreenReaderOnly CSS class. These tags provide **accessible** navigation using shortcut keys for customers who use screen readers to access the customer portal pages. The content is not visible to sighted users unless styles are disabled.

For information about creating content that is hidden to all users except screen readers, refer to the WebAIM article CSS in Action: Invisible Content Just for Screen Reader Users.

Configuration options on the Support History page include the following.

- Editing the page heading
- Removing the search field from the Support History page
- Changing the report that displays the customer’s questions
- Displaying all incidents from an organization

When you’re finished editing the Support History page, you can configure the other Your Account pages.



Note If an incident has been created when a customer provided feedback that an answer was not helpful, the Subject field on the Support History page will resemble the following:

Feedback for Answer ID 1772 (Rated: Not Helpful)

Editing the Support History page heading

The heading of the Support History page is visible only to screen readers. However, you can change its value by editing the *label_caption* attribute of the report widget.

To change the Support History heading

1 Open the *list.php* file in the */views/pages/account/questions* folder.

2 Locate the following line of code.

```
<rn:widget path="reports/Grid"
label_caption="<span
class='rn_ScreenReaderOnly'>#rn:msg:SEARCH_YOUR_SUPPORT_HISTORY_CMD#<
/span>"/>
```

3 Edit the code to change the heading to the new heading. Your code will resemble the following.

```
<rn:widget path="reports/Grid"
label_caption="<span class='rn_ScreenReaderOnly'>Your Incidents</
span>"/>
```

4 Save *list.php*.

Continue editing the Support History page or Configure other Your Account subpages.

Removing the search field

To remove the search field from the Support History page

1 Open the *list.php* file in the */views/pages/account/questions* folder.

2 Delete the following lines of code.

```
<div id="rn_SearchControls">
    <h1 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_CMD#</h1>
    <form onsubmit="return false;">
            <div class="rn_SearchInput">
                <rn:widget path="search/AdvancedSearchDialog"/>
                <rn:widget path="search/KeywordText"
                label_text="#rn:msg:SEARCH_YOUR_SUPPORT_HISTORY_CMD#"
                initial_focus="true"/>
            </div>
            <rn:widget path="search/SearchButton"/>
    </form>
    <rn:widget path="search/DisplaySearchFilters"/>
</div>
```

3 Save *list.php*.

Continue editing the Support History page or Configure other Your Account subpages.

Changing the Support History report

By default, the Support History page uses the Questions report (ID 196).

To change the report on the Support History page

1 Open the *list.php* file in the */views/pages/account/questions* folder.

2 Locate the following line of code.

```
<rn:container report_id="196">
```

3 Replace `196` with the ID for the standard or custom report you want to use instead. (Learn how to find a report's ID number.)

4 Save *list.php*.

Continue editing the Support History page or Configure other Your Account subpages.

Displaying all incidents from the organization

When you add the OrgList2 widget to the Support History page, your customers can choose to view only their own **incidents**, incidents from everyone in their **organization**, or incidents from everyone in their organization and all of the organization's subsidiaries.

Note When you use the OrgList2 widget, set the value of the configuration setting MYQ_VIEW_ORG_INCIDENTS to 2.

To let customers display all incidents from the organization

1 Open the *list.php* file in the */views/pages/account/questions* folder.

2 Locate the following line of code.

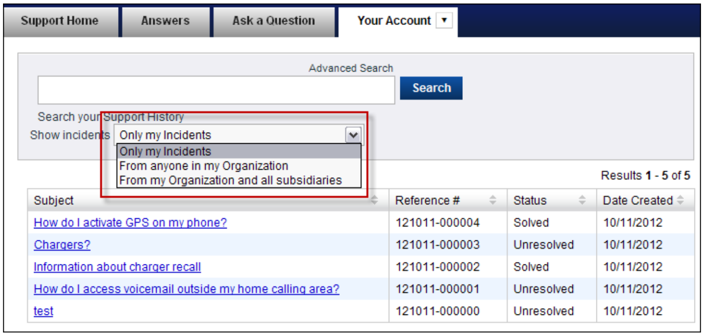
```
<div id="rn_PageContent" class="rn_QuestionList">
```

3 Type the following code just above the line you added in step 2.

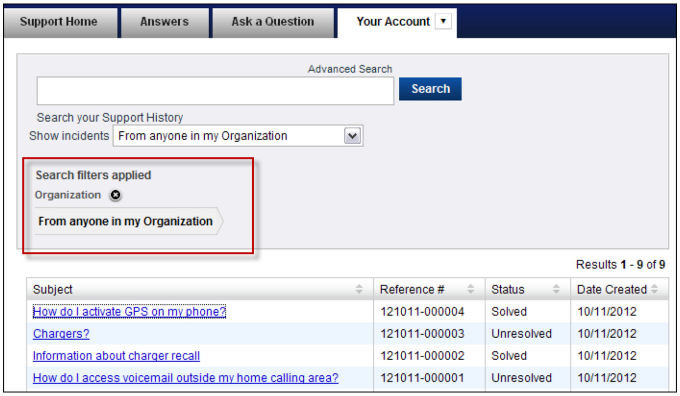
```
<rn:widget path="search/OrgList" search_on_select="true" />
```

Note When the *search_on_select* attribute is true, customers don't have to click the Search button after making their menu selection for displaying incidents because the report refreshes automatically.

4 Save *list.php*.



The report shows the selected filter and includes all incidents submitted from the customer's organization.



Notice that the report displays different incidents than the report containing only the individual's incidents.

Continue editing the Support History page or Configure other Your Account subpages.

Editing the question details page

Customer questions submitted through the customer portal generate **incidents** in your **knowledge base** that can be worked on the **agent desktop** by agents in your organization. When customers view the list of their questions on the Support History or Account Overview page, they can click an individual question to open the question details page for that question.

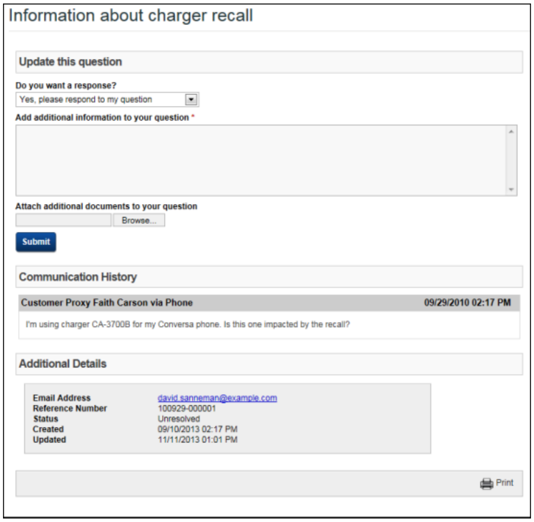
Whenever customers respond to the “Do you want a response?” question with “Yes, please respond to my question,” the Add Additional Information to Your Question field is automatically marked as a required field, and customers must enter something in the field before submitting their request.

Besides changing message bases, other configuration options on the question details page include the following.

- Change the details that are shown for the question/incident
- Prevent customers from solving incidents
- Prevent customers from updating closed incidents

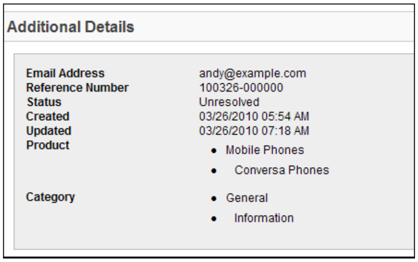
Note If incidents do not display as you expect them to, check to see if the agent associated with the incident changed font style, color, or highlighting when editing the incident on the agent desktop. Any font styles selected from the Rich Text Incident Thread control override CSS styling in customer portal code.

When you’re finished editing the question details page, you can configure the other Your Account pages.



Changing incident details

The Additional Details section on the question details page lists the customer's email address and information about the incident, including reference number, status, dates updated and created, and the associated product and category.



To add or remove incident details on the question details page

1 Open the *detail.php* file in the */views/pages/account/questions* folder.

2 Locate the following line of code.

```
<div id="rn_AdditionalInfo">
```

3 To add an incident detail, add a line of code that adds the DataDisplay widget to the block of DataDisplay code for incident fields. You can find the name of all the incident fields you can use by clicking Framework > Business Objects on the Customer Portal Administration site. (Refer to Business objects.) For example, you might want to add the time the incident was closed. In this case you would add the following code.

```
<rn:widget path="output/DataDisplay" name="Incident.ClosedTime"
label="Closed" />
```

4 To remove one of the incident fields, locate the line of code that displays the field and delete it.

5 Save *detail.php*.

Prevent customers from solving incidents or Prevent customers from updating closed incidents or Configure the other Your Account pages.

Preventing customers from solving an incident

When customers select “No, I don’t need this question answered now” from the Do You Want a Response? drop-down menu and then click Submit, the incident’s status is set to Solved automatically. You can remove the status field from the page, which prevents customers from solving incidents.

Note Removing this field prevents customers from intentionally solving an incident on the question details page. However, if customers update an incident by adding information to their question or attaching a file, the incident status is automatically set to Updated.

To prevent customers from solving incidents

1 Open the *detail.php* file in the */views/pages/account/questions* folder.

2 Delete the following line of code.

```
<rn:widget path="input/FormInput"
name="Incident.StatusWithType.Status"
label_input="#rn:msg:DO_YOU_WANT_A_RESPONSE_MSG#"/>
```

3 Save *detail.php*.

Prevent customers from updating closed incidents or Configure the other Your Account pages.

Preventing customers from updating closed incidents

By default, the question details page uses a condition to prevent customers from updating incidents (the customers’ questions) that have been solved for more than one week (168 hours). You can change the amount of time until an incident can no longer be updated or you can prevent customers from ever updating a closed incident, regardless of how recently it’s been solved.

To prevent customers from updating solved incidents

1 Open the *detail.php* file in the */views/pages/account/questions* folder.

2 Locate the following line of code.

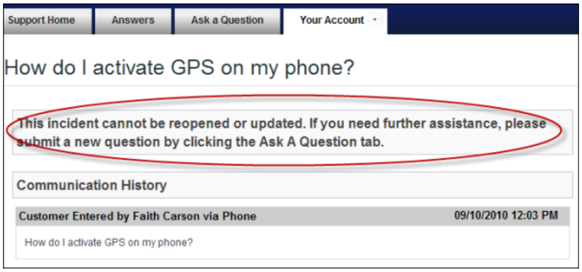
```
<rn:condition incident_reopen_deadline_hours="168">
```

3 Edit the code to change the value for the *incident_reopen_deadline_hours* attribute to 0.

```
<rn:condition incident_reopen_deadline_hours="0">
```

4 Save *detail.php*.

Configure the other Your Account pages.

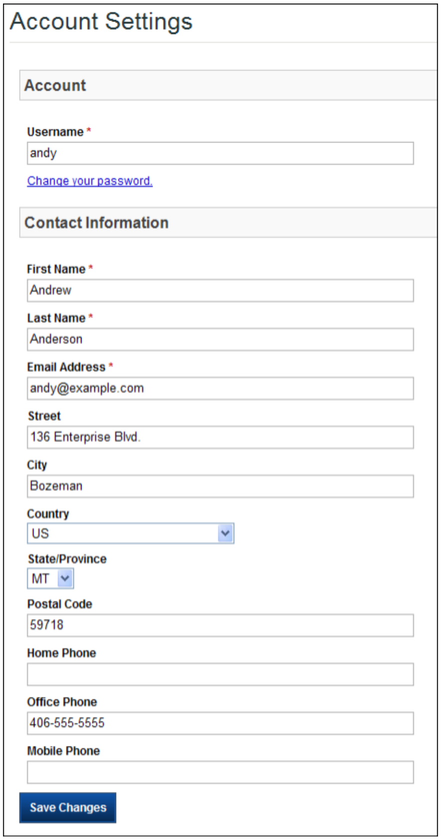


Editing the Account Settings page

The Account Settings page lets your customers update their account information. The fields on the default page include Username, First Name, Last Name, Email Address, Street, City, Country, State/Province, Postal Code, Home Phone, Office Phone, and Mobile Phone. Any **contact custom fields** that have been created on the **administration interface** and given End-user Read/Write Visibility will also appear on this page. (Refer to Setting custom field visibility.)

Besides changing the page title and other message bases on the Account Settings page, you can add or remove fields, allow multi-line address entry, and allow customers to edit fields when logging in with pass-through authentication.

When you're finished editing the Account Settings page, you can configure the other Your Account pages.



Changing the Account Settings page title

To edit the title on the Account Settings page

1 Open the *profile.php* file in the */views/pages/account* folder.

2 Locate the following line of code.

```
<h1>#rn:msg:ACCOUNT_SETTINGS_LBL#</h1>
```

3 Edit the code you located to change the message base to your new heading. Your code will resemble the following.

```
<h1>New Title for the Account Settings Page</h1>
```

4 Save *profile.php*.

Add or remove contact fields or Configure the other Your Account pages.

Adding or removing contact fields

To add or remove contact fields on the Account Settings page

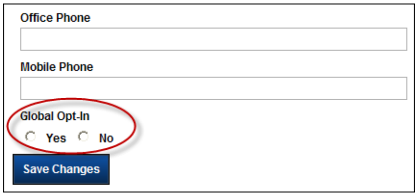
1 Open the *profile.php* file in the */views/pages/account* folder.

2 To add a field to the Account Settings page, insert a line of code that calls the FormInput widget in the location on the page where you want the field to appear. You can find the names of all the contact fields you can use by clicking Framework > Business Objects on the Customer Portal Administration site. For example, to add the alternate email address fields to the page, add the following lines of code.

```
<rn:widget path="input/FormInput" name="Contact.Emails.ALT1.Address"
label_input="Alternate Email 1" />
<rn:widget path="input/FormInput" name="Contact.Emails.ALT2.Address"
label_input="Alternate Email 2" />
```

3 To add a radio button selection that lets customers opt in to communications from your marketing department, add the following code wherever you want in the block of FormInput widgets on the page.

```
<rn:widget path="input/FormInput"
name="Contact.MarketingSettings.MarketingOptIn" label_input="Opt in
to marketing communications from us?"/>
```



4 To remove one of the contact fields, locate the line of code that displays the field and delete it. For example, to remove the phone fields, you would delete the following lines of code.

```
<rn:widget path="input/FormInput" name="Contact.Phones.HOME.Number"
label_input="#rn:msg:HOME_PHONE_LBL#">
<rn:widget path="input/FormInput" name="Contact.Phones.OFFICE.Number"
label_input="#rn:msg:OFFICE_PHONE_LBL#"/>
<rn:widget path="input/FormInput" name="Contact.Phones.MOBILE.Number"
```

```
label_input="#rn:msg:MOBILE_PHONE_LBL#"/>
```

Note The *profile.php* code contains conditional sections that display the physical address fields in a different sequence if the browser is using an Asian language. Physical address fields include Street, City, Country, State/Province, and Postal Code. If you want to remove any or all of these fields for all languages, be sure to remove them from both conditions.

5 Save *profile.php*.

Configure the other Your Account pages.

Allowing multiline address entry

To add or remove contact fields on the Account Settings page

1 Open the *profile.php* file in the */views/pages/account* folder.

2 Locate the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.Address.Street"
label_input="#rn:msg:STREET_LBL#"/>
```

3 Add the *textarea* attribute to the FormInput widget so your code is as follows.

```
<rn:widget path="input/FormInput"
name="Contact.Address.Street"
label_input="#rn:msg:STREET_LBL#"
textarea="true" />
```

4 Save *profile.php*.

Configure the other Your Account pages.

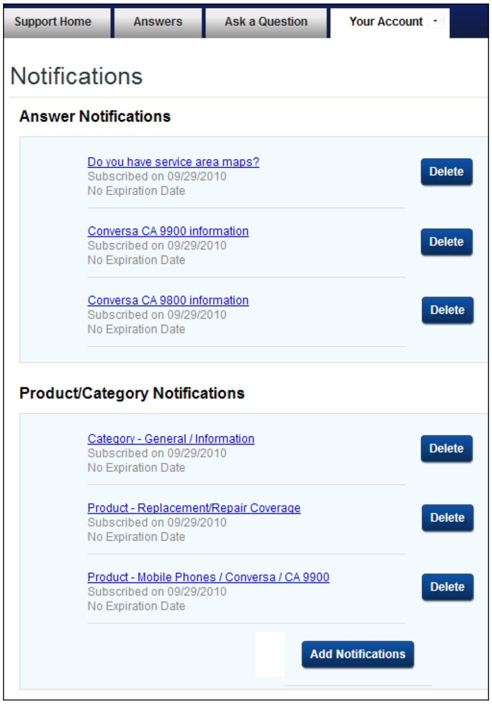
Editing the Notifications page

Your customers can access the Notifications page by selecting Notifications on the Your Account tab's drop-down menu, or they can open the page by selecting the "See all product, category, and answer notifications" link on the Account Overview page.

The Notifications page displays all answer notifications and product/category notifications the customer is subscribed to. It lists the date the customer subscribed to the notification and the date the notification expires. It also includes Delete and Renew buttons to let the customer manage all notifications from the page and an Add Notifications button so the customer can add other product/category notifications.

When your customer clicks an answer notification, the answer details page opens to display the answer. When a product/category notification is selected, the Answers page opens to display a list of all answers related to that product or category.

You can change the page title, change message bases, and remove either answer notifications or product/category notifications on the Notifications page.



Changing the Notifications page title

To edit the title on the Notifications page

1 Open the *list.php* file in the */views/pages/account/notif* folder.

2 Locate the following line of code.

```
<h1>#rn:msg:NOTIFICATIONS_HDG#</h1>
```

3 Edit the code you located to change the message base to your new heading. Your code will resemble the following.

```
<h1>New Title for the Notifications Page</h1>
```

4 Save *list.php*.

Configure the other Your Account pages.

Removing notifications

To remove notifications from the Notifications page

1 Open the *list.php* file in the */views/pages/account/notif* folder.

2 To remove the Answer Notifications section, delete the following lines of code.

```
<h2>#rn:msg:ANSWER_LBL# #rn:msg:NOTIFICATIONS_HDG#</h2>
<rn:widget path="notifications/AnswerNotificationManager" />
```

3 To remove the Product/Category Notifications section, delete the following lines of code.

```
<h2>#rn:msg:PRODUCT_LBL#/#rn:msg:CATEGORY_LBL#
#rn:msg:NOTIFICATIONS_HDG#</h2>
<rn:widget path="notifications/ProdCatNotificationManager" />
```

4 Save *list.php*.

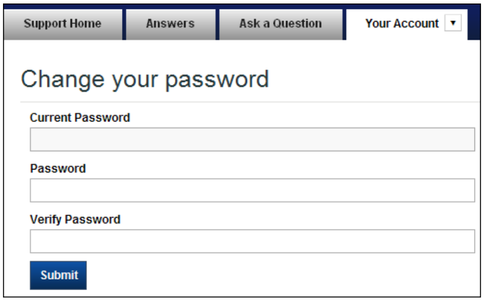
Change Your Password page

Customers can open the Change Your Password page by clicking the Change Your Password link under Settings on the Account Overview page or by clicking the Change Your Password link under Account on the Account Settings page.

Note Customers who have logged in through an open login account cannot change their password on this page. They will be required to log out and click the Forgot Your Username or Password? link.

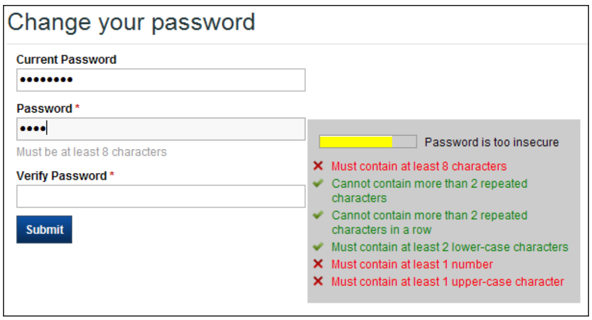
Configuration options on the Change Your Password page include the following.

- Configuring the password hardening features of the PasswordInput widget
- Editing message bases
- Editing the Password label to indicate the password minimum length requirement



Configuring the PasswordInput widget

The PasswordInput widget used on the Change Your Password page contains a password hardening feature that lets you define the strength of customer passwords on the **administration interface** (refer to [Configuring password requirements](#)). When customers change their password, the password formatting requirements appear on the page. As customers begin typing their password, the requirements that are met are marked with a green check mark. Incomplete requirements are marked with a red X.



To configure the PasswordInput widget

1 Open the *change_password.php* file in the */views/pages/account* folder.

2 Locate the following line of code.

```
<rn:widget path="input/PasswordInput"
name="Contact.NewPassword"
require_validation="true"
require_current_password="true"
```

```
label_input="#rn:msg:PASSWORD_LBL#"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"
initial_focus="true"/>
```

3 To enable the customer's web browser to auto-complete the password values, add the *disable_password_autocomplete* attribute and set it to false.

```
<rn:widget path="input/PasswordInput"
name="Contact.NewPassword"
require_validation="true"
require_current_password="true"
disable_password_autocomplete="false"
label_input="#rn:msg:PASSWORD_LBL#"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"
initial_focus="true"/>
```

4 To remove the Current Password field from the form so that customers must enter only the new password value, delete the *require_current_password* attribute.

5 To remove the validation requirement that causes the Verify Password field to appear, delete the *require_validation* attribute.

6 Save *change_password.php*.

Continue editing the Change Your Password page or Select another page to configure.

Editing message bases on the Change Your Password page

To edit message bases on the Change Your Password page

1 Open the *change_password.php* file in the */views/pages/account* folder.

2 To edit the heading, locate the following line of code and type the new heading between the `<h1>` tags.

```
<h1>#rn:msg:CHANGE_YOUR_PASSWORD_CMD#</h1>
```

3 Locate the following line of code.

```
<rn:widget path="input/PasswordInput" name="Contact.NewPassword"
require_validation="true" require_current_password="true"
label_input="#rn:msg:PASSWD_LBL#"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"
initial_focus="true"/>
```

4 To edit labels for any of the password fields, add or edit the following attributes.

a. To edit the Current Password label, add the *label_current_password* attribute and set its value to the label you want.
b. To edit the Password label, edit the value for the *label_input* attribute.
c. To edit the Verify Password label, edit the value for the *label_validation* attribute.
d. To edit the label displayed when the required password field is left blank, add the *label_required* attribute and set its value to the label you want.

5. To edit labels for any of the password hardening validation messages, add the following attributes.
   a. To edit the message stating that one or more characters are required in the password, add the *label_min_length_char* and *label_min_length_chars* attributes and set their values to the labels you want.
   b. To edit the message stating that one or more lowercase characters are required, add values for the *label_lowercase_char* and *label_lowercase_chars* attributes.
   c. To edit the message stating that a character cannot occur in the password more than the specified number of times, add values for the *label_occurring_char* and *label_occurring_chars* attribute.
   d. To edit the message stating that a character cannot be repeated consecutively more than the specified number of times, add values for the *label_repetition_char* and *label_repetition_chars* attributes.
   e. To edit the message stating that one or more uppercase characters are required, add values for the *label_uppercase_char* and *label_uppercase_chars* attributes.
   f. To edit the message stating that one or more special characters are required, add values for the *label_special_char* and *label_special_chars* attributes.
   g. To edit the message stating that one or more special characters and/or numbers are required, add values for the *label_special_digit_char* and *label_special_digit_chars* attributes.

Note Although the default label is “Must contain at least [x] numbers,” the requirement is met if customers enter the required number of numbers or special characters, or a combination of the two. If you want to be more specific, you can change the label to “Must contain any combination of at least [x] numbers and special characters.”

6. Save *change_password.php*.

If you have finished editing the Change Your Password page, you can select another page to configure.

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Chatting on the Customer Portal

Occasionally, your customers may not find the information they are looking for on your support site or need an answer more quickly than a typical email response. When **Oracle RightNow Chat Cloud Service** (Chat) is enabled on your site, your customers can click a link to request a real-time chat session with an agent to resolve their needs quickly.

When a customer clicks the Live Chat link on the sidebar of any standard Customer Portal page, the Live Help page opens and displays a small chat request form. Once the request is submitted, the Chat page opens indicating the customer's position in the queue. Once an agent accepts the chat request, the Chat page provides a place for the customer to post messages to the agent, and displays a transcript of the chat session.

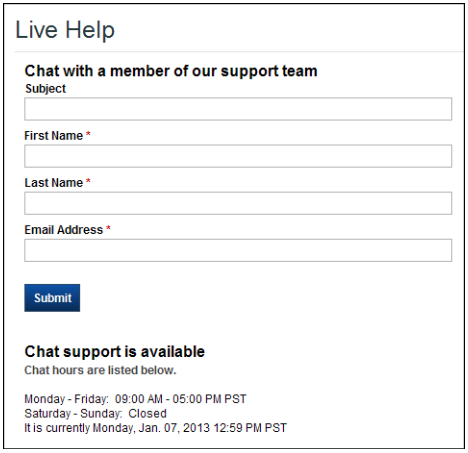
In addition to accepting requests through the sidebar link, you can add a Chat navigation tab to the template or place a chat link on any customer portal page or on an external page. Also, rather than waiting for customers to submit a request, you can proactively offer them a chat invitation based on criteria you define, such as after they perform three searches or spend a certain amount of time on a page.

Live Help page

The Live Help page is where your customers submit a request for a **chat session**. After the request has been submitted, the Chat page opens and the customer can begin chatting with an available agent. The Live Help page is opened when customers click the Live Chat link on the sidebar or the Chat navigation tab, if it has been added to the template.

The default Live Help page displays the customer's first and last names and email address if the customer is logged in. If the customer is not yet logged in, the fields are blank waiting for customer input. If you have **incident custom fields** with chat visibility, those fields are displayed on the default Live Help page as well, with required custom fields noted by a red asterisk. The page also contains a Submit Request button, a chat status message, and the chat hours listing.

[Learn how to configure the Live Help page.](#)



If you are finished editing this page and want to configure another page on your customer portal, select the page you want to edit.

- Support Home Page
- Answers Page
- Ask a Question Page
- Your Account Pages
- Log In page
- Chat page

Configuring the Live Help page

The following configuration options are available for the Live Help page.

- Change the message bases
- Change the chat hours
- Remove fields on the Live Help page
- Require an SLA for chats

When you're finished configuring the Live Help page, you can configure the Chat page.

Changing the message bases

You can change the following message bases on the Live Help page. (Learn more about editing message bases here.)

- Live Help heading
- Chat with a Support Assistant subheading
- Chat support available message

Continue configuring the Live Help page.

Changing the Live Help heading

To change the Live Help heading

1 Open the *chat_launch.php* file in the */views/pages/chat* folder.

2 Locate the following line of code.

```
<h1>#rn:msg:LIVE_HELP_HDG#</h1>
```

3 Type the new heading between the `<h1>` and `</h1>` tags.

4 Save *chat_launch.php*.

Continue editing the Live Help message bases or Continue configuring the Live Help page.

Changing the Chat subheading

To change the Chat subheading

1 Open the *chat_launch.php* file in the */views/pages/chat* folder.

2 Locate the following line of code.

```
<span
class="rn_ChatLaunchFormHeader">#rn:msg:CHAT_MEMBER_OUR_SUPPORT_TEAM_
LBL#</span>
```

3 Type a replacement heading to replace the message base. Your code will resemble the following.

```
<span class="rn_ChatLaunchFormHeader">Talk to someone on our support
team right now!</span>
```

4 Save *chat_launch.php*.

Continue editing the Live Help message bases or Continue configuring the Live Help page.

Changing the Chat Support available message

To change the Chat Support available message

1 Open the *chat_launch.php* file in the */views/pages/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatStatus"/>
```

3 Add the *label_chat_available* attribute to the code. Your changes will resemble the following example.

```
<rn:widget path="chat/ChatStatus"
label_chat_available="Agents are currently available." />
```

4 Save *chat_launch.php*.

Continue editing the Live Help message bases or Continue configuring the Live Help page.

Changing the chat hours

The Live Help page lists the chat hours as they have been defined on the **administration interface**. If you change the chat hours on the administration interface, they will change on your customer portal.

To change chat hours

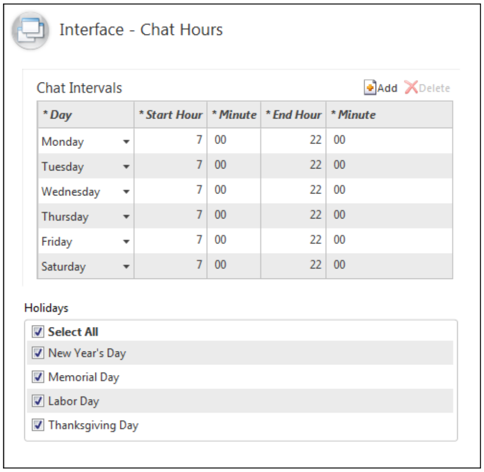
1 Log in to Oracle Service Cloud.

2 Click the Configuration button on the navigation pane.

3 Double-click Interfaces under Site Configuration. The Interfaces tree displays on the content pane.

4 Click the interface you want to edit chat hours for. The Interfaces editor displays on the content pane.

5 Click the Chat Hours button on the ribbon. The Chat Hours page opens.



6 To add a day, click the Add button and select a day from the drop-down menu.

7 To edit the start hour and minute or the end hour and minute for any day, click in the field and type the new value.

8 When you are finished making your changes, click the Save and Close button to save the chat hours and close the editor. Your changes now appear on the Live Help page.

If you need more information, refer to Setting chat hours.

Continue configuring the Live Help page.

Removing fields from the Live Help page

To remove fields from the Live Help page

1 Open the *chat_launch.php* file in the */views/pages/chat* folder.

2 Locate the following lines of code.

```
<rn:widget path="input/FormInput"
name="Incident.Subject"
label_input="#rn:msg:SUBJECT_LBL#"/>
<rn:condition config_check="COMMON:intl_nameorder == 1">
    <rn:widget path="input/FormInput"
    name="Contact.Name.Last"
    label_input="#rn:msg:LAST_NAME_LBL#"
    required="true"/>
```

```
        <rn:widget path="input/FormInput"
        name="Contact.Name.First"
        label_input="#rn:msg:FIRST_NAME_LBL#" required="true"/>
    <rn:condition_else/>
        <rn:widget path="input/FormInput"
        name="Contact.Name.First"
        label_input="#rn:msg:FIRST_NAME_LBL#"
        required="true"/>
        <rn:widget path="input/FormInput"
        name="Contact.Name.Last"
        label_input="#rn:msg:LAST_NAME_LBL#"
        required="true"/>
    </rn:condition>
    <rn:widget path="input/FormInput"
    name="Contact.Emails.PRIMARY.Address"
    required="true" label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
    <!-- optional fields -->
    <rn:widget path="input/CustomAllInput"
    table="Incident"
    chat_visible_only="true"
    always_show_mask="false" />
```

3 To remove the Subject field, delete the following line of code.

```
<rn:widget path="input/FormInput"
name="Incident.Subject"
label_input="#rn:msg:SUBJECT_LBL#"/>
```

4 To remove the Last Name field and display only the first name, delete the following line of code from both condition cases.

```
    <rn:widget path="input/FormInput"
    name="Contact.Name.Last"
    label_input="#rn:msg:LAST_NAME_LBL#" required="true"/>
```

5 To remove the Email Address field, delete the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
```

6 To remove incident custom fields, delete the following lines of code.

```
<!-- optional fields -->
<rn:widget path="input/CustomAllInput"
table="Incident"
chat_visible_only="true" always_show_mask="false" />
```

7 Save *chat_launch.php*.

Continue configuring the Live Help page.

Requiring an SLA for chats

You can hide the chat link on the sidebar or make the Live Help page content conditional on the customer having an **SLA.** Or, you can simply add a meta tag to the page to prevent customers without a chat SLA from requesting a chat. Customers who do not have an SLA will see a Permission Denied message.

To set an SLA condition before displaying the chat link

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<rn:condition config_check="MOD_CHAT_ENABLED == true">
    <rn:widget path="chat/ConditionalChatLink"
    min_sessions_avail="1"/>
</rn:condition>
```

3 Add the following line of code immediately before the code you located in step 2.

```
<rn:condition sla="chat" />
```

4 Add the following code immediately after the code you located in step 2.

```
</rn:condition>
```

5 Save *standard.php*.

To set an SLA condition before displaying page content

1 Open the *chat_launch.php* file in the */views/pages/chat* folder.

2 Locate the following line of code.

```
<!-- optional fields -->
<div id="rn_PageContent"
class="rn_Live">
```

3 Add the following line of code immediately before the code you located in step 2.

```
<rn:condition sla="chat" />
```

4 Add the following code after the last line in the *chat_launch.php* file.

```
<rn:condition_else />
<div id="rn_PageContent"
```

```
class="rn_AnswerDetail">
    <div class="rn_Padding">
        <h2>#rn:msg:PERMISSION_DENIED_LBL#</h2>
        <p>#rn:msg:CHAT_SLA_REQUIRED_LBL#</p>
    </div>
</div>
</rn:condition>
```

5 Save *chat_launch.php*.

To set a page meta tag to require an SLA

1 Open the *chat_launch.php* file in the */views/pages/chat* folder.

2 Add the *sla_required_type* page meta tag to the first line of the file, which should now read:

```
<rn:meta title="#rn:msg:LIVE_CHAT_LBL#"
template="standard.php"
clickstream="chat_request"
sla_required_type="chat" />
```

3 Save *chat_launch.php*.

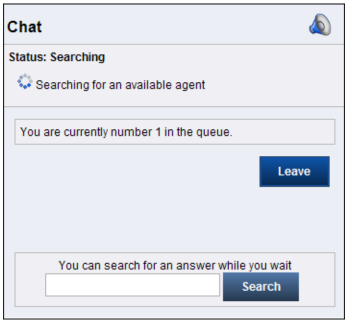
Note If you require a chat SLA on the Live Help page, you should also require one on the Chat page. Edit the *chat_landing.php* file in the same manner by adding `sla_required_type="chat"` to the line that begins with `<rn:meta`. The edited code will look like the following.

```
<rn:meta clickstream="chat_landing"
javascript_module="standard"
include_chat="true"
sla_required_type="chat" />
```

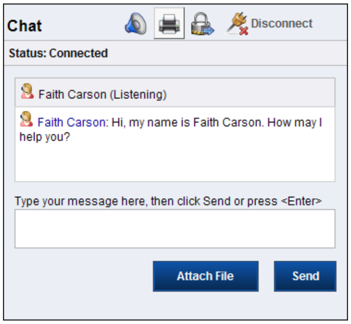
Continue configuring the Live Help page or, if finished, you can move on to configuring the Chat page.

Chat page

The Chat page opens after customers submit a chat request. While **Chat** looks for an available agent, the customer sees the screen shown here. You can tell from the look of the page that it doesn't use the standard template for the reference implementation.



After an agent accepts the chat request, the Chat page displays the agent's opening comments.



Important By default, the *chat_landing.php* file for the Chat page contains the *include_chat* page meta tag, which is set to true. If you create additional pages that contain a chat application, you must include this meta tag and set it true in the page file. When the *include_chat* tag is set to true, the page includes all the required JavaScript files for Chat.

Although the default Chat page includes multiple widgets, only the following three widgets are actually necessary to create a usable Chat page.

- ChatServerConnect
- ChatTranscript
- ChatPostMessage

Configure the required Chat page widgets or View other widgets on the Chat page.

When you're finished editing the Chat pages and want to configure another page on your customer portal, select the page you want to edit.

- Support Home Page
- Answers Page
- Answer Details Page
- Ask a Question Page
- Your Account Pages
- Log In page

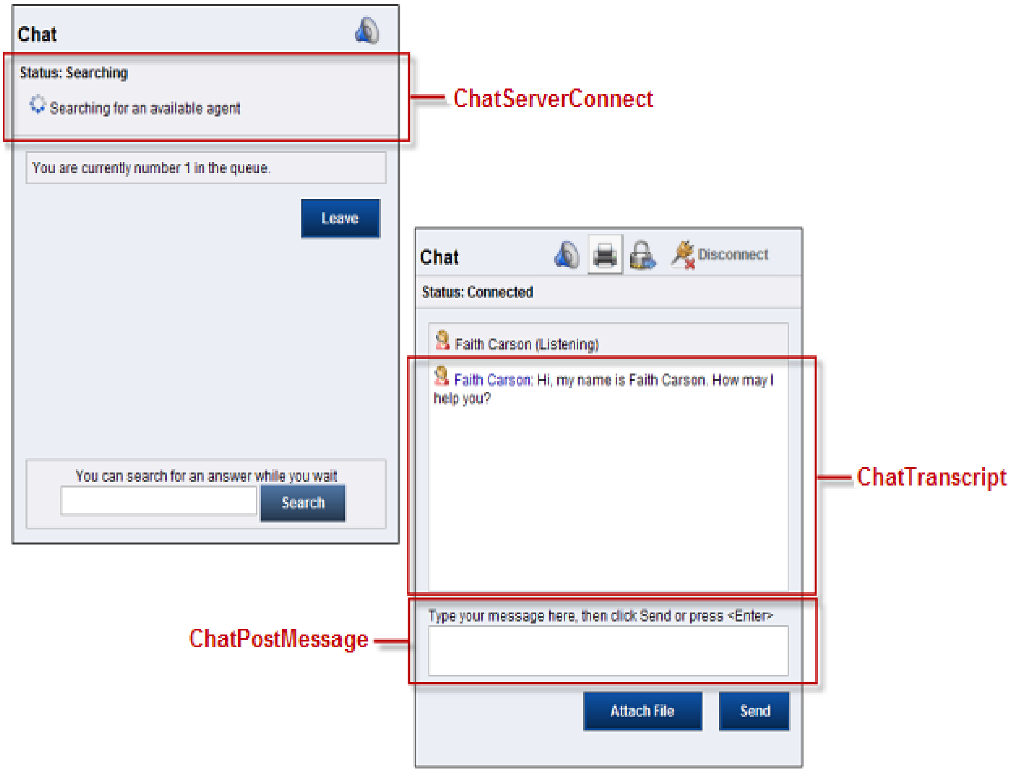
Configuring the primary chat widgets

The Chat page requires, at a minimum, the following three widgets, which you can configure.

- ChatServerConnect widget
- ChatTranscript widget
- ChatPostMessage widget

Although only three widgets are required for a working Chat page, additional chat widgets provide more functionality on the Chat page.

When you are finished configuring these widgets, continue configuring other Chat options.



Configuring the ChatServerConnect widget

The ChatServerConnect widget is used to communicate with the customer who has just requested a chat session. Besides changing the loading icon and specifying a page to be loaded in the chat window when the chat session ends, you can modify the messages that appear when connecting, when the connection succeeds or fails, and when the session is terminated.

To configure the ChatServerConnect widget

1 Open the *chat_landing.php* file in the */views/pages/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatServerConnect"/>
```

3 To change the loading icon, add the *loading_icon_path* attribute to the widget. Your code will resemble the following.

```
<rn:widget path="chat/ChatServerConnect"
loading_icon_path="images/indicator_2.gif" />
```

4 To edit any of the following default labels (shown in quotation marks), add the associated attribute (shown in italics) and define it with your new label. (Learn about editing message bases here.)

label_connecting—"Please wait while we establish a connection to the Chat Server."

label_connection_fail—"There was a problem connecting to the Chat Server."

label_connection_success—"A connection to the Chat Server has been established successfully."

label_prevent_anonymous_chat—"One or more required contact fields are missing. Please review all fields and re-submit the chat request." This attribute applies only when you prevent anonymous chat requests by requiring one or more of the email, first name, and last name fields (the *email_required, first_name_required,* or *last_name_required* attributes).

label_terminate_session—"This action will terminate your current session. Do you want to continue?"

Your code may resemble the following.

```
<rn:widget path="chat/ChatServerConnect"
label_connecting="We are connecting to the chat server now." />
```

5 Save *chat_landing.php*.

Continue configuring other chat widgets.

Configuring the ChatTranscript widget

The ChatTranscript widget lets you replace the default icons and labels that appear on the transcript window.

- Disable new message notifications
- Replace ChatTranscript widget icons
- Replace ChatTranscript widget labels

Continue configuring other chat widgets.

Disabling new message notifications

By default, customers are notified about new messages from the chat agent if the chat transcript window does not have focus when the message is received. The title bar of the window displays the number of unread messages. If you want to disable the notification, use the following procedure.

To disable new message notifications

1 Open the *chat_landing.php* file in the */views/pages/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatTranscript"/>
```

3 Add the *unread_messages_titlebar_enabled* attribute to the widget and set it to false. Your code will resemble the following.

```
<rn:widget path="chat/ChatTranscript"
unread_messages_titlebar_enabled="false" />
```

4 Save *chat_landing.php*.

Edit other attributes of the ChatTranscript widget or Continue configuring other chat widgets.

Replacing ChatTranscript widget icons

You can replace the following default icons, which are specified as attributes of the ChatTranscript widget, by defining the path and file name for the replacement icon. In the *chat_landing.php* file, the code for the ChatTranscript widget is the following.

```
<rn:widget path="chat/ChatTranscript"/>
```

To replace the default Agent Message icon, add the *agent_message_icon_path* attribute to the widget. Your code will resemble the following.

```
<rn:widget path="chat/ChatTranscript"
agent_message_icon_path="images/chat_agent_new.png" />
```

All default icons are in the */cp/customer/assets/themes/standard/images* folder, but you can reference the path in the widget attribute simply by typing `images/[filename]`.

- Agent Message Icon—*agent_message_icon_path* attribute
- Alert Icon—*alert_icon_path* attribute
- End-user Message Icon—*enduser_message_icon_path* attribute
- Off the Record Icon—*off_the_record_icon_path* attribute

Edit other attributes of the ChatTranscript widget or Continue configuring other chat widgets.

Editing ChatTranscript widget labels

You can replace the following default labels, which are specified as attributes of the ChatTranscript widget, by defining the new label. For specific information about where each label is used, refer to the label attribute descriptions in the widget documentation at http://<your_site>/ci/admin/docs/widgets/standard/chat/ChatTranscript.

- Agent Requesting to Control Desktop
- Agent Requesting to View Desktop
- Allow (agent to **co-browse**)
- Click (label used in co-browse invitation)
- Deny (co-browse invitation)
- End User Name Default Prefix
- File Attachment Error
- File Attachment Received
- File Attachment Started (uploading)
- Has Disconnected
- Has Joined Chat
- Has Left Chat
- Have Disconnected
- Initializing Screen Sharing Session
- Java Certificate Rejected
- Java Not Detected
- Off the Record
- Or
- Screen Sharing Session Declined
- Screen Sharing Session Ended
- Screen Sharing Session Error
- Screen Sharing Session Started
- You

Edit other attributes of the ChatTranscript widget or Continue configuring other chat widgets.

Configuring the ChatPostMessage widget

The configuration options for the ChatPostMessage widget include the following.

- Edit the label that provides the instructions for sending a post.
- Set all customer messages to post off the record.
- Notify customers that a new agent message is available.

Continue configuring other chat widgets.

Editing the instructions for sending a post

To edit the instructions label

1 Open the *chat_landing.php* file in the */views/pages/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatPostMessage"/>
```

3 Add the *label_send_instructions* attribute to the ChatPostMessage widget to change the message that is displayed to the customer. Your code will resemble the following.

```
<rn:widget path="chat/ChatPostMessage"
label_send_instructions="Your new instructions for sending a message."
/>
```

4 Save *chat_landing.php*.

Set all customer messages to post off the record or Continue configuring other chat widgets.

Notifying customers of incoming messages

If your customers have several windows open on their desktop when they are chatting with one of your agents, they may not be aware that the agent has replied to their most recent message. You can set the *focus_on_incoming_messages* attribute of the ChatPostMessage widget to bring the chat window to the top or flash the task bar button to notify customers that a new response is available.

Note This attribute functions only for customers using Internet Explorer.

To notify customers of incoming messages

1 Open the *chat_landing.php* file in the */views/pages/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatPostMessage"/>
```

3 Add the *focus_on_incoming_messages* attribute to the ChatPostMessage widget. Your code will resemble the following.

```
<rn:widget path="chat/ChatPostMessage"
focus_on_incoming_messages="true" />
```

4 Save *chat_landing.php*.

Additional chat widgets

Although only three widgets are required for a working Chat page, additional chat widgets provide more functionality on the Chat page.

Click to view

The ChatSoundButton widget provides an audio tone that lets your customers know when a chat agent is first connected and whenever the agent posts a message. Customers can mute the sound by clicking the widget.

You can add icons to the following buttons or change an icon that is already associated with the button. You can also change the labels for all buttons, dialog titles, and tooltips. Refer to Editing message bases.

- ChatAttachFileButton
- ChatCancelButton
- ChatDisconnectButton
- ChatOffTheRecordButton
- ChatPrintButton
- ChatRequestEmailResponseButton
- ChatSendButton

Configuring chat options

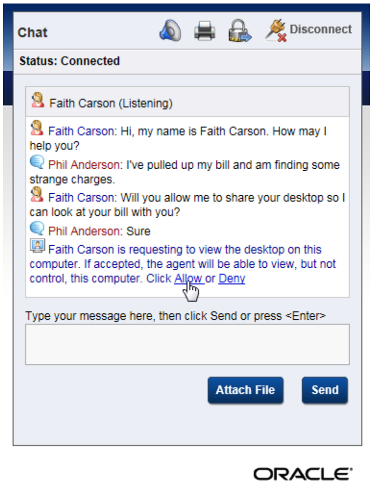
Additional chat configuration options include the following.

- Configure co-browsing by chat agents.
- Change the size of the Chat page.
- Change the size of the window that opens when customers search for an answer while waiting to chat.
- Allow or prevent chatting off the record.
- Remove the search field on the Chat page.
- Remove Virtual Assistant widgets.

When you're finished configuring chat options, you can select another page to configure.

Configuring chat co-browsing

The ChatCobrowsePremium widget can be added to the Chat page to let customers share their desktop with agents who are chatting with them. When an agent initiates screen sharing, the customer is asked to accept or deny the screen sharing request.



After the customer allows the screen sharing session, the agent can view the customer portal pages or, in Advanced Mode, the customer's entire desktop. (To learn more, see Co-browsing with customers.)

Note The Co-Browse Premium feature must be enabled before the widget displays. Contact your Oracle account manager to enable Co-Browse Premium.

The chat sessions **workspace** must be customized to add the Co-Browse tab so the agent can use the feature. Refer to Configuring co-browse on chat workspaces.

To add the ChatCobrowsePremium widget to the Chat page

1 Open the *chat_landing.php* file in the */views/pages/chat* folder.

2 Locate the following lines of code.

```
<div id="rn_InChatButtonContainer">
    <rn:widget path="chat/ChatAttachFileButton"/>
    <rn:widget path="chat/ChatSendButton"/>
```

3 Add the following lines of code immediately after the last line you located in step 2.

```
    <rn:widget path="chat/ChatCobrowsePremium" />
```

4 Save *chat_landing.php*.

Continue configuring chat options.

Changing the Chat page size

The size of the Chat page is determined by the ChatLaunchButton widget used on the Live Help page. That means you'll have to edit the Live Help page to change the Chat page size.

To change the Chat window size

1 Open the *chat_launch.php* file in the */views/pages/chat* folder.

2 Locate the following lines of code.

```
<rn:widget path="chat/ChatLaunchButton"
    error_location="rn_ErrorLocation"
    add_params_to_url="q_id,pac,request_source,p,c,survey_send_id,sur
    vey_send_delay,survey_comp_id,survey_term_id,chat_data,survey_ter
    m_auth,survey_comp_auth"/>
```

3 Add the *launch_height* and *launch_width* attributes to the ChatLaunchButton widget to define the size of the Chat page that opens. The value you enter is in pixels, and the default height is 495 and the default width is 380. Your edited code will resemble the following.

```
<rn:widget path="chat/ChatLaunchButton"
    error_location="rn_ErrorLocation"
    launch_height="800"
    launch_width="700"
    add_params_to_url="q_id,pac,request_source,p,c,survey_send_id,sur
    vey_send_delay,survey_comp_id,survey_term_id,chat_data,survey_ter
    m_auth,survey_comp_auth"/>
```

4 Save *chat_launch.php*.

Continue configuring chat options.

Changing the answer window size

The ChatQueueSearch widget lets customers search for an **answer** while waiting for an agent. By default, a separate window opens when the Search button is clicked. You can control the size of that window by specifying its size as a percentage of the total screen height and width.

Note The *popup_window* attribute must be set to true for the changes to the answer window size to be meaningful.

To change the answer window size

1 Open the *chat_landing.php* file in the */views/pages/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatQueueSearch"
popup_window="true"/>
```

3 Add the *popup_window_height_percent* and *popup_window_width_percent* attributes to the ChatQueueSearch widget to define the size of the answer window that opens. (These attributes actually belong to the SearchButton widget, which is contained in the ChatQueueSearch widget.) The value you enter is a percentage, and the default height is 42 percent and the default width is 30 percent. Your edited code will resemble the following.

```
<rn:widget path="chat/ChatQueueSearch"
popup_window="true"
popup_window_height_percent="50"
popup_window_width_percent="40" />
```

4 Save *chat_landing.php*.

Continue configuring chat options.

Chatting off the record

The default Chat page contains a button that customers can click to send an off-the-record message during the chat session. The button appears at the top of the page between the Print and Disconnect buttons. Any information the customer types in the Off the Record Message dialog that opens when the button is clicked will not appear on the Messages tab of the incident that is created from the chat session. Instead, the incident will show "Message Removed."

Do you want your customers to be able to submit posts using the off-the-record option?

- **Yes.** This is the default, so continue configuring chat options.
- **Yes,** and I want customer posts to always be off the record.
- **No,** I want to remove the Off the Record button and dialog.

Setting all chat posts off the record

To set all chat posts off the record

1 Open the *chat_landing.php* file in the */views/pages/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatPostMessage"/>
```

3 Edit the widget to add the *all_posts_off_the_record* attribute, as shown in the following code.

```
<rn:widget path="chat/ChatPostMessage"
all_posts_off_the_record="true" />
```

4 Save *chat_landing.php*.

Continue configuring chat options.

Removing the off-the-record chat option

To remove the off-the-record chat option

1 Open the *chat_landing.php* file in the */views/pages/chat* folder.

2 Delete the following two lines of code. (These lines are not sequential in the file.)

```
<rn:widget path="chat/ChatOffTheRecordDialog"/>
<rn:widget path="chat/ChatOffTheRecordButton"/>
```

3 Save *chat_landing.php*.

Continue configuring chat options.

Removing the search field

The default Chat page lets customers search your knowledge base for answers while they are waiting for an agent. If you want to remove this search field, you can delete the ChatQueue-Search widget.

To remove the search field on the Chat page when customers are waiting for an agent

1 Open the *chat_landing.php* file in the */views/pages/chat* folder.

2 Delete the following lines of code.

```
<div id="rn_ChatQueueSearchContainer">
    <rn:widget path="chat/ChatQueueSearch"/>
</div>
```

3 Save *chat_landing.php*.

Continue configuring chat options.

Removing virtual assistant widgets

The Customer Portal reference implementation includes four virtual assistant widgets on the default Chat page: VirtualAssistantAvatar, VirtualAssistantBanner, VirtualAssistantFeedback, and VirtualAssistantSimilarMatches. If your customer portal is not integrated with Oracle RightNow Virtual Assistant Cloud Service, you will want to remove these widgets to prevent widget errors from appearing in the header on your development site.

To remove Virtual Assistant widgets

1. Open the *chat_landing.php* file in the */views/pages/chat* folder.

2. Delete the following lines of code.

```
<div id="rn_VirtualAssistantContainer">
    <rn:widget path="chat/VirtualAssistantAvatar"/>
    <rn:widget path="chat/VirtualAssistantBanner"/>
</div>
```

3. Also delete the following lines of code.

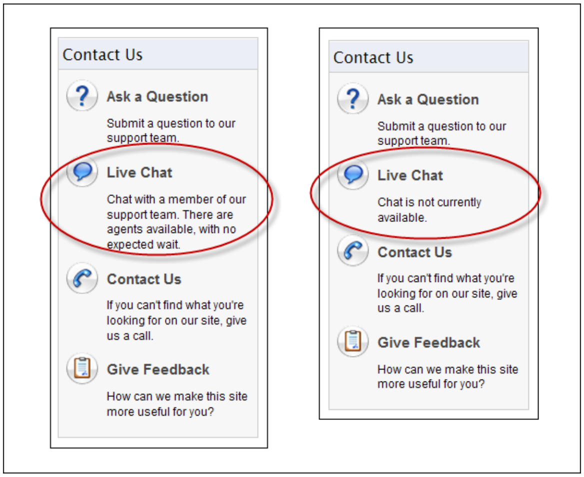
```
<rn:widget path="chat/VirtualAssistantSimilarMatches"/>
<rn:widget path="chat/VirtualAssistantFeedback"/>
```

4. Save *chat_landing.php*.

Continue configuring chat options.

Creating a chat link on a customer portal page

The reference implementation for the standard page set includes a Live Chat link on the sidebar. When Chat is enabled, the link appears by default and lets customers know whether chat sessions are currently available, if agents are available, and what the expected wait time is. The Live Help page opens when the link is clicked and chats are available. By default, the widget that creates the chat link checks for agent availability every five seconds for the first ten minutes, then every minute thereafter.



In addition to or instead of displaying the chat link on the sidebar, you might want to add the link to another customer portal page or add the link to a page that is external to the customer portal. For example, you might want to remove it from the template and add it only to the Answers page.

Adding a chat link to the Answers page

You can add a chat link to any customer portal page by inserting the ConditionalChatLink widget, but for the purpose of this procedure, we'll add it to the Answers page.

To add a chat link to the Answers page

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following line of code.

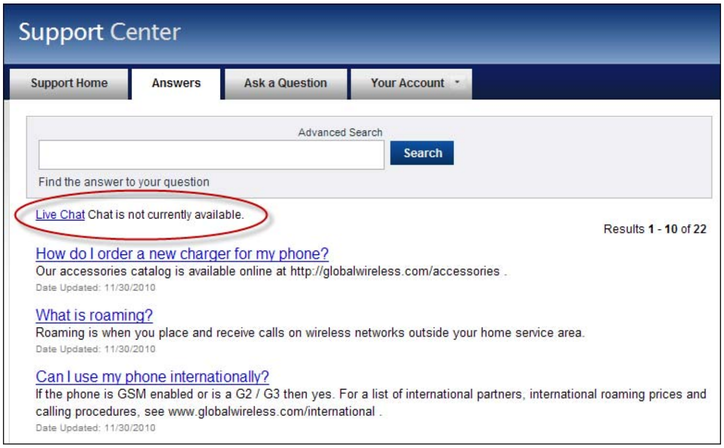
```
<h2 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_RESULTS_CMD#</h2>
```

3 Add the following directly below the code you located in step 2.

```
<rn:widget path="chat/ConditionalChatLink" />
```

4 Save *list.php*.

5 Now you can configure the ConditionalChatLink widget.



Configuring the ConditionalChatLink widget

The following configuration options are available for the ConditionalChatLink widget.

Detecting incident ID automatically

When you add the ConditionalChatLink widget to a page or edit it on the sidebar, you can pass an incident ID through the URL for the agent. To do so, add the *auto_detect_incident* attribute to the widget. Your code will resemble the following.

```
<rn:widget path="chat/ConditionalChatLink"
auto_detect_incident="true" />
```

Opening a different chat launch page

If you want to change the launch page that opens when customers click the chat link, edit the *chat_login_page* attribute to identify the new page. Your code will resemble the following.

```
<rn:widget path="chat/ConditionalChatLink"
chat_login_page="/app/chat/chat_launch_alternate1" />
```

Hiding link when agents are unavailable

You can define the ConditionalChatLink widget to appear on your customer portal only when agents are available by setting the *hide_on_unavailable* attribute to true. Your code will resemble the following.

```
<rn:widget path="chat/ConditionalChatLink"
hide_on_unavailable="true" />
```

Ignoring chat session pre-routing information

The ConditionalChatLink widget considers available information when determining agent availability levels, and pre-routes each request to a queue and agent accordingly. As a result, any information the customer enters after being pre-routed is ignored by default and will not affect the routing of the chat request.

If you want such data to be considered when routing, you can set the *ignore_preroute* attribute to true. This will enable routing rules to check the values of customer fields and re-route the request accordingly. Your code will resemble the following.

```
<rn:widget path="chat/ConditionalChatLink"
ignore_preroute="true" />
```

Important The agent availability detection and pre-routing functions occur before routing rules are applied. As a result, when the *ignore_preroute* attribute is enabled, customers may be routed to a different queue than the one originally determined by agent availability, even a queue for which no agent is immediately available. This can conflict with the indication of availability expressed by the widget itself, leading to customer confusion. For this reason, the *ignore_preroute* attribute should be enabled only when necessary for achieving a specific business goal.

Initiating link by event

If you do not want the ConditionalChatLink widget to check chat availability until it is triggered by a specific event, set the *initiate_by_event* attribute to true. The widget will display the default message ("Chat directly with a member of our support team") or any other value you define for the *label_default* attribute.

Configuring additional attributes

Other modifications to the standard ConditionalChatLink widget let you:

- Open the chat launch page in a new window (*open_in_new_window*), specify the size of that window (*chat_login_page_height, chat_login_page_width*), and add scrollbars to that window (*enable_scrollbars*).
- Disable the availability check so the link is always displayed (*enable_availability_check*).
- Disable polling, which continually checks for chat availability (*enable_polling*).
- Set a minimum number of available sessions to activate the widget (*min_sessions_avail*).
- Define the maximum wait time (*wait_threshold*).
- Edit labels (*label_available_immediately_template, label_available_with_wait_template, label_default, label_unavailable_busy_template,* and *label_unavailable_hours*).

Creating a chat link on an external page

Just as you can add a chat link to a customer portal page, you can also add one to an external page using the **syndicated** ConditionalChatLink widget. Its function is similar to the standard ConditionalChatLink widget that informs customers about the availability of chat sessions.

- Add the syndicated ConditionalChatLink widget.
- Configure the syndicated ConditionalChatLink widget.

Adding the syndicated ConditionalChatLink widget

The widget information page lets you configure the syndicated ConditionalChatLink widget by creating widget code based on the attributes you define. You'll simply copy the generated code to the external page where you want the chat link to appear.

To add the syndicated ConditionalChatLink widget to a web page

1 Type `https://<your_site>/ci/tags/syndicated_widgets/standard/ConditionalChatLink` to open the page for the syndicated ConditionalChatLink widget. The page displays a preview of the widget and the code you will add to your page.

Note Your profile must have WebDAV permission enabled, and you must log in with your Oracle Service Cloud user name and password.

2 Scroll down to the Configure Widget section and begin modifying widget attributes for your organization's needs. The attribute is on the left, the value is in the center, and a description of the attribute is on the right. For specific information about the attributes, refer to Configuring the syndicated ConditionalChatLink widget.

3 To preview your changes, click the Apply button at the bottom of the Configure Widget section. Continue to configure the widget until you are satisfied with the result.

Note You can also modify the widget's appearance by editing its CSS file, which is */cp/customer/assets/css/syndicated_widgets/standard/ConditionalChatLink.css*. If you modify the CSS file, you must reload the page to see your changes.

4 Open the source code for the web page you want to add the widget to.

5 To ensure the page renders correctly in Internet Explorer 7, add the following code to the top of the page before your first HTML tag.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http:/
/www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

6 On the right side of the page, click the top Select Text button to select the code in the first yellow box and press **Ctrl+c** to copy the code.

7 Paste the code into your page file just before the closing </body> tag. Even if you plan to use multiple syndicated widgets on the page, you need to paste this code only once.

8 Click the second Select Text button and copy the code that defines the widget.

9 Paste the copied code just below the code you pasted in step 7.

10 Click the third Select Text button, copy the code, and paste it in the page code where you want the widget to appear.

11 Save your web page.

Click here for information about configuring the syndicated ConditionalChatLink widget.

Configuring the syndicated ConditionalChatLink widget

The following options exist for configuring the syndicated ConditionalChatLink widget.

Opening a different page when the link is selected

The Live Help page (*/app/chat/chat_launch*) opens by default when customers click the syndicated ConditionalChatLink widget. To direct customers to a different page, type the page name in the field for the *chat_login_page* attribute. Be sure to begin the path with `/app/`.

Specifying product and category IDs

You can configure the syndicated ConditionalChatLink widget by specifying the product or category, which helps route the chat session to the most appropriate queue. You can select only one product or category in the attribute's field, so if the product or category you want is a sub-level, you'll need to enter the ID for the sub-product or sub-category instead of the ID for the parent level. To determine the ID for a product or category, refer to Finding product ID numbers.

To add a product, type the product ID number in the field for the attribute called *p*. To add a category, type its ID number in the field for the *c* attribute.

Specifying custom fields

Type one or more key-value pairs in the field for the *custom_fields* attribute. The key is the custom field ID and the value is the value of the custom field.

Note If you add or remove custom fields on the **administration interface**, the changes do not appear on the page containing the syndicated widget until the duration specified in CACHED_CONTENT_EXPIRE_TIME passes. You must then refresh the page and, if Internet Explorer is the browser, you may also need to close and reopen the browser.

Ignoring chat session pre-routing

Customers are pre-routed to a chat queue based on agent availability. As a result, any information they enter after being pre-routed is ignored. If you want customer data to be considered when routing to a chat session, select the Enabled check box for the *ignore_preroute* attribute. (It is possible that customers may then be routed to a different queue than the one originally determined by agent availability.)

Additional attributes for the syndicated ConditionalChatLink widget

Other modifications to the syndicated ConditionalChatLink widget let you:

- Open the chat launch page in a new window (*open_in_new_window*) and specify the size of that window (*chat_login_page_height, chat_login_page_width*).
- Disable the availability check so the link is always displayed (*enable_availability_check*).
- Disable polling, which continually checks for chat availability (*enable_polling*).
- Set a minimum number of available sessions to activate the widget (*min_sessions_avail*).
- Define the maximum wait time (*wait_threshold*).
- Edit labels (*label_available_immediately_template, label_available_with_wait_template, label_default, label_unavailable_busy_template,* and *label_unavailable_hours*).
- Define IDs for the widget container (*container_element_id*), the widget instance (*instance_id*), and the HTML elements that display the widget and chat link (*info_element_id, link_element_id*).

Offering customers a chat session

Rather than waiting for your customers to request a **chat session**, you may want to offer them one when it appears they are not finding the information they are looking for. You can proactively offer a chat session from your customer portal pages as well as from any external page on your website.

- Offering a chat on customer portal pages
- Offering a chat on external pages
- Reports for the ProactiveChat widget

The following summary of events occurs when a customer accepts a chat offer through either the ProactiveChat widget in the */cp/core/widgets/standard/chat* folder or the **syndicated** ProactiveChat widget accessed by clicking Widgets > Syndicated Widgets on the Customer Portal Administration page.

- Before the chat is offered to the customer, the chat session routing rules determine what **queue** the chat request will be directed to based on **products**, **categories**, **custom fields**, and other **rule conditions**.
- When the customer accepts the chat request, the chat page that opens contains by default any incident custom fields that have chat visibility. If you have edited the page to add the ability to select products or categories, they will also appear.
- If the customer changes any of the information on the chat page, that information is passed to the agent on the chat session workspace. However, the rules engine does **not** run again. As a result, the customer may change a field that would have triggered the chat being assigned to a different queue, but because rules are not run on the updated chat page, the original queue assignment does not change.

We recommend that you do not add any fields to the chat page that would result in a queue reassignment if the customer edits that field since reassignment does not occur with either the standard or syndicated widget. If you want to display a different page to customers who enter a chat session through a proactive chat offer than you display to customers who submit a chat request by clicking the chat login, you can create a custom chat login page. After you create the custom page, change the *chat_login_page* attribute for the widget to specify the custom page.

Chat sessions are not offered in the following situations.

- If the customer's browser does not accept cookies, no chat is offered during the customer session.
- If the widget looks for a chat queue ten times without finding one, no chat is offered on that page.

- If a chat is offered (whether or not it is accepted), a cookie is set and no more chat offers are made during the current customer session.
- If a chat is offered and the customer refuses, a cookie is set and no more chat offers are made for 30 days.

Reports for the ProactiveChat widget

The following standard reports are available for the ProactiveChat widget. They can be found in the Reports explorer under Public Reports > Service > Chat Reports > Proactive Chat.

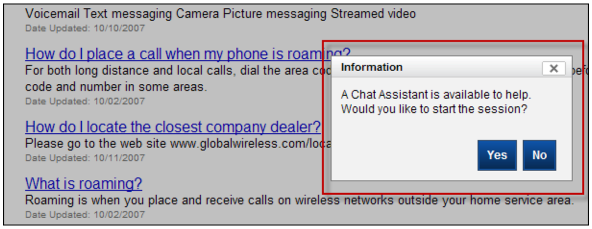
- **Proactive Chat Offer Statistics**—Shows the number of site visits, proactive chat invitations, and accepted, declined, refused, and ignored chat invitations.
- **Proactive Chat Summary Statistics**—Shows the number of chat requests resulting from a proactive chat invitation and the number of chat sessions that were deflected, abandoned, and accepted (with and without agent interaction).

Offering a chat on customer portal pages

You can put the ProactiveChat widget on any page, but for the purpose of this procedure, we'll add it to the Answers page. Chat must be enabled and agents must be available before a chat will be offered to a customer. Additionally, the customer's browser must be configured to accept cookies.

Important The default code for the ProactiveChat widget will not trigger a chat offer until you add an attribute that defines the trigger for the offer. Therefore, you must add at least one of the following attributes to the code: *seconds, searches,* or *profile_* attributes. If you do not specify one of these, the widget will not offer a chat session.

Alternatively, you can define an event that will trigger a chat offer by creating a custom widget based on the ProactiveChat widget. Refer to Triggering a chat offer by an event.



To add the ProactiveChat widget to the Answers page

1 Open the *list.php* file in the */views/pages/answers* folder.

2 Locate the following code.

```
<rn:widget path="reports/Paginator" />
```

3 Add the following code immediately after the code you found in step 2.

```
<rn:widget path="chat/ProactiveChat" />
```

4 To trigger the chat offer based on the customer's inactive time on the page, add the *seconds* attribute to the code, which will resemble the following.

```
<rn:widget path="chat/ProactiveChat"
seconds="60" />
```

5 To trigger the chat offer based on the number of searches the customer conducted, add the *searches* attribute to the code.

```
<rn:widget path="chat/ProactiveChat"
searches="3" />
```

6 To trigger the chat offer based on the customer's profile information, including organization, SLAs, and default product and category, refer to Triggering chat offers on profile attributes.

7 To trigger the chat offer based on an event, refer to Triggering a chat offer by an event.

8 Save *list.php*.

Define the attributes of the ProactiveChat widget, including the events that trigger a chat request.

Configuring the ProactiveChat widget attributes

The default code for the ProactiveChat widget will not trigger a chat offer because the default values for the *seconds, searches,* and *profile_* attributes are 0. You must define at least one of these attributes before the chat offer will be triggered.

When one of these attributes has been met, an AJAX request is made to the server, which then sends back the number of available agents and the minimum wait time. If a product or category can be determined through search terms or answers or incidents viewed, the queue ID for that product or category is also returned. This information is then matched against any additional widget attributes.

You can configure any of the following ProactiveChat widget attributes.

- Chat triggers
  - ▷ Number of seconds on page
  - ▷ Number of searches conducted
  - ▷ Profile attributes (*profile_item, profile_operator,* and *profile_value*)
- Display and function
  - ▷ The wording of the chat invitation
  - ▷ The chat login page that opens when customers accept
  - ▷ Whether the chat login page opens in a new window or the same one
- Chat availability
  - ▷ The minimum number of available agents
  - ▷ Maximum wait time in queue

Important If you add multiple attributes that control a chat offer (for example, *seconds, min_agents_avail,* and *wait_threshold*), all of them must be met before a chat will be offered to customers.

Triggering chat offers based on time

The default setting of 0 for the *seconds* attribute does not mean chats are offered immediately (after 0 seconds). Instead, it means chats will never be offered based on the amount of time customers spend on a page.

However, you might decide that the amount of time spent on a page is a valid trigger for offering a chat. If you want to offer customers a chat session if, for example, they've been on a page for 60 seconds without any activity, you can set the *seconds* attribute to trigger a chat at that time.

To trigger chat offers based on page time

Add the *seconds* attribute to the code so it resembles the following.

```
<rn:widget path="chat/ProactiveChat"
seconds="60" />
```

Continue configuring attributes for the ProactiveChat widget.

Triggering chat offers on number of searches

The default setting of 0 for the *searches* attribute means that chats will never be offered based on the number of searches conducted by customers. You might decide to use number of searches as a trigger for offering a chat. If customers have conducted several searches without finding what they're looking for, an invitation to chat might be useful.

To trigger chat offers based on number of searches

Add the *searches* attribute to the code so it resembles the following.

```
<rn:widget path="chat/ProactiveChat"
searches="3" />
```

Continue configuring attributes for the ProactiveChat widget.

Triggering chat offers on profile attributes

The default null values for the *profile_* attributes mean that chats will never be offered based on customer profile information, but you might decide to set those values because you want to offer chats based on customer profile information.

When you configure the ProactiveChat widget to offer a chat based on customer profile information, you must define all three profile attributes for the widget: the profile item, the operator, and the value. In other words, once you select the profile item you want to evaluate before the widget offers a chat, you must then select the value and operator as well. For example, if you want to offer a chat based on a customer's organization, you must also specify what that organization is.

Let's assume you want to offer a chat to all customers from ABC International, which has an organization ID of 81945. (Learn how to identify an organization's ID number.) In that case, the widget code would resemble the following.

```
<rn:widget path="chat/ProactiveChat"
profile_item="org_id"
profile_operator="equals"
profile_value="81945" />
```

The following list includes all the profile items you can use as conditions for offering chats to customers.

- **slac**—The number of chat incidents the customer's SLA allows.
- **slai**—The number of self-service incidents the customer's SLA allows.
- **web_access**—The customer's SLA allows self-service.
- **org_id**—The ID of the organization associated with the customer.
- **o_lvlN**—The ID of the organization's sublevel, if the organization has subsidiaries, where N is the organization level.

Any of the following operators are valid for defining profile items.

- Equals
- Less than or equals
- Greater than or equals
- Not equal
- Less than
- Greater than

One useful case for the profile attributes is verifying that a customer has an SLA that allows chat incidents before offering them a chat session.

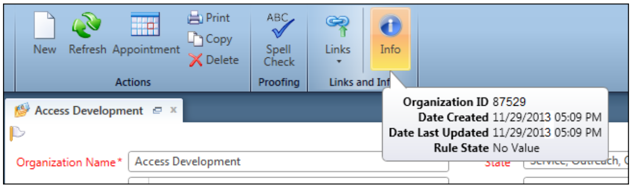
Identifying an organization ID

To identify an organization ID

1 Log in to Oracle Service Cloud.

2 Open the organization record.

3 Click the Info button on the ribbon to display information about the organization, including its ID, the dates when it was created and last updated, and the rule state the organization is in, if applicable.



Triggering chat offers based on customer SLAs

If your organization requires **SLAs** in order for customers to chat with agents, you'll want to verify that the customer has an SLA with available chat incidents before a **chat session** is offered. The profile attributes of the ProactiveChat widget can do that for you.

An SLA defines the total number of **incidents** a customer can submit, as well as specific numbers of chat, staff member, email, and web self-service incidents.

To check for chat SLAs prior to offering a chat

Add the *profile_item, profile_operator,* and *profile_value* attributes to the code for the ProactiveChat widget. You will want to set the *slac* item to be greater than zero to be sure the customer has remaining chat incidents available on their SLA. You will probably also still want to include the *seconds* or *searches* attributes so the chat invitation is not immediately offered when the customer lands on the page with the widget. Your edited code will resemble the following.

```
<rn:widget path="chat/ProactiveChat"
seconds="30"
profile_item="slac"
profile_operator="greater than"
profile_value="0" />
```

Continue configuring attributes for the ProactiveChat widget.

Editing the chat invitation

By default, the chat invitation says "A Chat Assistant is available to help. Would you like to start the session?" That message can be edited by editing an attribute of the ProactiveChat widget.

To edit the chat invitation

Add the *label_chat_question* attribute to the code so that it resembles the following.

```
<rn:widget path="chat/ProactiveChat"
seconds="30"
label_chat_question="Staff members are available now. Would you like
to chat with someone?" />
```

Note Remember that you must define the *seconds, searches,* or *profile_* attributes in order to trigger the chat invitation.

Continue configuring attributes for the ProactiveChat widget.

Changing the chat login page

When customers click Yes to accept the chat offered by the ProactiveChat widget, the Live Help page (*/chat/chat_launch*) opens by default. You might want to direct customers to a different page instead.

To change the chat login page

Add the *chat_login_page* attribute to the widget code so it resembles the following. Note that the path to the page must begin with */app/*.

```
<rn:widget path="chat/ProactiveChat"
seconds="30"
chat_login_page="/app/chat/alternate_chat_launch_page" />
```

Note Remember that you must define the *seconds, searches,* or *profile_* attributes in order to trigger the chat invitation.

Continue configuring attributes for the ProactiveChat widget.

Defining how the chat login page opens

By default, the chat login page opens in a new window that lets you configure its height and width. You can also set the chat login page to open in the same window.

To change the size of the chat login window

Add the *chat_login_page_height* and *chat_login_page_width* attributes to the widget code, defining the new values for height and width. Your code will resemble the following.

```
<rn:widget path="chat/ProactiveChat"
seconds="30"
chat_login_page_height="500"
chat_login_page_width="600" />
```

Note Remember that you must define the *seconds, searches,* or *profile_* attributes in order to trigger the chat invitation.

To open the chat login page in the same window

Add the *open_in_new_window* attribute and set it to false so your code resembles the following.

```
<rn:widget path="chat/ProactiveChat"
```

```
seconds="30"
open_in_new_window="false" />
```

Note Remember that you must define the *seconds, searches,* or *profile_* attributes in order to trigger the chat invitation.

Continue configuring attributes for the ProactiveChat widget.

Defining the minimum number of agents

If the *seconds, searches,* or *profile_* attributes of the chat widget have been met, an AJAX request is made to the server, which sends back the number of available agents. If you have defined the minimum number of agents required before a chat session is offered, that value is compared to the number returned from the chat server. If the number of available agents is greater than or equal to the number you defined in the *min_agents_avail* attribute, the chat is offered to the customer.

To define the minimum number of agents

Add the *min_agents_avail* attribute to the widget code so it resembles the following.

```
<rn:widget path="chat/ProactiveChat"
seconds="30"
min_agents_avail="2" />
```

Note Remember that you must define the *seconds, searches,* or *profile_* attributes in order to trigger the chat invitation.

Continue configuring attributes for the ProactiveChat widget.

Defining the maximum wait time

If the *seconds, searches,* or *profile_* attributes of the chat widget have been met, an AJAX request is made to the server, which sends back the wait time for a chat session. If you have defined the maximum time the customer will have to wait in a queue, that value will be compared to the number returned from the chat server. If the wait time is less than the value you defined for the *wait_threshold* attribute, the chat is offered to the customer.

Tip We recommend that you set *min_agents_avail* to 0 when you set the maximum wait time.

To define the maximum wait time

Add the *wait_threshold* attribute to the widget code so it resembles the following. Note that the wait time value is measured in seconds.

```
<rn:widget path="chat/ProactiveChat"
seconds="30"
wait_threshold="60" />
```

Note Remember that you must define the *seconds, searches,* or *profile_* attributes in order to trigger the chat invitation.

Continue configuring attributes for the ProactiveChat widget.

Triggering a chat offer by an event

If you want to trigger chat offers only when a specific event occurs, you must first create an event called *evt_customProactiveInitialization* using custom code. Then set the *initiate_by_event* attribute of the ProactiveChat widget to true. This tells the widget's logic file to listen for the event before triggering a chat offer.

Note For specific information about defining *evt_customProactiveInitialization* for use with the *initiate_by_event* attribute, refer to the documentation for the ProactiveChat widget at http://<your_site>/ci/admin/docs/widgets/standard/chat/ProactiveChat.

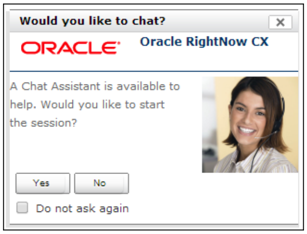
Offering a chat on external pages

The syndicated ProactiveChat widget functions much like the ProactiveChat widget that you place on your customer portal pages. However, you can place the syndicated widget on external sites that are not hosted by Oracle instead of having widget placement restricted to customer portal pages.

The syndicated ProactiveChat widget opens a chat invitation to your customers after they spend a specified amount of time on the page where you placed the widget. You can define additional conditions that must also be met before a chat is offered, including the number of available agents and wait time. If you want to write your own custom rules, you can even trigger a chat offer based on conditions such as the dollar value or type of products in your customer's shopping cart.

The widget lets you configure images, labels, and messages for the chat invitation window. You can define a product and category to route the chat session into an appropriate chat queue and specify whether customers can ignore the invitation or must respond to it.

- Adding the syndicated ProactiveChat widget
- Configuring the syndicated ProactiveChat widget
- Custom rules for the syndicated ProactiveChat widget



Adding the syndicated ProactiveChat widget

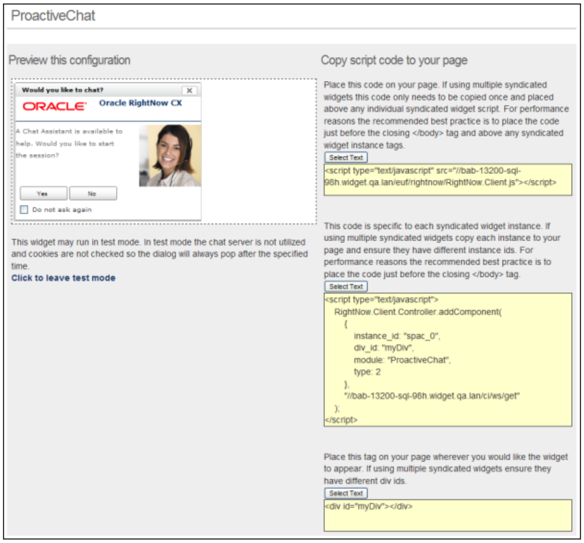
The widget information page gives you everything you need to add the **syndicated** ProactiveChat widget to any page on your website. As you modify the attributes of the widget, the page displays a preview of the widget and modifies the widget code to reflect the changes you make. When you're done, all you have to do is select and copy the code to your page to place the syndicated widget on it.

To add the syndicated ProactiveChat widget to a web page

1 Type `https://<your_site>/ci/tags/syndicated_widgets/standard/ProactiveChat` to open the page for the syndicated ProactiveChat widget. The page displays a preview of the widget and the code you will add to your page.

Note Your profile must have WebDAV permission enabled, and you must log in with your user name and password.

Click to view



2 Scroll down to the Configure Widget section and begin modifying the widget attributes as you choose. The attribute is on the left, the value is in the center, and a description of the attribute is on the right. For specific information about the attributes, refer to [Configuring the syndicated ProactiveChat widget](#).

Click to view

Configure Widget

The CSS file for this widget may be edited. It is located at:
euf/assets/css/syndicated_widgets/standard/ProactiveChat.css

avatar_image	/euf/assets/images/avatar_photo.jpg	Avatar image URL. Specifying an empty string will disable the avatar
c		The ID of the category to use. Only a single category may be used with chat. Example: 1
chat_login_page	/app/chat/chat_launch	Page to display to log in to chat. This should start with "/app". Example: /app/chat/chat_launch
chat_login_page_height	686	The height of the window to display. If open_in_new_window is set to false, setting this value has no effect.
chat_login_page_width	700	The width of the window to display. If open_in_new_window is set to false, setting this value has no effect.
div_id	myDiv	The div element on your page where you want the code to appear
instance_id	spac_0	Widget instance_id must be unique for each widget on a page
label_accept_button	Yes	Label for the accept button
label_avatar_image	Helpful person waiting to chat with you	Alt text for the avatar image
label_dialog_header	RightNow Technologies	Label for the dialog header
label_logo_image		Alt text for the corporate logo image
label_question	A Chat Assistant is available to help. Would you like to start the se	Text to display to users when asking them if they would like to chat
label_refuse_checkbox	Do not ask again	Label for the chat refusal checkbox
label_reject_button	No	Label for the reject button
label_title	Would you like to chat?	Label for the dialog title bar
logo_image	/euf/assets/images/rn_logo.png	Corporate logo image URL. Specifying an empty string will disable the logo
min_agents_avail	1	Minimum number of agents (or agent sessions if using min_agents_avail_type "sessions") available
min_agents_avail_type	agents	Determines whether to use the number of agents available, or the number of agent chat sessions available.
modal	☐ Enabled	Enables dialog to be modal
open_in_new_window	☑ Enabled	If set to true, the page defined by chat_login_page will be displayed in a new window. If false, the current window will navigate to that page.
p		The ID of the product to use. Only a single category may be used with chat. Example: 1
seconds	0	Seconds until the chat invite pops up. If it is set to 0, the chat invite will not pop up unless it is called explicitly using the API.
wait_threshold	40	Maximum queue time in seconds. It is recommended that you set min_agents_avail to 0 when utilizing this attribute.

Apply

3 To preview your changes, click the Apply button at the bottom of the Configure Widget section. Continue to configure the widget until you are satisfied with the result.

Note You can also modify the widget's appearance by editing its CSS file, which is */cp/customer/assets/css/syndicated_widgets/standard/ProactiveChat.css*. If you modify the CSS file, you must reload the page to see your changes.

4 Open the web page you want to add the widget to.

5 To ensure the page renders correctly in Internet Explorer 7, add the following code to the top of the page before your first HTML tag.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http:/
/www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

6 On the right side of the page, click the top Select Text button to select the code in the first yellow box and press **Ctrl+c** to copy the code.

7 Paste the code into your page file just before the closing </body> tag. Even if you plan to use multiple syndicated widgets on the page, you need to paste this code only once.

8 Click the second Select Text button and copy the code that defines the widget.

9 Paste the copied code just below the code you copied in step 7.

10 Add the following line to the page code wherever you want the widget to appear.

```
<div_id="myDiv"></div>
```

Note You can also copy this line from the page by pressing the third Select Text button, copying the code, and pasting it where you want the widget to appear.

11 Save your web page.

Click here for specific information about configuring the syndicated ProactiveChat widget.

Configuring the syndicated ProactiveChat widget

The default code for the syndicated ProactiveChat widget will not trigger a chat offer because the default values for the *seconds* attribute is 0. You must set this attribute before a chat offer will be triggered. (Or you can create custom rules that will trigger a chat offer.)

When the time the customer spends on the page exceeds the value you set for the *seconds* attribute, an AJAX request is made to the server, which then sends back the number of available agents and the minimum wait time. This information is then matched against any additional widget attributes.

You can configure any of the following syndicated ProactiveChat widget attributes.

- Number of seconds the customer is on the page before a chat offer is extended
- The minimum number of available agents
- The maximum wait time in the queue
- Product and category IDs
- The chat login page that opens when customers accept
- Whether the chat login page opens in a new window or the same one
- Avatar and logo images
- Labels
  - ▷ Accept and reject buttons and refusal check box
  - ▷ Alternate text for the avatar and logo images (for screen reader use)
  - ▷ Dialog header and title bar
  - ▷ The wording of the chat invitation
- Div element
- Instance ID
- Whether the dialog is modal (A modal dialog requires the customer to take some action before the dialog closes and the customer can return to the previous screen.)

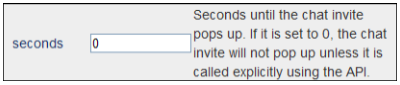
Important If you add multiple attributes that trigger a chat offer (for example, *seconds, min_agents_avail,* and *wait_threshold*), all of them must be met before a chat will be offered to customers.

Triggering chat offers based on time

The default setting of 0 for the *seconds* attribute results in no chat invitation being offered unless it is explicitly called using the API. Use this value to trigger a chat at the number of seconds you specify. For example, if you want to offer customers a chat session when they've been on a page for 60 seconds without any activity, you can set the *seconds* attribute to trigger a chat at that time.

To trigger chat offers based on page time

Type a value in the field for the *seconds* attribute.



Defining the minimum number of agents

If the *seconds* attribute of the chat widget has been met, an AJAX request is made to the server, which sends back the number of available agents. If you have defined the minimum number of agents required to offer a chat session, that value will be compared to the number returned from the chat server. If the number of available agents is greater than or equal to the number you defined in the *min_agents_avail* attribute, the chat is offered to the customer.

To define the minimum number of agents

Type a value in the field for the *min_agents_avail* attribute.

Defining the maximum wait time

If the *seconds* attribute of the chat widget has been met, an AJAX request is made to the server, which sends back the wait time for a chat session. If you have defined the maximum time the customer will have to wait in a queue, that value will be compared to the number returned from the chat server. If the wait time is less than the value you defined for the *wait_threshold* attribute, the chat is offered to the customer.

To define the maximum wait time

Type a value in the field for the *wait_threshold* attribute.

Continue configuring attributes for the syndicated ProactiveChat widget.

Defining product and category IDs

You can specify the product or category you want to use for the syndicated ProactiveChat widget, which helps route the chat session to the most appropriate queue. You can select only one product or category in the attribute's field, so if the product or category you want is a sub-level, you'll need to enter the ID for the sub-product or sub-category instead of the ID for the parent level. To determine the ID for a product or category, refer to Finding product ID numbers.

To define products for the syndicated ProactiveChat widget

Note This procedure describes how to specify a product for the syndicated ProactiveChat widget. The procedure to specify a category is identical, but the attribute name is **c** for category instead of **p** for product.

1 With the syndicated ProactiveChat widget page open, scroll to the Configure Widget section of the page and find the attribute called **p.**

2 Type the product ID in the field. Refer to Finding product ID numbers if you do not know the product ID number.

Finding product ID numbers

The ID numbers for products and categories are defined on the administration interface, so you'll need to log in to find these values.

To find a product ID number

1 Log in to Oracle Service Cloud.

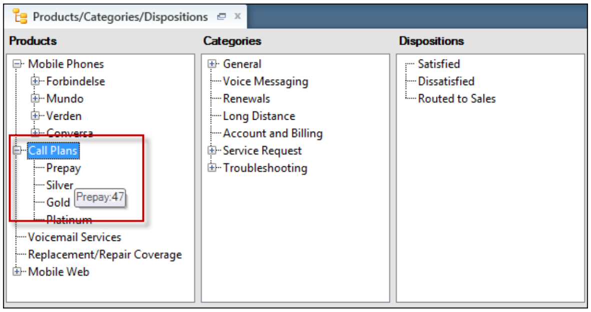
2 Click the Configuration button on the navigation pane.

3 Double-click Products/Categories/Dispositions under Service. The Products/Categories/Dispositions editor displays on the content pane.

4 Expand the products tree if necessary to display the product you want to select.

Note Remember that you want to get the ID number for the lowest level product you want to use for the widget, so don't use the ID number for any of the product's parent levels.

5 Hover over the product name to display its ID, as shown here, where the ID number for the Prepay call plan is 47.



Continue configuring attributes for the syndicated ProactiveChat widget.

Changing the chat login page

When customers click Yes to accept the chat offered by the syndicated ProactiveChat widget, the Live Help page (*/chat/chat_landing*) opens by default. You might want to direct customers to a different page instead.

To change the chat login page

Type a value in the field for the *chat_login_page* attribute. Note that the path to the page must begin with */app/*.

Note Remember that you must define the *seconds* attribute in order to trigger the chat invitation.

Defining how the chat login page opens

By default, the chat login page opens in a new window that lets you configure its height and width. You can also set the chat login page to open in the same window.

To change the size of the chat login window

Type the new height of the window, in pixels, in the field for the *chat_login_page_height* attribute, and type the width in the *chat_login_page_width* field.

To open the chat login page in the same window

Clear the Enabled check box in the *open_in_new_window* attribute.

Continue configuring attributes for the syndicated ProactiveChat widget.

Replacing images

The images for the chat assistant avatar and the logo are located in the */cp/customer/assets/images/* folder. The default avatar file is *avatar_photo.jpg*, and the default logo file is *rn_logo.png*. You will probably want to change these, or you may decide not to use any images on the syndicated ProactiveChat widget.

Note It's a good idea to store the images you want to use in the same */cp/customer/assets/images/* folder where the default images are stored.

To replace default images

1 To replace the avatar image, type the path in the field for the *avatar_image* attribute. Leave the field blank if you do not want to display an avatar.

2 To replace the logo image, type the path in the field for the *logo_image* attribute. Leave the field blank if you do not want to display a logo.

Continue configuring attributes for the syndicated ProactiveChat widget.

Editing labels

You might want to change the wording of messages on the chat invitation. You can do so by editing the *label* attributes of the syndicated ProactiveChat widget. (Don't forget that you also need to define the *seconds* attribute to trigger the chat invitation.)

You can edit the following labels for the syndicated ProactiveChat widget.

- Accept and reject buttons and refusal check box
- Alt text for the avatar and logo images (for screen reader use)
- Dialog header and title bar
- The wording of the chat invitation

Editing button and check box labels

The default labels for accepting or rejecting the chat invitation are Yes and No. The default message to refuse all future chat invitations is "Do not ask again."

To edit button and check box labels

1 To edit the Yes button, type the new label in the field for the *label_accept_button* attribute.

2 To edit the No button, type the new label in the field for the *label_reject_button* attribute.

3 To edit the label for the chat refusal check box, type the new label in the field for the *label_refuse_checkbox* attribute.

Editing alt text for images

Alt text labels do not appear on the syndicated ProactiveChat widget but are defined so they can be read by screen readers to meet accessibility guidelines for the widget. The default alt text for the logo is null so you can add text that applies to your organization's logo.

To edit alt text for images

1 To edit the alt text for the avatar image, type the new label in the field for the *label_avatar_image* attribute.

2 To add alt text for the corporate logo image, type text in the field for the *label_logo_image* attribute.

Editing the dialog header and title bar

The default header label is blank, so you'll want to add your organization's name or another message. The default title bar is "Would you like to chat?"

To edit the dialog header and title bar

1 To edit the header label, type the new label in the field for the *label_dialog_header* attribute.

2 To edit the title bar, type the new label in the field for the *label_title* attribute.

Edit other labels or Continue configuring the syndicated ProactiveChat widget.

Editing the chat invitation

By default, the chat invitation says "A Chat Assistant is available to help. Would you like to start the session?"

To edit the chat invitation

Type a new chat invitation message in the field for the *label_question* attribute.

Edit other labels or Continue configuring the syndicated ProactiveChat widget.

Editing the div element

The default div element that defines where you want the syndicated ProactiveChat widget to appear on the page is myDiv. If you change the *div_id* attribute, the code you add to the page also changes.

To edit the div element

Type a new name for the div element in the field for the *div_id* attribute. The new code for the div element will resemble the following.

```
<div id="newDiv"></div>
```

Editing the instance ID

If you have more than one syndicated ProactiveChat widget on a page, you must have unique ID values for each of them. The default value is spac_0.

To edit the instance ID

Replace the "0" in "spac_0" in the *instance_id* attribute with another value for each widget you add to the page. Each instance of the widget must have a unique value.

Changing the dialog to be modal

By default, the syndicated ProactiveChat widget is not modal. That is, the widget does not require action from the customer in order to close the dialog and resume activity on the page.

To change the dialog to modal

Select the Enabled check box for the *modal* attribute.

[Continue configuring the syndicated ProactiveChat widget](#).

Custom rules for the syndicated ProactiveChat widget

Using only the attributes of the syndicated ProactiveChat widget, you can define the time a customer must spend on a page before a chat invitation is offered. But you may want to define custom rules that specify other conditions for triggering a chat offer. For example, you may want to offer a chat to customers who have a certain dollar value or a specific type of product in their shopping cart.

The syndicated ProactiveChat widget includes two JavaScript API functions.

- The chatAvailability() function, for checking agent availability
- The offerChat() function, for offering a chat invitation

You can call these functions from your web pages on a specific instance of the ProactiveChat widget. This can be done either through an event or with a direct method call. The custom code to trigger a chat offer must appear on the same page where you place the syndicated ProactiveChat widget.

Exposing the syndicated ProactiveChat widget API

To expose the API functions of the syndicated ProactiveChat widget, you must set the seconds attribute in the widget instance to 0. When this attribute is set to 0, agent availability is not checked and chat invitations are not offered unless direct API calls are made.

To expose the API functions

Add code like the following to your web page for each widget instance for which you want to call the functions.

```
<script type="text/javascript">
    RightNow.Client.Controller.addComponent(
        {
            modal: true,
            instance_id: "spac_0",
            div_id: "myDiv",
            seconds: 0,
            module: "ProactiveChat",
            type: 2
        },
        "http://[your_site]/ci/wsf/get"
    );
</script>
```

For more information about adding a widget instance, see Adding the syndicated ProactiveChat widget.

Now that you have exposed the API functions, you can use them for the following options.

- Requesting agent availability using the chatAvailability() function
- Offering a chat session using the offerChat() function
- Requesting chat availability using an event
- Offering a chat using an event

Note For code samples and to see how other developers are using the syndicated ProactiveChat widget, refer to the Customer Portal developer forum.

Requesting agent availability using the chatAvailability() function

The chatAvailability() function of the syndicated ProactiveChat widget requests agent availability. You can use the function to check:

- The queue id that is currently assigned to the chat instance.
- The number of agents available.
- The current wait time.

The chatAvailability() function accepts an argument that is the name of the callback method that is executed if the function is successful. If the function call is successful, the agent availability data is passed to the callback method.

To use the chatAvailability function

1 Expose the widget API.

2 On the web page containing the widget, add code like the following to define a function that calls chatAvailability() and to define a callback method.

```
function chatAvail(){
    spac_0.chatAvailability(chatDataAvail);

};

function chatDataAvail(result){
    alert("q_id "+result.queueId);
    alert("agent_avail "+result.availableAgentSessions);
    alert("wait_time "+result.expectedWaitSeconds);
};
```

3 On the web page, make sure that your code calls the function that makes the call to chatAvailability(), which in the example is the chatAvail() function.

In this example, the chatAvail() function calls the chatAvailability() function on the spac_0 instance of the syndicated ProactiveChat widget. The callback method, chatDataAvail, displays alerts for the queue ID, agent availability, and wait time data of the result argument.

Offering a chat session using the offerChat() function

The offerChat() function of the syndicated ProactiveChat widget allows you to offer a chat to a user. You generally use the function together with code that determines the criteria for offering the chat, and which then checks the availability of agents through the chatAvailability() function. The offerChat() function offers a chat session if its Boolean argument is true.

To use the offerChat() function

1 Expose the widget API.

2 On the web page containing the widget, add code like the following to define a function that calls chatAvailability() and to define a callback method that calls the offerChat() function.

```
function chatAvail(){
    spac_0.chatAvailability(chatDataAvail);

};

function chatDataAvail(result){
    if(result.availableAgentSessions > 0) {
        alert("offering a chat now");
        spac_0.offerChat(check);
    }
};
```

3 On the web page, make sure that your code calls the function that makes the call to chatAvailability(), which in the example is the chatAvail() function.

In this example, the chatAvail() function calls the chatAvailability() function on the spac_0 instance of the syndicated ProactiveChat widget. The callback method, chatDataAvail, examines the result argument to verify that more than one agent is available and, if so, calls the offerChat() function to offer a chat to the user.

Requesting chat availability using an event

On the web page containing the syndicated ProactiveChat widget, you can request chat availability through an event. The code must first subscribe to the evt_chatAvailabilityResponse event and then fire an evt_chatAvailabilityRequest event.

To request chat availability using an event

1 Add the following code to the web page containing the syndicated ProactiveChat widget.

```
function chatAvailEvent(){

    RightNow.Client.Event.evt_chatAvailabilityResponse.unsubscribe(on
    DataReady);
    RightNow.Client.Event.evt_chatAvailabilityResponse.subscribe(onDa
    taReady);
    RightNow.Client.Event.evt_chatAvailabilityRequest.fire();
```

```
};
```

2 On the web page, add code to call the function that requests chat availability, which in the example is chatAvailEvent().

Offering a chat using an event

On the web page containing the syndicated ProactiveChat widget, you can offer a chat session by firing an evt_chatOfferRequest event.

To request chat availability using an event

1 Add the following code to the web page containing the syndicated ProactiveChat widget.

```
function offerChatEvent(){
    RightNow.Client.Event.evt_chatOfferRequest.fire({data:
    {checkAvailability: true}, id: "spac_0"});

};
```

2 On the web page, add code to call the function that offers the chat, which in this example is offerChatEvent().

The checkAvailability parameter of the evt_chatOfferRequest event determines whether the request first checks for agent availability.

- If the argument is set to true, the evt_chatAvailabilityResponse event is first fired, which is used to determine whether agents are available.
- If the argument is set to false, a chat is offered immediately.

Continue configuring the syndicated ProactiveChat widget.

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Communities on the Customer Portal

Oracle RightNow Social Experience communities allow you to add a customized, dynamic social media channel to your support site. A community gives your customers a place to meet and discuss your organization's products and services, share experiences and troubleshooting techniques, and generally promote a positive customer culture driven by your own brand. When a community is enabled and configured, customers can view community posts on your customer portal, conduct searches of community posts, and comment on answers in your knowledge base. By adding community access and features to your customer portal, you can provide customer-generated solutions and social opportunities directly from your support site.

The **reference implementation** of the Customer Portal includes a tab for the community and a sidebar link for submitting a question to the community. Once enabled, you can add other community features using the Community integration widgets.

Important To enable a community, you will need additional information and assistance from your Oracle account manager.

To enable a community on your customer portal

1 Use the procedure described in To locate and edit configuration settings to locate the following configuration settings under RightNow Common > RightNow Social > General.

2 To specify the base URL of the community site, click COMMUNITY_BASE_URL, type the URL in the Value field, and click Update.

Important This configuration setting should never point to a customer portal page because requests for data will create an invalid loop.

Furthermore, if the community is enabled and the COMMUNITY_BASE_URL value is null, logging out of the customer portal displays an error message to the customer.

3 To specify the URL for the community home page, click COMMUNITY_HOME_URL, type the URL in the Value field, and click Update.

4 To specify the private key for the community search API, click COMMUNITY_PRIVATE_KEY, type the value, and click Update.

5 To specify the public key for the community search API, click COMMUNITY_PUBLIC_KEY, type the value, and click Update.

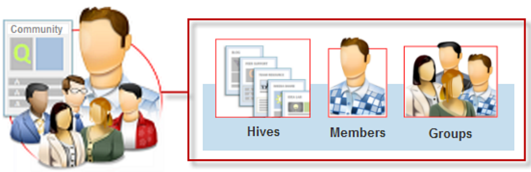
6 Click Save.

Now that your community has been enabled, you can add other features to let your customers view community posts on the customer portal, conduct searches of community posts, and comment on answers in your knowledge base.

Add and configure community integration widgets.

Community integration widgets

When adding **community** features to the customer portal, it is helpful to understand a few basic concepts about communities. A community is a social site designed to help your customers meet and share information, such as troubleshooting ideas or product recommendations. As such, communities are defined primarily by their users and content.



The community interface is comprised of one or more hives—highly adaptable resource entities that can take a variety of forms, such as blogs, forums, message boards, or media shares. Each hive usually accepts different types of **posts** and **comments**, which form the core content that the hive presents.

Members are the users who populate the community. Their roles often vary based on **user types**—they may be general members, moderators, administrators, or builders of the community. Members can be included in one or more **groups** based on roles or interests they have in common with other members. Also, because the community is included in pass-through authentication, members who log in to your customer portal are automatically logged in to the community as well.

Important Member access to community content and functions is governed by a combination of settings, such as community privacy levels, hive permissions and privacy levels, and user types, as well as permissions extended through association with a group. As a result, when a member is logged in to the customer portal, community widgets will display only content that is available to that member in the community. When a member is not logged in, the widgets will display only content that is publicly available. Refer to Configuring community access.

Also, community content is cached frequently for requests submitted by users who are not logged in. As a result, live changes to some data may not be reflected in community widgets for up to five minutes unless you are logged in to the community.

Community content can be accessed from the customer portal through a variety of features. For example, your customers can view and search posts made in the community in addition to viewing and searching answers in your knowledge base. They can also post and respond to comments on individual answers. The following widgets can be used to add these and other community features to your customer portal pages.

- CommunityPosts—Displays the five most recent posts on the community. You can configure the number and order of displayed posts, and how much information each post includes.
- CommunitySearchResults—Displays community posts associated with the search terms customers enter. This allows customers to search content from both the knowledge base and community at once, and view both result sets on the same page.
- AnswerComments—Displays a comments feature on the answer details page to let customers view, add, and manage answer comments for each answer.
- CommunityPostDisplay—Displays a community post and its comments and allows logged-in customers to rate and comment on the post.
- CommunityPostSubmit—Displays a post form that allows customers submit a question or discussion item to the community.
- CommunityUserDisplay—Displays a customer's name and picture.

Adding the CommunityPosts widget to the template

By including a sampling of recent community posts on your customer portal, you can position the community as another helpful support resource. Giving your customers a glimpse of available content encourages them to explore and participate.

This example assumes you want to add the CommunityPosts widget to the sidebar so it appears on all pages that use the **reference implementation** template.

To add the CommunityPosts widget to the sidebar

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following code.

```
            <div class="rn_Feedback">
                <rn:widget path="feedback/SiteFeedback" />
                <span>#rn:msg:SITE_USEFUL_MSG#</span>
            </div>
        </div>
    </div>
```

3 Add the following code immediately after the code you found in step 2.

```
    <div class="rn_Module">
        <h2>Latest Community Posts</h2>
        <rn:widget path="social/CommunityPosts" />
    </div>
```

4 Save *standard.php*.

Next, configure the attributes of the CommunityPosts widget or Return to the community integration widgets overview.

Configuring the CommunityPosts widget

You can configure widget attributes to alter how customer posts are displayed on the customer portal. The following properties can be edited in the CommunityPosts widget code:

- The display of post information, including:
  - ▷ Author
  - ▷ Number of comments
  - ▷ Snippets of content
  - ▷ Updated date
- Labels on the widget
- The number of results to be displayed
- Removing the link to all posts
- The number of characters for truncating post content
- Sorting order for the posts
  - ▷ Alphabetical
  - ▷ Highest rating
  - ▷ Most views
  - ▷ Most comments
  - ▷ Most recent

Return to the community integration widgets overview.

Defining what post information is displayed

By default, the CommunityPosts widget displays a snippet of the content (the length of which is defined by the *truncate_size* attribute), the author, and the updated date for each post. You can remove any of this information. You can also add the number of comments the post has received, which is not displayed by default.

To define what post information is displayed

1 To remove content snippets from posts, add `show_post_content="false"` to the widget code, which now reads as follows.

```
<rn:widget path="social/CommunityPosts"
show_post_content="false" />
```

2 To remove authors' names from posts, add `show_author_name="false"` to the widget code.

3 To remove the updated dates from posts, add `show_updated_date="false"` to the widget code.

4 To add the number of comments to posts, add `show_comment_count="true"` to the widget code.

Continue configuring the CommunityPosts widget or Return to the community integration widgets overview.

Editing labels

The default CommunityPosts widget uses the labels Author, Updated, and Comments to identify the information it displays. It also uses See All Posts as the label for the link to go to the community. You can edit any or all of these labels.

To edit labels on the CommunityPosts widget

1 To edit the Author label, add `label_author="Your new author label: %s"` to the widget code, which now reads as follows. (Substitute whatever text you want for "Your new author label.")

```
<rn:widget path="social/CommunityPosts"
label_author="Your new author label: %s" />
```

2 To edit the Updated label, add `label_updated="Your new updated label: %s"` to the widget code.

3 To edit the Comments label, add `label_comment="Your new comment label: %s"` to the widget code.

Note The *show_comment_count* attribute must be set to true in order for this label to display. The complete widget code will resemble the following.

```
<rn:widget path="social/CommunityPosts"
show_comment_count="true"
label_comment="Your new comment label: %s" />
```

4 To edit the See All Posts link label, add `label_all_results="Your new See All Posts label"` to the widget code.

Continue configuring the CommunityPosts widget or Return to the community integration widgets overview.

Defining the number of posts

The default CommunityPosts widget displays five posts from the community, but you can edit that value using the *limit* attribute.

To change the number of displayed posts

Add `limit="10"` to the widget code, replacing `"10"` with the value you want. The code now resembles the following.

```
<rn:widget path="social/CommunityPosts"
limit="10" />
```

Continue configuring the CommunityPosts widget or Return to the community integration widgets overview.

Removing the link to all posts

By default, the See All Posts link appears at the bottom of the list of posts. When customers click the link, they are taken to the community site. You can remove the link if you want.

To remove the See All Posts link

Add `show_all_results_link="false"` to the widget code so it reads as follows.

```
<rn:widget path="social/CommunityPosts"
show_all_results_link="false" />
```

Continue configuring the CommunityPosts widget or Return to the community integration widgets overview.

Truncating posts

By default, the CommunityPosts widget displays the first 60 characters of the content for a post and then displays an ellipsis to indicate additional content. Because partial words are not displayed, the actual number of displayed characters may not total exactly 60. You can edit the *truncate_size* attribute to vary the number of displayed characters between 1 and 200.

To change the number of characters used to display content

Add `truncate_size="100"` to the widget code, replacing `"100"` with the value you want. The code now resembles the following.

```
<rn:widget path="social/CommunityPosts"
truncate_size="100" />
```

Continue configuring the CommunityPosts widget or Return to the community integration widgets overview.

Sorting posts

By default, the community posts are sorted with the most recent one first in the list, but the *sort_order* attribute lets you change sorting options.

To change sorting order

1 To sort posts alphabetically by post title, add `sort_order="alphabetical"` to the widget code, which now reads as follows.

```
<rn:widget path="social/CommunityPosts"
sort_order="alphabetical" />
```

2 To sort posts by the highest rating, add `sort_order="highestRating"` to the widget code.

3 To sort posts by the number of views, add `sort_order="mostViews"` to the widget code.

4 To sort posts by the number of comments, add `sort_order="mostComments"` to the widget code.

Continue configuring the CommunityPosts widget or Return to the community integration widgets overview.

Adding the CommunitySearchResults widget to the Answers page

When you add the CommunitySearchResults widget to your Answers page, customers who enter a search term can view not only the answers related to their search term but also any community posts that include the term.

To add the CommunitySearchResults widget to the Answers page

1. Open the *list.php* file in the */views/pages/answers* folder.

2. Locate the following code.

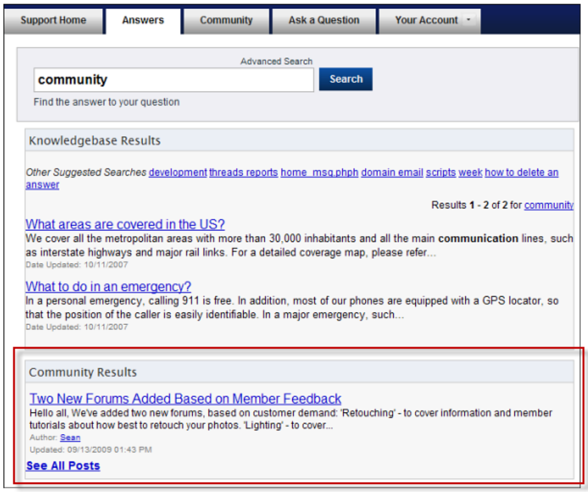
```
<div class="rn_Padding">
    <h2 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_RESULTS_CMD#</h2>
    <rn:widget path="reports/ResultInfo"
    add_params_to_url="p,c"/>
    <rn:widget path="knowledgebase/TopicWords"/>
    <rn:widget path="reports/Multiline" />
    <rn:widget path="reports/Paginator" />
</div>
```

3. Add the following code immediately after the code you located in step 2.

```
<div class_"rn_Module">
    <h3>Community Results</h3>
    <rn:widget path="social/CommunitySearchResults" />
</div>
```

4. Save *list.php*.

Next, configure the attributes of the CommunitySearchResults widget or Return to the community integration widgets overview.



Configuring the CommunitySearchResults widget

You can configure widget attributes to alter how community search results appear on your customer portal. The following properties can be edited in the CommunitySearchResults widget code.

- The display of post information, including:
  - ▷ Author
  - ▷ Number of comments
  - ▷ Snippets of content
  - ▷ Updated date
- Labels on the widget
- Search term highlighting
- The number of results to be displayed
- Removing the link to all posts
- The number of characters for truncating post content

Return to the community integration widgets overview.

Defining what post information is displayed

By default, the CommunitySearchResults widget displays a snippet of the content (the length of which is defined by the *truncate_size* attribute), the author, and the updated date for each post. You can remove any of this information, and you can add the number of comments the post has received, which is not displayed by default.

To define what post information is displayed

1 To remove content snippets from posts, add `show_post_content="false"` to the widget code, which now reads as follows.

```
<rn:widget path="social/CommunitySearchResults"
show_post_content="false" />
```

2 To remove authors' names from posts, add `show_author_name="false"` to the widget code.

3 To remove the updated dates from posts, add `show_updated_date="false"` to the widget code.

4 To add the number of comments to posts, add `show_comment_count="true"` to the widget code.

Continue configuring the CommunitySearchResults widget or Return to the community integration widgets overview.

Editing labels

The default CommunitySearchResults widget uses the labels Author, Updated, and Comments to identify the information it displays. It also uses See All Posts as the label for the link to go to the community. You can edit any or all of these labels.

To edit labels on the CommunitySearchResults widget

1 To edit the Author label, add `label_author="Your new author label: %s"` to the widget code, which now reads as follows. (Substitute whatever text you want for "Your new author label.")

```
<rn:widget path="social/CommunitySearchResults"
label_author="Your new author label: %s" />
```

2 To edit the Updated label, add `label_updated="Your new updated label: %s"` to the widget code.

3 To edit the Comments label, add `label_comment="Your new comment label: %s"` to the widget code.

Note The *show_comment_count* attribute must be set to true in order for this label to display. The complete widget code will resemble the following.

```
<rn:widget path="social/CommunitySearchResults"
show_comment_count="true" label_comment="Your new comment
label: %s" />
```

4 To edit the See All Posts link label, add `label_all_results="Your new See All Posts label"` to the widget code.

Continue configuring the CommunitySearchResults widget or Return to the community integration widgets overview.

Highlighting search terms

By default, customer-entered search terms are highlighted with bold text in the list of matching community posts, but you can disable this feature.

To disable search term highlighting

Add `highlight="false"` to the widget code to change it as follows.

```
<rn:widget path="social/CommunitySearchResults"
highlight="false" />
```

Continue configuring the CommunitySearchResults widget or Return to the community integration widgets overview.

Defining the number of posts

The default CommunitySearchResults widget displays five posts from the community, but you can edit that value using the *limit* attribute.

To change the number of displayed posts

Add `limit="10"` to the widget code, replacing `"10"` with the number of posts you want to display. The code now resembles the following.

```
<rn:widget path="social/CommunitySearchResults"
limit="10" />
```

Continue configuring the CommunitySearchResults widget or Return to the community integration widgets overview.

Removing the link to all posts

By default, the See All Posts link appears at the bottom of the list of posts. When customers click the link, they are taken to the community site. You can disable the link if you want.

To disable the See All Posts link

Add `show_all_results_link="false"` to the widget code so it reads as follows.

```
<rn:widget path="social/CommunitySearchResults"
show_all_results_link="false" />
```

Continue configuring the CommunitySearchResults widget or Return to the community integration widgets overview.

Truncating posts

By default, the CommunitySearchResults widget displays the first 200 characters of the content for a post and then displays an ellipsis to indicate additional content. Because partial words are not displayed, the actual number of displayed characters may not total exactly 200. You can edit the *truncate_size* attribute to vary the number of displayed characters between 1 and 200.

To change the number of characters used to display content

Add `truncate_size="100"` to the widget code, replacing `"100"` with the value you want. The code now resembles the following.

```
<rn:widget path="social/CommunitySearchResults"
truncate_size="100" />
```

Continue configuring the CommunitySearchResults widget or Return to the community integration widgets overview.

Adding the AnswerComments widget to the answer details page

When you add the AnswerComments widget to the answer details page, your customers can post comments to individual answers, as well as reply to comments posted by other customers. You can place the widget anywhere on the page. In this example, we'll add it to the bottom of the page below the links for sharing, printing, emailing, and subscribing to the answer.

To add the AnswerComments widget to the answer details page

1 Open the *detail.php* file in the */views/pages/answers* folder.

2 Locate the following lines of code.

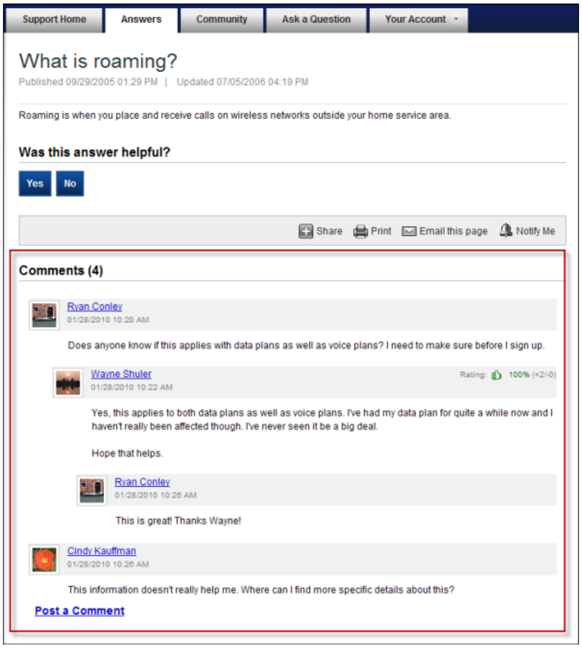
```
<div id="rn_DetailTools">
    <rn:widget path="utils/SocialBookmarkLink" />
    <rn:widget path="utils/PrintPageLink" />
    <rn:widget path="utils/EmailAnswerLink" />
    <rn:condition logged_in="true">
        <rn:widget path="notifications/AnswerNotificationIcon" />
    </rn:condition>
</div>
```

3 Add the following code immediately below the code you located in step 2.

```
<rn:widget path="social/AnswerComments" />
```

4 Save *detail.php*.

Next, configure the attributes of the AnswerComments widget or Return to the community integration widgets overview.



Configuring the AnswerComments widget

You can configure the AnswerComments widget to let your customers comment on individual answers in your knowledge base. Answer comments are often insightful and can be used to refine and expand knowledge base content and adjust to the needs of your customers.

The following characteristics can be edited in the widget code.

- Control the number of comment levels
- Change the thumbs up/thumbs down icons
- Change labels on the widget

Controlling the number of comment levels

By default, five comment levels are allowed on the AnswerComments widget. When comments have reached a depth of five levels, no additional comments can be submitted. You can change this value, but you may need to change the width of the widget to accommodate higher values.

To change the number of comment levels

Define the *max_comment_depth* attribute so the widget code resembles the following.

```
<rn:widget path="social/AnswerComments"
max_comment_depth="3" />
```

Continue configuring the AnswerComments widget or Return to the community integration widgets overview.

Replacing icons

You can replace the default thumbs up and thumbs down icons, which are specified as attributes of the AnswerComments widget, by defining the path and file name for the replacement icon. All default icons are in the */cp/customer/assets/themes/standard/images* folder, but you can reference the path in the widget attribute simply by typing `images/[filename]`.

To replace the thumbs up icon

Define the *thumbs_up_icon* attribute so your code resembles the following.

```
<rn:widget path="social/AnswerComments"
thumbs_up_icon="images/new/thumbUp.png" />
```

To replace the thumbs down icon

Define the *thumbs_down_icon* attribute so your code resembles the following.

```
<rn:widget path="social/AnswerComments"
thumbs_down_icon="images/new/thumbDown.png" />
```

Changing labels

You can change any of the following labels by editing its corresponding attribute. For example, to replace the default title, your code will resemble the following.

```
<rn:widget path="social/AnswerComments"
label_title="New Comments Label (%d)" />
```

- Cancel button—*label_cancel_submit*
- Create account link—*label_create_account*
- Delete link—*label_delete*
- Delete confirmation message—*label_delete_confirm*
- Title on delete confirmation message—*label_delete_confirm_title*
- Label for deleted comment—*label_deleted*
- Edit link—*label_edit*
- Edited label—*label_edited*
- Flag link—*label_flag*
- Flagged comment label—*label_flagged*
- Text for new comment—*label_new_comment*
- Text when there are no comments—*label_no_comments*
- Label for notification check box—*label_notify*
- Rate it link—*label_rate*
- Accessibility labels for rating links—*label_rate_up*, *label_rate_down*
- Label for customer's rating—*label_rated*
- Rating label—*label_rating*
- Reply link—*label_reply*
- Submit button—*label_submit*
- Suspended label—*label_suspended*
- Title—*label_title*

Continue configuring the AnswerComments widget or Return to the community integration widgets overview.

Adding the CommunityPostDisplay widget

The CommunityPostDisplay widget displays a community **post** on your customer portal. You can specify which post you want to display by setting the *post_hash* attribute to the post's **hash** value. You can use other attributes to alter the post's appearance. By default, any comments for the post appear in chronological order, and logged-in customers can rate posts and comments and submit comments of their own.

Important The CommunityPostDisplay widget assumes that the post's title is contained in the **post type's** first field and the body text is in its second field. To display the post properly, be sure that the post type conforms to this field order. Refer to Posts.

This example assumes you want to add the CommunityPostDisplay widget to display a public post on the Support Home page. If a non-public post is defined instead, customers must log in before they can see it.

To add the CommunityPostDisplay widget to the Support Home page

1 Open the *home.php* file in the */views/pages* folder.

2 Locate the following code.

```
<div class="rn_Module">
    <h2>#rn:msg:MOST_POPULAR_ANSWERS_LBL#</h2>
    <rn:widget path="reports/Multiline"
    report_id="194"
    per_page="12"/>
    <a class="rn_AnswersLink"
    href="/app/answers/
    list#rn:session#">#rn:msg:SEE_ALL_POPULAR_ANSWERS_UC_LBL#</a>
</div>
```

3 Add the following code immediately after the code you found in step 2, entering the hash of the post you want to display so that your code resembles the following.

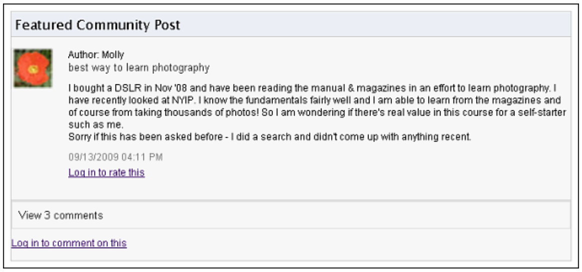
```
<div class="rn_Module">
    <h2>Featured Community Post</h2>
    <rn:widget path="social/CommunityPostDisplay"
    post_hash="bbe47d0d5e" />
```

```
</div>
```

Note A post's hash is found in the URL of its page. For example, if a post is located at `http://<your_site>.com/posts/bbe47d0d5e`, the post hash is `bbe47d0d5e`.

4 Save *home.php*.

Next, configure the attributes of the CommunityPosts widget or Return to the community integration widgets overview.



Configuring the CommunityPostDisplay widget

You can configure the CommunityPostDisplay widget's attributes to alter how the post appears on your customer portal. The following properties can be edited in the widget code.

- The display of post information, including:
  - ▷ Author name and profile photo
  - ▷ Post rating option
  - ▷ Post creation date
  - ▷ Post comments
  - ▷ Number of post comments
- Labels on the widget

Return to the community integration widgets overview.

Defining the post information displayed

By default, the CommunityPostDisplay widget includes the author's name and profile picture, a rating submission option, the date that the post was created, and the Log In To Comment On This link. You can remove any of this information.

To remove post information

1 To remove the author's name and profile picture, add `show_author="false"` to the widget code so it reads as follows.

```
<rn:widget path="social/CommunityPostDisplay"
post_hash="bbe47d0d5e"
show_author="false" />
```

2 To remove the option for submitting a post rating, add `post_ratings="false"` to the widget code.

```
<rn:widget path="social/CommunityPostDisplay"
post_hash="bbe47d0d5e"
post_ratings="false" />
```

3 To remove the post's creation date, add `show_posted_date="false"` to the widget code.

```
<rn:widget path="social/CommunityPostDisplay"
post_hash="bbe47d0d5e"
show_posted_date="false" />
```

4 To remove the Log In To Comment On This link, add `post_comments="false"` to the widget code.

```
<rn:widget path="social/CommunityPostDisplay"
post_hash="bbe47d0d5e"
post_comments="false" />
```

Continue configuring the CommunityPostDisplay widget or Return to the community integration widgets overview.

Changing labels

You can change any of the following labels by editing its corresponding attribute. For example, to modify the login link text, your code would resemble the following.

```
<rn:widget path="social/CommunityPostDisplay"
label_login_link_comment="Sign in to comment" />
```

- Author name—*label_author* (Defaults to `'Author: %s'`.)
- Post creation date—*label_posted_date* (Defaults to `'%s'`.)
- Log in to rate link—*label_login_link_rate*
- Log in to comment link—*label_login_link_comment*
- Comment placeholder text—*label_comment_placeholder*

Continue configuring the CommunityPostDisplay widget or Return to the community integration widgets overview.

Adding the CommunityPostSubmit widget

The CommunityPostSubmit widget displays a form that allows customers to submit a community **post** from your customer portal. You direct form submissions to a specific **hive** and **post type** by setting the *resource_hash* and *post_type_id* attributes. You can also configure other attributes to alter the post's appearance.

Important The CommunityPostSubmit widget supports only the title and body fields. To ensure that posts are created properly, be sure that the post type includes these fields. Refer to Posts.

This example assumes you want to add the CommunityPostSubmit widget to the Support Home page.

To add the CommunityPostSubmit widget to the Support Home page

1 Open the *home.php* file in the */views/pages* folder.

2 Locate the following code.

```
<div class="rn_Module">
    <h2>#rn:msg:MOST_POPULAR_ANSWERS_LBL#</h2>
    <rn:widget path="reports/Multiline"
    report_id="194"
    per_page="12"/>
    <a class="rn_AnswersLink"
    href="/app/answers/
    list#rn:session#">#rn:msg:SEE_ALL_POPULAR_ANSWERS_UC_LBL#</a>
</div>
```

3 Add the following code immediately after the code you found in step 2, entering the hash of the post you want to display so that your code resembles the following.

```
<div class="rn_Module">
    <h2>Submit a Community Post</h2>
    <rn:widget path="social/CommunityPostSubmit"
    resource_hash="a93f4c7f51" post_type_id="5" />
```

```
</div>
```

Note The hive resource hash ID is found in the URL of its hive summary page. For example, if a hive is located at `http://<your_site>.com/hives/a93f4c7f51/summary`, the hive's resource hash is `a93f4c7f51`.

The post type ID can be found in the URL of the post type's configuration page, located at Admin > Posts > (post name). For example, if a post type's configuration page URL is `http://<your_site>.com/settings/posttypes/5`, the post type ID is 5. Refer to Posts.

4 Save *home.php*.

Next, configure the attributes of the CommunityPostSubmit widget or Return to the community integration widgets overview.

Configuring the CommunityPostSubmit widget

You can configure the CommunityPostSubmit widget's attributes to alter how the community post submit form appears on your customer portal. The following properties can be edited in the widget code.

- The enabling of post form functions, including:
  - Field hints
  - Title field focus
  - Confirmation dialog
  - Submission landing page
  - Append parameters
  - Submission progress image
- Labels on the widget

Return to the community integration widgets overview.

Enabling post form functions

By default, the CommunityPostSubmit widget displays only the title and body fields. You can add widget attributes to always show field hints, auto-focus the title field, prompt for confirmation, redirect to a custom, parameterized URL upon submission, and display a submission progress graphic.

To enable post form functions

1 To always display hints for form fields (not just when a field has focus), add `always_show_hint="true"` to the widget code so it reads as follows.

```
<rn:widget path="social/CommunityPostSubmit"
resource_hash="a93f4c7f51" post_type_id="5"
always_show_hint="true" />
```

2 To set browser focus to the title field, add `initial_focus="true"` to the widget code.

```
<rn:widget path="social/CommunityPostSubmit"
resource_hash="a93f4c7f51"
post_type_id="5"
initial_focus="true" />
```

3 To prompt members for confirmation when they click the Submit button, add `label_confirm_dialog="true"` to the widget code.

```
<rn:widget path="social/CommunityPostSubmit"
resource_hash="a93f4c7f51"
post_type_id="5"
label_confirm_dialog="true" />
```

4 To redirect members to another page upon submitting the post form, add the `on_success` attribute with the page URL so that your code resembles the following.

```
<rn:widget path="social/CommunityPostSubmit"
resource_hash="a93f4c7f51"
post_type_id="5"
on_success="http://yoursite.com" />
```

5 To append parameters to the redirecting URL, list them in comma-separated format using the `add_params_to_url` attribute so that your code resembles the following.

```
<rn:widget path="social/CommunityPostSubmit"
resource_hash="a93f4c7f51"
post_type_id="5"
on_success="http://yoursite.com"
add_params_to_url="param_1=7,param_2=45,param_3=123" />
```

6 To display an image while the post submission in is progress, add the `icon_loading_path` attribute to the widget code so it resembles the following.

```
<rn:widget path="social/CommunityPostSubmit"
resource_hash="a93f4c7f51"
post_type_id="5"
icon_loading_path="http://yoursite.com/images/image.jpg" />
```

Continue configuring the CommunityPostSubmit widget or Return to the community integration widgets overview.

Changing labels

You can change any of the following labels by editing its corresponding attribute. For example, to modify the body hint text, your code would resemble the following.

```
<rn:widget path="social/CommunityPostSubmit"
label_body_hint="When submitting a technical issue to the community,
please include your system specifications." />
```

- Field required—*label_required* (Defaults to `'%s is required'`.)
- Submit button—*label_submit_button*
- Title field label—*label_title_field*
- Title hint—*label_title_hint*
- Body field label—*label_body_field* (Defaults to `'Your Post'`.)
- Body hint—*label_body_hint*

Return to the community integration widgets overview.

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Mobile Customer Portal

The Oracle RightNow Customer Portal Cloud Service (Customer Portal) not only provides a superior customer experience on full-featured browsers, but it also includes a reference implementation designed specifically for mobile devices. In addition to its streamlined interface and optimized performance, the mobile customer portal includes the ability to direct customers to a predefined page set based on the type of device they use to access your support site.

Using the default mobile **reference implementation**, customers can view popular answers and featured support categories. They can conduct searches, view lists of answers and individual answers, and provide feedback on an answer. They can also submit questions, update their account information, chat with an agent, and be guided through a series of questions to reach a solution.

The mobile reference implementation has been tested on devices using the following operating systems.

- Android 1.5+
- iPhone 3.1+

Although not officially supported, other devices that support full-featured browsers (those supporting JavaScript, style sheets, and cookies) are expected to be able to use the mobile reference implementation without customization.

Note All figures showing mobile customer portal pages were captured using an Android mobile device emulator.

Overview of working with the mobile customer portal

The mobile customer portal pages are automatically included in the Customer Portal reference implementation. This section describes the steps you must take so you can view the mobile pages in development mode and so your customers with mobile devices can view them on your production site.

Step 1—Enable page set mappings. This step is critical for viewing the mobile customer portal. Refer to Enabling page set mappings.

Step 2—Decide where you want to view the development pages. Your options include viewing them on your regular desktop workstation, mobile devices, and mobile device emulators. Refer to Working with the mobile development pages.

Step 3—Edit the mobile reference implementation to incorporate all the changes you eventually want to include on your production site. Begin by editing the template at Mobile template configuration, and then continue editing individual mobile pages and widgets as described within this section.

Step 4—Define the user agent mapping so customers who use desktop browsers can view your standard pages and those using mobile devices can view your mobile pages. Refer to Defining user agent mapping.

Step 5—Stage and promote the customer portal so the mobile development pages you have been working on are promoted to your production site. Refer to Staging and Promoting the Customer Portal.

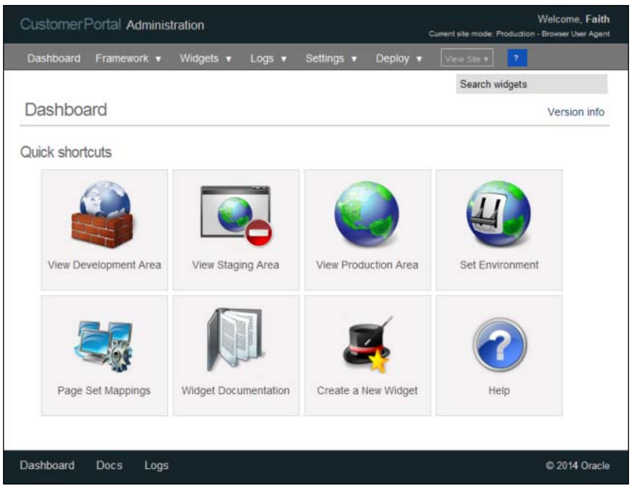
Enabling page set mappings

Before you can view the mobile customer portal page set in the development area, you must enable at least one of the default page set mappings. It does not matter which browser you use to enable page set mappings, whether it's your desktop system or a mobile device. After you enable one or more page set mappings on any system and then set the development area for the specific browser or device, you can view the default mobile page set in the development area.

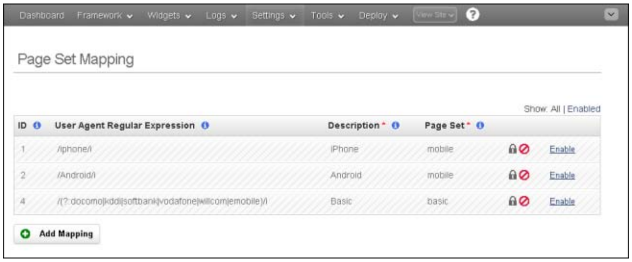
Important Although the mobile page set is visible in the development area after you have enabled page set mappings, the mobile pages will not be visible on your production site until you have **staged** and **promoted** the customer portal.

To enable page set mappings

1 In a web browser, type `https://<your_site>/ci/admin`. After you log in, the Customer Portal Dashboard displays.



2 Click the Page Set Mappings shortcut on the dashboard. The Page Set Mapping page displays.



3 Click Enable in the right column for one or more of the three mobile devices (iPhone, Android, and Palm). The link changes to Disable.

4 To add your own page set mappings, click here.

5 To make these pages available on your production site, log in to Oracle Service Cloud and stage and promote the customer portal.

Working with the mobile development pages

When you begin working on your **development pages**, you'll want to test and review your changes before you **stage** and **promote** them into **production**. You can—and should—review the pages on the actual mobile devices you expect your customers to use to access your support site before you promote the changes. However, you might prefer to do preliminary testing on your desktop browser or a mobile device emulator.

The following emulators are available for testing your development pages.

- iPhone Simulator application on PCs or the native simulator application on your Mac
- Android emulator

Although you need to enable the page set mappings just once on any browser or device you choose, you must set the development area for each browser or device you test on. For example, assume you want to test your mobile pages on your iPhone and also on an Android emulator. You must select the development area separately for each device. And if you want to also view your mobile pages on your workstation without an emulator, you must set the development area for your browser too.

You can view the mobile development pages in any of the following ways.

- On a mobile device
- On a mobile device emulator

- On your workstation using one or more browsers

Note You may find it easier to verify pages on your desktop browser instead of a mobile device emulator because emulators typically have slower performance. (Google Chrome provides the most representative mobile page set when viewed in a web browser.) Still, before you stage and promote your development pages, you should always preview your pages on the actual kinds of mobile devices you expect your customers to use.

Viewing development pages on a mobile device or emulator

Prerequisite

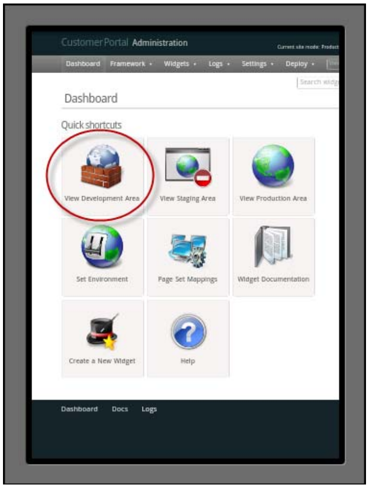
You must complete the procedure in Enabling page set mappings before you set the development area.

To view the development pages on a mobile device or emulator

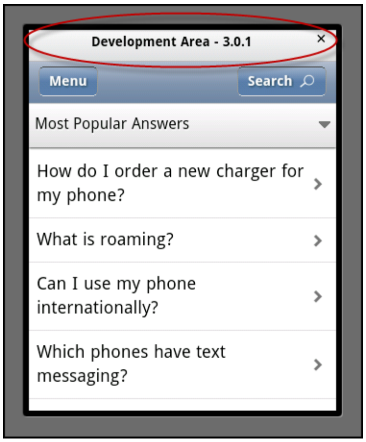
Note For the best mobile customer portal experience, devices should be configured to load images on web pages. If images are turned off, display issues may occur.

1 Enter the following URL on your mobile device or emulator to access the Customer Portal Administration site.

```
https://<your_site>/ci/admin
```



2 On the Quick Shortcuts Dashboard, click View Development Area. The home page opens, and the Development Area header appears at the top of the page so you know you are viewing development pages.



Refer to [Development header] for an explanation of the options available on the header.

Viewing mobile development pages on a desktop workstation

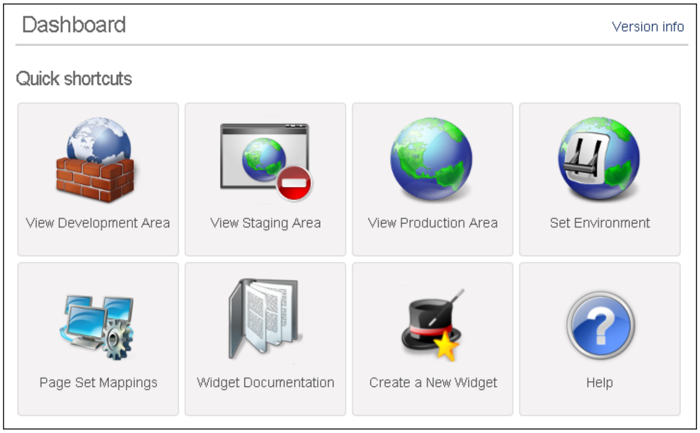
Prerequisite

You must complete the procedure in Enabling page set mappings before you set the development area.

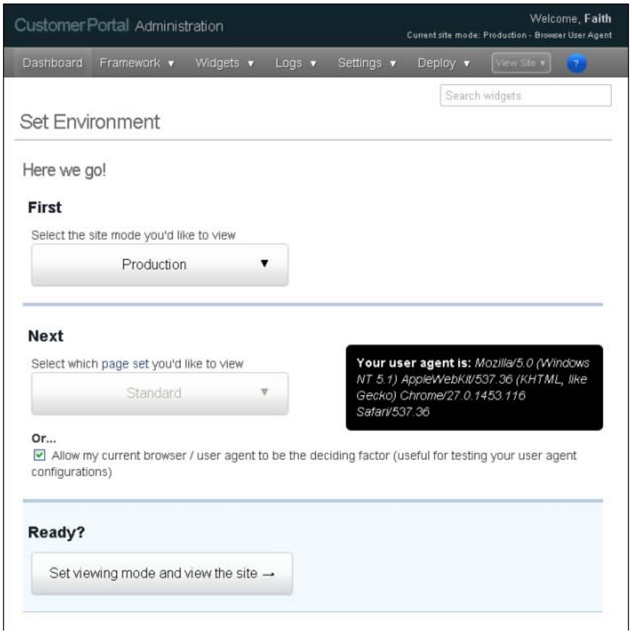
To view mobile development pages on a desktop workstation

1 Enter the following URL on your workstation browser to access the Customer Portal Administration site.

```
https://<your_site>/ci/admin
```



2 On the Quick Shortcuts Dashboard, click Set Environment.



3 In the Production drop-down menu, select Development.

Note If you want to view your current production site, you can select Production. However, if you haven't staged and promoted the customer portal after enabling the page set mappings, the mobile pages will not be displayed on your production site.

4 Clear the check box that says "Allow my current browser/user agent to be the deciding factor."

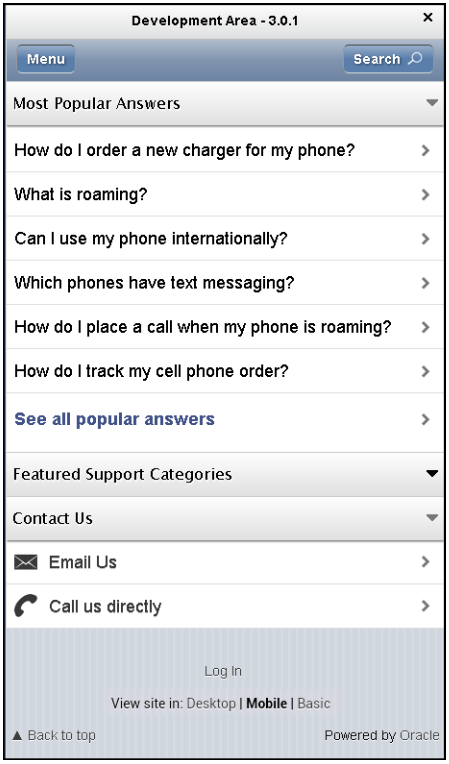
5 In the drop-down menu just above the check box, select Mobile.

Note If the Mobile option doesn't appear in the menu, at least one default page set mapping must first be enabled.

6 Click Set Viewing Mode and View the Site. The Development Area header appears at the top of the page so you know you are viewing development pages. (Refer to Development header for an explanation of the options available on the header.)

The following figure shows the mobile page set displayed on a desktop workstation using Google Chrome, which mimics more closely than other web browsers how the pages appear on a mobile device. If you also want to view your mobile pages using additional web browsers (Mozilla Firefox, for example), you'll need to repeat this procedure for those browsers as well.

Note For a good representation of the mobile page set, use any browser except Internet Explorer.



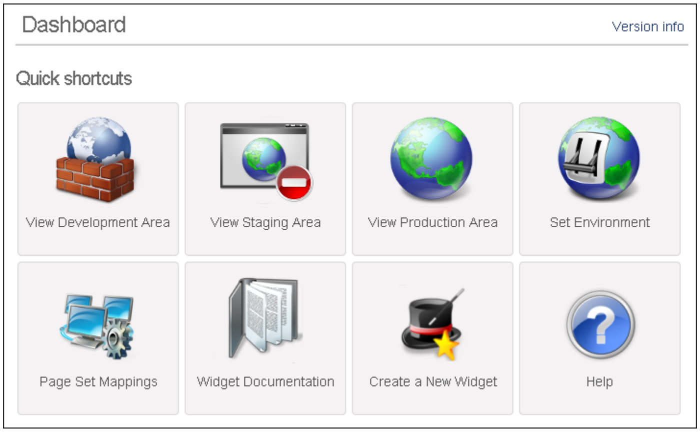
Defining user agent mapping

You want your customers to be automatically directed to the correct interface based on the browser they are using. That is, if they are using a desktop or laptop computer, you want them to access your standard customer portal, but if they are using a mobile device, you want them to be directed to your mobile customer portal interface. User agent mapping lets you control how that occurs. It also lets you define unique page sets for various mobile devices if you want.

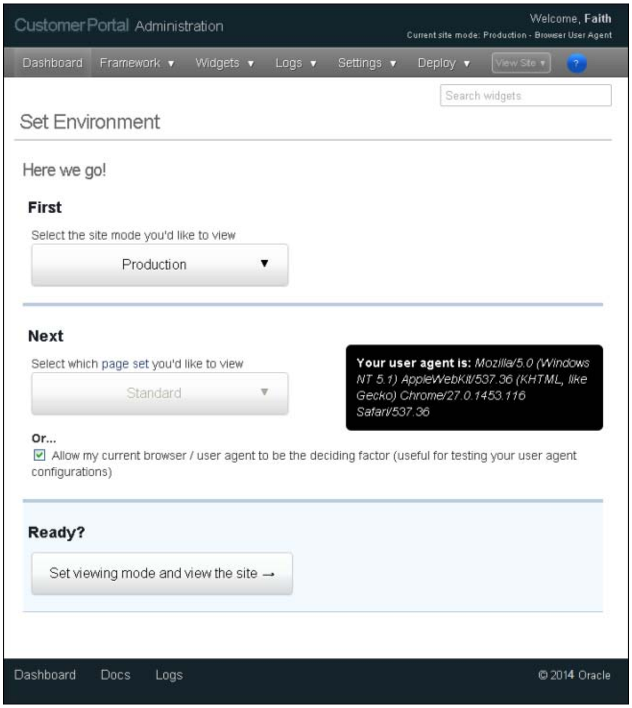
To define user agent mapping

1 Enter the following URL on your workstation browser to access the Customer Portal Administration site.

```
https://<your_site>/ci/admin
```



2 On the Quick Shortcuts Dashboard, click Set Environment.



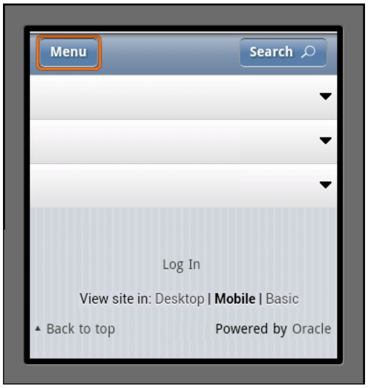
3 Select the check box that says "Allow my current browser/user agent to be the deciding factor," which means that the page set is determined by the browser or user agent accessing the pages. The user agent of your browser is shown on the page.

Note With this check box selected, you will see the standard page set if you are using a desktop browser and the mobile page set if you are using a mobile device or emulator.

Mobile template configuration

The mobile reference implementation for the Customer Portal includes its own template and a set of pages specific to the mobile customer portal. The template and pages are optimized for mobile devices, and many of the widgets are specially designed for the mobile application.

The file for the mobile reference implementation template is *mobile.php*, located in the customer portal file structure under */cp/customer/development/views/templates*. The template includes a Menu button, a Search button, and a page set selector that lets customers display the standard page set on their mobile device if they choose. It also includes a Log In/Logout link, an option that takes customers to the top of the page, and another link for the Oracle Service Cloud website.



Select one of the following template features to learn about its configuration options.

- Configuring security
- Menu button
- Search button
- Log In/Logout link
- Page set selector

When you finish configuring the mobile template, you can configure the individual pages that make up the mobile interface. These pages are located in the */cp/customer/development/views/pages/mobile* folder. The following main pages are included.

- Home page
- Login page
- Answers list page
- Answer details page
- Guided assistance page
- Ask a question page
- Chat pages

- Create account page
- Support history page
- Question details page
- Account settings page
- Change password page

Configuring security

Clickjacking is an attack on browser security that can mislead your customers into clicking a concealed link. To prevent clickjacking, you cannot let your site be put into an iFrame on another site. If you do not use iFrames, make the following edits to the template file.

Note If you intentionally run your customer portal inside an iFrame, do not use the following procedure.

To configure the template for security

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following first lines of code.

```
<rn:meta javascript_module="mobile"/>
<!DOCTYPE html>
<html lang="#rn:language_code#">
    <head>
```

3 Immediately after the `<head>` tag you located in step 2, add the following code.

```
<script>
if (top!= self) top.location.href = self.document.location;
if (parent!= self) top.location.href = location.href;
if (top.frames.length!=0) top.location=self.document.location;
if (window!= window.top) top.location.href = location.href;
</script>
```

4 Save *mobile.php*.

5 Open the *hooks.php* file in the */customer/development/config* folder.

6 Add the following code to the pre_page_render hook to prevent clickjacking in modern browsers. Refer to Adding hooks.

```
header("X-Frame-Options:deny");
```

7 Save *books.php*.

Menu button

The Menu button, which appears on the mobile template and therefore on all mobile pages, toggles between displaying and hiding an overlay of the following navigation options.

- Home
- Contact Us
- Your Account

Review the code for the Menu button.

Code for the Menu button

The MobileNavigationMenu widget is a toggle button. When it is used to generate the Menu button, the code defines the submenu (rn_MenuList) that is opened and closed when the button is clicked. You can see from the following code that the rn_MenuList submenu has the class rn_Hidden, meaning that options are hidden until the button is clicked. The default *label* attribute of MobileNavigationMenu is "Menu," so the widget code doesn't need to specify a button label.

```
<span class="rn_FloatLeft">
    <rn:widget path="navigation/MobileNavigationMenu"
    submenu="rn_MenuList"/>
</span>
<ul id="rn_MenuList"
class="rn_Hidden">
    <li>
        <a href="/app/
```

```
    #rn:config:CP_HOME_URL##rn:session#">#rn:msg:HOME_LBL#</a>
</li>
<li>
    <a href="javascript:void(0);"
    class="rn_ParentMenu">#rn:msg:CONTACT_US_LBL#</a>
    <ul class="rn_Submenu rn_Hidden">
        <rn:condition config_check="MOD_CHAT_ENABLED == true">
            <li><a href="/app/chat/
            chat_launch#rn:session#">#rn:msg:CHAT_LBL#</a></li>
        </rn:condition>
        <li><a href="/app/
        ask#rn:session#">#rn:msg:EMAIL_US_LBL#</a></li>
        <li><a
        href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#<
        /a></li>
        <rn:condition config_check="COMMUNITY_ENABLED == true">
            <li><a
            href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_
            LBL#</a></li>
        </rn:condition>
    </ul>
</li>
<li>
    <a href="javascript:void(0);"
    class="rn_ParentMenu">#rn:msg:YOUR_ACCOUNT_LBL#</a>
    <ul class="rn_Submenu rn_Hidden">
        <rn:condition logged_in="false">
            <rn:condition config_check="PTA_ENABLED == true">
                <li><a
                href="javascript:void(0);">#rn:msg:SIGN_UP_LBL#</
                a></li>
                <li><a
                href="javascript:void(0);">#rn:msg:LOG_IN_LBL#</
                a></li>
            <rn:condition_else>
                <li><a href="/app/utils/
                create_account#rn:session#">#rn:msg:SIGN_UP_LBL#<
                /a></li>
                <li><a href="/app/
                #rn:config:CP_LOGIN_URL##rn:session#">#rn:msg:LOG
                _IN_LBL#</a></li>
            </rn:condition>
```

```
                    <li><a href="/app/
                    #rn:config:CP_ACCOUNT_ASSIST_URL##rn:session#">#rn:ms
                    g:ACCOUNT_ASSISTANCE_LBL#</a></li>
                </rn:condition>
                <li><a href="/app/account/questions/list
                #rn:session#">#rn:msg:VIEW_YOUR_SUPPORT_HISTORY_CMD#</
                a></li>
                <li><a href="/app/account/profile
                #rn:session#">#rn:msg:CHANGE_YOUR_ACCOUNT_SETTINGS_CMD#</
                a></li>
            </ul>
        </li>
    </ul>
```

Home section

The rn_MenuList element is a list of the three options: Home, Contact Us, and Your Account. The Home option consists of the following simple code to return customers to the mobile home page.

```
        <li>
            <a href="/app/
            #rn:config:CP_HOME_URL##rn:session#">#rn:msg:HOME_LBL#</a>
        </li>
```

Contact Us section

Code for the Contact Us section is more complex since it displays several contact options. The following code defines the Contact Us section.

```
        <li>
            <a href="javascript:void(0);"
            class="rn_ParentMenu">#rn:msg:CONTACT_US_LBL#</a>
            <ul class="rn_Submenu rn_Hidden">
                <rn:condition config_check="MOD_CHAT_ENABLED == true">
                    <li><a href="/app/chat/
                    chat_launch#rn:session#">#rn:msg:CHAT_LBL#</a></li>
                </rn:condition>
                <li><a href="/app/
                ask#rn:session#">#rn:msg:EMAIL_US_LBL#</a></li>
                <li><a
                href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#<
                /a></li>
                <rn:condition config_check="COMMUNITY_ENABLED == true">
                    <li><a
                    href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_
```

```
                LBL#</a></li>
            </rn:condition>
        </ul>
    </li>
```

Clicking Contact Us invokes a submenu with Chat, Email Us, Call Us Directly, and Ask the Community options. Notice that the JavaScript links for the last two options are blank by default. You'll need to define the Call Us Directly link and the Ask the Community link.

Your Account section

The Your Account section is defined by the following code. Notice that the first three options on the Your Account submenu—Sign Up, Log In, and Account Assistance—are displayed conditionally only when customers are not logged in. When customers are logged in, the Your Account menu has just two options: View Your Support History and Change Your Account Settings.

```
    <li>
        <a href="javascript:void(0);"
        class="rn_ParentMenu">#rn:msg:YOUR_ACCOUNT_LBL#</a>
        <ul class="rn_Submenu rn_Hidden">
            <rn:condition logged_in="false">
                <rn:condition config_check="PTA_ENABLED == true">
                    <li><a
                    href="javascript:void(0);">#rn:msg:SIGN_UP_LBL#</
                    a></li>
                    <li><a
                    href="javascript:void(0);">#rn:msg:LOG_IN_LBL#</
                    a></li>
                <rn:condition_else>
                    <li><a href="/app/utils/
                    create_account#rn:session#">#rn:msg:SIGN_UP_LBL#<
                    /a></li>
                    <li><a href="/app/
                    #rn:config:CP_LOGIN_URL##rn:session#">#rn:msg:LOG
                    _IN_LBL#</a></li>
                </rn:condition>
                <li><a href="/app/
                #rn:config:CP_ACCOUNT_ASSIST_URL##rn:session#">#rn:ms
                g:ACCOUNT_ASSISTANCE_LBL#</a></li>
            </rn:condition>
            <li><a href="/app/account/questions/list
            #rn:session#">#rn:msg:VIEW_YOUR_SUPPORT_HISTORY_CMD#</
            a></li>
```

```
            <li><a href="/app/account/profile
            #rn:session#">#rn:msg:CHANGE_YOUR_ACCOUNT_SETTINGS_CMD#</
            a></li>
        </ul>
    </li>
```

Removing and adding Menu button navigation options

You can remove or add navigation options for the Menu button.

To remove navigation options from the Menu button

1 Open the *mobile.php* file in the */views/templates* folder.

2 To remove Home, delete the following lines of code.

```
<li>
    <a href="/app/
    #rn:config:CP_HOME_URL##rn:session#">#rn:msg:HOME_LBL#</a>
</li>
```

3 To remove Contact Us, delete the following lines of code.

```
<li>
    <a href="javascript:void(0);"
    class="rn_ParentMenu">#rn:msg:CONTACT_US_LBL#</a>
    <ul class="rn_Submenu rn_Hidden">
        <rn:condition config_check="MOD_CHAT_ENABLED == true">
            <li><a href="/app/chat/
            chat_launch#rn:session#">#rn:msg:CHAT_LBL#</a></li>
        </rn:condition>
        <li><a href="/app/ask#rn:session#">#rn:msg:EMAIL_US_LBL#</
        a></li>
        <li><a
        href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#</
        a></li>
        <rn:condition config_check="COMMUNITY_ENABLED == true">
            <li><a
            href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_LBL#
            </a></li>
        </rn:condition>
    </ul>
</li>
```

4 To remove Your Account, Delete the following lines of code.

```
<li>
    <a href="javascript:void(0);"
    class="rn_ParentMenu">#rn:msg:YOUR_ACCOUNT_LBL#</a>
    <ul class="rn_Submenu rn_Hidden">
        <rn:condition logged_in="false">
            <rn:condition config_check="PTA_ENABLED == true">
                <li><a
                href="javascript:void(0);">#rn:msg:SIGN_UP_LBL#</
                a></li>
                <li><a
                href="javascript:void(0);">#rn:msg:LOG_IN_LBL#</
                a></li>
            <rn:condition_else>
                <li><a href="/app/utils/
                create_account#rn:session#">#rn:msg:SIGN_UP_LBL#<
                /a></li>
                <li><a href="/app/
                #rn:config:CP_LOGIN_URL##rn:session#">#rn:msg:LOG
                _IN_LBL#</a></li>
            </rn:condition>
            <li><a href="/app/
            #rn:config:CP_ACCOUNT_ASSIST_URL##rn:session#">#rn:ms
            g:ACCOUNT_ASSISTANCE_LBL#</a></li>
        </rn:condition>
        <li><a href="/app/account/questions/list
        #rn:session#">#rn:msg:VIEW_YOUR_SUPPORT_HISTORY_CMD#</
        a></li>
        <li><a href="/app/account/profile
        #rn:session#">#rn:msg:CHANGE_YOUR_ACCOUNT_SETTINGS_CMD#</
        a></li>
    </ul>
</li>
```

5 Save *mobile.php*.

Adding options to the Menu button

You can add other options to the Menu button that will take your customers to pages in your customer portal or to external URLs. The following example removes the default options and creates a custom menu that opens when the Menu button is clicked.

To add options to the Menu button

1 Open the *mobile.php* file in the */views/templates* folder.

2 Delete the default code for the Home option, the Contact Us option, and the Your Account option.

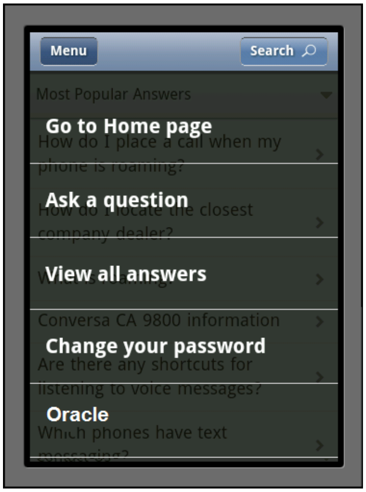
3 Locate the following line of code.

```
<ul id="rn_MenuList" class="rn_Hidden">
```

4 Add the following code below the line you located in step 3.

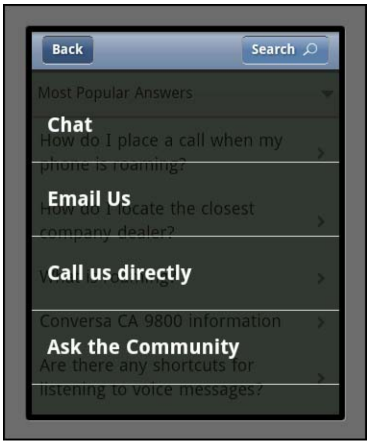
```
<li>
    <a href="/app/#rn:config:CP_HOME_URL##rn:session#">Go to Home
    page</a>
</li>
<li>
    <a href="/app/ask#rn:session#">Ask a question</a>
</li>
<li>
    <a href="/app/answers/list#rn:session#">View all answers</a>
</li>
<li>
    <a href="/app/account/change_password#rn:session#">Change your
    password</a>
</li>
<li>
    <a href="http://www.oracle.com">Oracle</a>
</li>
```

5 Save *mobile.php*.



Contact Us section

Clicking the Menu button and then clicking Contact Us opens the following menu.



- **Chat**—Clicking Chat submits a request to chat with an agent. Refer to Chatting on the mobile customer portal.
- **Email Us**—Clicking Email Us opens the page to ask a question. Refer to Asking a question on the mobile customer portal.

- **Call Us Directly**—This link opens a web page containing your organization's contact information. By default, the URL is void, so you'll need to specify the URL you want to link to. Refer to Adding a URL for the Call Us Directly option.
- **Ask the Community**—This link takes customers to your organization's **community** forum page. By default, the URL is void, so you'll need to specify the URL for the community forum page where they can submit their questions. Refer to Defining a URL for the Ask the Community option.

Note The Ask the Community link is enclosed in a condition that checks to see if Oracle RightNow Social Experience (Social Experience) is enabled on your site. If it is not, the link does not appear. For information about this condition tag, refer to Config Setting Check condition.

Clicking the Back button on the upper left returns customers to the menu they originally accessed by clicking the Menu button (Home, Contact Us, and Your Account).

Configuration options for the Contact Us menu include removing default items and adding other options to the menu.

Removing default options from the Contact Us menu

To remove default options from the Contact Us menu

1 Open the *mobile.php* file in the */views/templates* folder.

2 To remove the Chat option, delete the following lines of code.

```
<rn:condition config_check="MOD_CHAT_ENABLED == true">
    <li><a href="/app/chat/
    chat_launch#rn:session#">#rn:msg:CHAT_LBL#</a></li>
</rn:condition>
```

3 To remove the Email Us option, delete the following line of code.

```
<li><a href="/app/ask#rn:session#">#rn:msg:EMAIL_US_LBL#</a></li>
```

4 To remove the Call Us Directly option, delete the following line of code.

```
<li><a href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#</a></
li>
```

5 To remove the Ask the Community option, delete the following line of code.

```
<rn:condition config_check="COMMUNITY_ENABLED == true">
    <li><a
    href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_LBL#</a></
```

```
    li>
</rn:condition>
```

6 Save *mobile.php*.

Adding options to the Contact Us menu

To add an option to the Contact Us menu

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following lines of code.

```
<a href="javascript:void(0);"
class="rn_ParentMenu">#rn:msg:CONTACT_US_LBL#</a>
<ul class="rn_Submenu rn_Hidden">
    <rn:condition config_check="MOD_CHAT_ENABLED == true">
        <li><a href="/app/chat/
        chat_launch#rn:session#">#rn:msg:CHAT_LBL#</a></li>
    </rn:condition>
    <li><a href="/app/ask#rn:session#">#rn:msg:EMAIL_US_LBL#</a></li>
    <li><a href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#</
    a></li>
    <rn:condition config_check="COMMUNITY_ENABLED == true">
        <li><a
        href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_LBL#</
        a></li>
    </rn:condition>
</ul>
```

3 Add code that resembles the following example in the location where you want it to appear in the list of options. Here we'll add a link for driving directions after the Call Us Directly option.

```
    <li><a href="http://www.mapquest.com/
    maps?city=Bozeman&state=MT&address=136+Enterprise+Blvd&zipcode=59
    718-5945&country=US&latitude=45.655298&longitude=-
    111.06968&geocode=ADDRESS">Get driving directions</a></li>
```

4 Save *mobile.php*.

Adding a URL for the Call Us Directly option

By default, the URL for the Call Us Directly option is void so you won't unknowingly link to a site you don't want to link to. To activate the option, you'll want to specify a URL that takes customers to a web page containing your organization's contact information.

If you prefer to display your phone number in the menu, you can change the message base to add the phone number.

To define a URL for the Call Us Directly option

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<li><a href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#</a></
li>
```

3 Replace `javascript:void(0);` with the URL for your contact page. Your edited code will resemble the following.

```
<li><a href="http://www.oracle.com/company-
contact.php">#rn:msg:CALL_US_DIRECTLY_LBL#</a></li>
```

4 Save *mobile.php*.

Adding a phone number

To add a phone number to the Contact Us options

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<li><a href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#</a></
li>
```

3 Edit the code to replace the Call Us Directly message base with your phone number. Your edited code will resemble the following.

```
<li><a href="javascript:void(0);">Call us at (406) 555-1212</a></li>
```

4 Save *mobile.php*.

Defining a URL for the Ask the Community option

By default, the URL for the Ask the Community option is void so you won't unknowingly link to a site you don't want to link to. To activate the option, you'll need to specify a URL that takes customers to the community forum page where they can submit their questions.

Note The Ask the Community option is enclosed in a condition that checks to see if **Social Experience** is enabled on your site. If it is not, the option does not appear. For information about this condition tag, refer to Config Setting Check condition.

To define a URL for the Ask the Community option

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following code.

```
<li><a
href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_LBL#</a></
li>
```

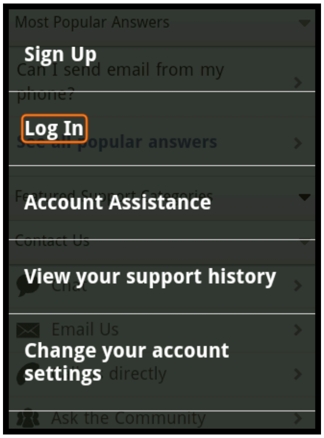
3 Replace `javascript:void(0);` with the URL for your community forum page that lets customers submit questions, being sure to append the community token (`#rn:community_token#`)to the end. Your edited code will resemble the following.

```
<li><a href="http://community.example.com/resources/b1248fb2a1/
summary#rn:community_token#">
#rn:msg:ASK_THE_COMMUNITY_LBL#</a></li>
```

4 Save *mobile.php*.

Your Account options

When customers who are not logged in click the Menu button and then click Your Account, the following options are displayed. Customers who are logged in see only the View Your Support History and Change Your Account Settings options.



- **Sign Up**—Customers who click Sign Up are taken to a page where they can enter their account information. Refer to Create account page.
- **Log In**—Clicking Log In takes customers to the login page. Configure the page here.
- **Account Assistance**—Customers can click Account Assistance to request their user name or reset their password.
- **View Your Support History**—When customers click View Your Support History, a list of incidents they have submitted displays. Customers can drill down for details about a specific incident. Refer to Configuring the support history page.
- **Change Your Account Settings**—Clicking Change Your Account Settings takes customers to the account settings page, where they can update the information in their contact record. Configure the page here.

Configuration options for the Your Account menu include removing default items and adding other options to the menu.

Removing default options from the Your Account menu

To remove default options from the Your Account menu

1 Open the *mobile.php* file in the */views/templates* folder.

2 To remove the Sign Up and Log In options, delete the following lines of code.

```
<rn:condition config_check="PTA_ENABLED == true">
    <li><a href="javascript:void(0);">#rn:msg:SIGN_UP_LBL#</a></li>
    <li><a href="javascript:void(0);">#rn:msg:LOG_IN_LBL#</a></li>
<rn:condition_else>
    <li><a href="/app/utils/
    create_account#rn:session#">#rn:msg:SIGN_UP_LBL#</a></li>
    <li><a href="/app/
    #rn:config:CP_LOGIN_URL##rn:session#">#rn:msg:LOG_IN_LBL#</a></
    li>
</rn:condition>
```

3 To remove the Account Assistance option, delete the following line of code.

```
<li><a href="/app/
#rn:config:CP_ACCOUNT_ASSIST_URL##rn:session#">#rn:msg:ACCOUNT_ASSIST
ANCE_LBL#</a></li>
```

4 To remove the View Your Support History option, delete the following line of code.

```
<li><a href="/app/account/questions/
list#rn:session#">#rn:msg:VIEW_YOUR_SUPPORT_HISTORY_CMD#</a></li>
```

5 To remove the Change Your Account Settings option, delete the following line of code.

```
<li><a href="/app/account/
profile#rn:session#">#rn:msg:CHANGE_YOUR_ACCOUNT_SETTINGS_CMD#</a></
li>
```

6 Save *mobile.php*.

Adding options to the Your Account menu

To add an option to the Your Account menu

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following lines of code.

```
    <li>
        <a href="javascript:void(0);"
        class="rn_ParentMenu">#rn:msg:YOUR_ACCOUNT_LBL#</a>
```

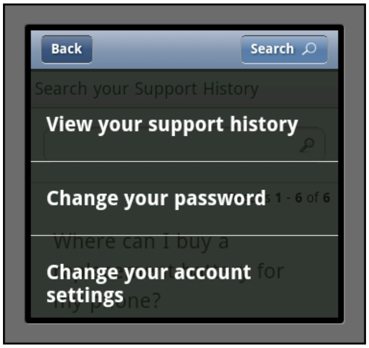
```
        <ul class="rn_Submenu rn_Hidden">
            <rn:condition logged_in="false">
                <rn:condition config_check="PTA_ENABLED == true">
                    <li><a
                    href="javascript:void(0);">#rn:msg:SIGN_UP_LBL#</
                    a></li>
                    <li><a
                    href="javascript:void(0);">#rn:msg:LOG_IN_LBL#</
                    a></li>
                <rn:condition_else>
                    <li><a href="/app/utils/
                    create_account#rn:session#">#rn:msg:SIGN_UP_LBL#<
                    /a></li>
                    <li><a href="/app/
                    #rn:config:CP_LOGIN_URL##rn:session#">#rn:msg:LOG
                    _IN_LBL#</a></li>
                </rn:condition>
                <li><a href="/app/
                #rn:config:CP_ACCOUNT_ASSIST_URL##rn:session#">#rn:ms
                g:ACCOUNT_ASSISTANCE_LBL#</a></li>
            </rn:condition>
            <li><a href="/app/account/questions/list
            #rn:session#">#rn:msg:VIEW_YOUR_SUPPORT_HISTORY_CMD#</
            a></li>
            <li><a href="/app/account/profile
            #rn:session#">#rn:msg:CHANGE_YOUR_ACCOUNT_SETTINGS_CMD#</
            a></li>
        </ul>
    </li>
```

3 Add code that resembles the following example in the location where you want it to appear in the list of options. Because our example is adding a change password option, we'll put it between the options available to logged-in customers: View Your Support History and Change Your Account Settings.

```
<li><a href="/app/account/change_password#rn:session#">Change
your password</a></li>
```

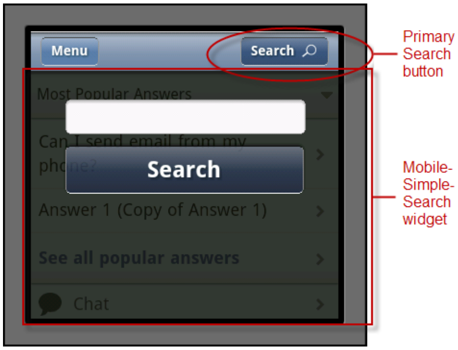
Note Depending on the option you're adding, you'll want to pay attention to whether you're placing the new option between the `logged_in="false"` condition tags. If you want the option to be available to everyone, place it anywhere in the block of code. If you want the option to be available when customers are logged in, place it after the closing condition tag (`</rn:condition>`).

4 Save *mobile.php*.



Template search feature

The search feature on the mobile reference implementation template consists of two widgets. The MobileNavigationMenu widget generates the Search button that toggles between displaying and hiding the MobileSimpleSearch widget. The MobileSimpleSearch widget includes a search field and Search button. To distinguish between the two Search buttons, we'll call the one from the MobileNavigationMenu widget the primary Search button.



[Review the code that makes up the search feature on the template.]

You can change the following search configuration options on the mobile template.

- [The label on the primary Search button]
- [The icon on the primary Search button]

- The icon in the search field that clears the field
- An initial hint that populates the search field
- The label for the Search button on the MobileSimpleSearch widget
- The page that opens when the Search button is clicked
- An icon to replace the Search button

Return to template configuration options.

Code for the template search feature

The MobileNavigationMenu widget is a toggle button. Because the button can be used for different purposes, the template specifies the label and image to define its use as a search button. (The Menu button to the left of the Search button is also generated using the MobileNavigationMenu widget.) The *submenu* attribute defines the div ID of the element to be displayed when the button is clicked. This div ID is rn_SearchForm, which contains the MobileSimpleSearch widget. Because the class for the rn_SearchForm div is rn_Hidden, the MobileSimpleSearch widget remains hidden until the MobileNavigationMenu widget calls it when the Search button is clicked. This is the code for the template's search feature.

```
<span class="rn_FloatRight rn_Search" role="search">
    <rn:widget path="navigation/MobileNavigationMenu"
    label_button="#rn:msg:SEARCH_LBL#<img src='images/search.png'
    alt='#rn:msg:SEARCH_LBL#'/>" submenu="rn_SearchForm"/>
</span>
<div id="rn_SearchForm" class="rn_Hidden">
    <rn:widget path="search/MobileSimpleSearch" report_page_url="/
    app/answers/list"/>
</div>
```

Changing the primary Search button label

To change the primary Search button label

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<rn:widget path="navigation/MobileNavigationMenu"
label_button="#rn:msg:SEARCH_LBL#<img src='images/search.png'
alt='#rn:msg:SEARCH_LBL#'/>" submenu="rn_SearchForm"/>
```

3 Edit the code to change the *label_button* attribute so that your code resembles the following.

```
<rn:widget path="navigation/MobileNavigationMenu"
```

```
label_button="Find Answers<img src='images/search.png'
alt='#rn:msg:SEARCH_LBL#'/>" submenu="rn_SearchForm"/>
```

4 Save *mobile.php*.

Replacing the icon on the primary Search button

To change the icon for the primary Search button

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<rn:widget path="navigation/MobileNavigationMenu"
label_button="#rn:msg:SEARCH_LBL#<img src='images/search.png'
alt='#rn:msg:SEARCH_LBL#'/>" submenu="rn_SearchForm"/>
```

3 Edit the code to change the image path, as shown in the following example code.

```
<rn:widget path="navigation/MobileNavigationMenu"
label_button="#rn:msg:SEARCH_LBL#<img src='images/search_new.png'
alt='#rn:msg:SEARCH_LBL#'/>" submenu="rn_SearchForm"/>
```

4 Save *mobile.php*.

Replacing the icon that clears the search field

When a customer begins entering text in the search field, a circled X appears on the right side of the field. Clicking the X completely clears the search field so the customer can enter a new search term without having to delete each previously entered character.

To change the icon for clearing the search field

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<rn:widget path="search/MobileSimpleSearch"
report_page_url="/app/answers/list"/>
```

3 Edit the code to add the *clear_text_icon_path* attribute for defining the new icon, as shown in the following example code.

```
<rn:widget path="search/MobileSimpleSearch"
report_page_url="/app/answers/list"
clear_text_icon_path="images/new_x.png" />
```

4 Save *mobile.php*.

Adding a hint to the search field

By default, the search field is blank when you first open it, but you can add a hint to the field. The hint is cleared when focus enters the field.

Note The search field automatically has focus when the primary Search button is clicked, so the hint is not visible unless the field loses focus (that is, unless the customer clicks somewhere else on the page).

To add a hint to the search field

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<rn:widget path="search/MobileSimpleSearch"
report_page_url="/app/answers/list"/>
```

3 Edit the code to add the *label_hint* attribute, as shown in the following example code.

```
<rn:widget path="search/MobileSimpleSearch"
report_page_url="/app/answers/list"
label_hint="Enter search term here" />
```

4 Save *mobile.php*.

Changing the Search button label

If you added the *search_icon_path* attribute to the MobileSimpleSearch widget (go here to learn how) to replace the label with an icon, changing the label as described in this procedure changes the alternate text for the button. By default, the label is “Search.”

Note Alternative (alt) text is provided for accessibility purposes so that screen readers, used by low-vision customers, know how to describe the button.

To change the Search button label

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<rn:widget path="search/MobileSimpleSearch"
report_page_url="/app/answers/list"/>
```

3 Edit the code to add the *label_search* attribute, as shown in the following example code.

```
<rn:widget path="search/MobileSimpleSearch"
report_page_url="/app/answers/list"
label_search="Find answers now" />
```

4 Save *mobile.php*.

Opening a different page when the Search button is clicked

When customers click the Search button, the answers list page opens by default, but you can change that. For example, you might have created an alternate page that you want to display instead. This example procedure assumes you've created a *list_2.php* file in the *answers* folder.

To open a different page when the Search button is clicked

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<rn:widget path="search/MobileSimpleSearch"
report_page_url="/app/answers/list"/>
```

3 Edit the code to edit the *report_page_url* attribute as shown in this example. (The page name must begin with */app/*. Alternately, you can specify a fully qualified URL that accepts the search parameters that are passed in the URL.)

```
<rn:widget path="search/MobileSimpleSearch"
report_page_url="/app/answers/list_2"/>
```

4 Save *mobile.php*.

Replacing the Search button with an icon

To replace the Search button with an icon

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<rn:widget path="search/MobileSimpleSearch"
```

```
report_page_url="/app/answers/list"/>
```

3 Edit the code to add the *search_icon_path* attribute, as shown in the following example code.

```
<rn:widget path="search/MobileSimpleSearch"
report_page_url="/app/answers/list"
search_icon_path="images/search.png" />
```

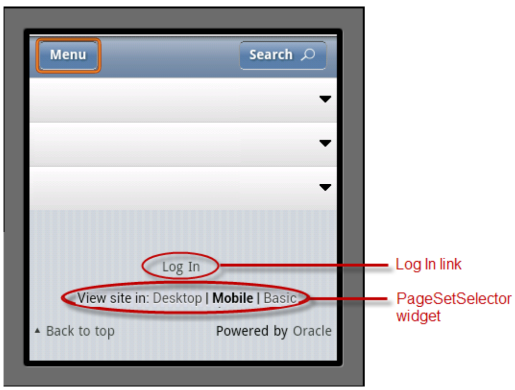
Note If the image for the *search_icon_path* attribute is in the */cp/customer/assets/themes/mobile/images* folder, you need to specify only `images/<file_name>`. If you reference a file in another folder, specify the entire path, for example:

```
search_icon_path="/cp/customer/assets/new images/
new_search.png"
```

4 Save *mobile.php*.

Additional mobile template features

Besides the Search and Menu buttons, the template for the mobile customer portal includes a Log In/Logout link, the PageSetSelector widget, and navigation options to take customers to the top of the page or to the Oracle website.

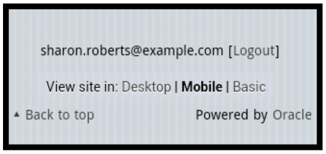


[Learn about configuring log in here.](#)

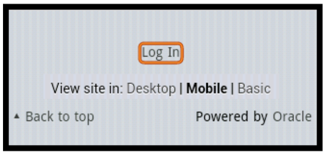
[Learn about the PageSetSelector widget here.](#)

Configuring the template Log In link

By default, the template for the mobile customer portal includes Log In/Logout links. When customers are logged in, the email address is displayed next to the Logout link.



Customer logged in



Customer not logged in

You can configure the following options for the Log In/Logout links.

- [Removing the links](#)
- [Editing the link labels](#)
- [Adding a welcome message](#)
- [Adding the customer's name](#)
- [Removing the email address](#)

[Click here to learn how to configure the login page that opens when the Log In link is clicked.](#)

Removing Log In/Logout links

To remove the Log In/Logout links

1 Open the *mobile.php* file in the */views/templates* folder.

2 Delete the following lines of code.

```
<div>
    <rn:condition logged_in="true">
        <rn:field name="Contact.Emails.PRIMARY.Address"/><rn:widget
        path="login/LogoutLink"/>
    <rn:condition_else />
```

```
            <rn:condition config_check="PTA_ENABLED == true">
                <a href="javascript:void(0);">#rn:msg:LOG_IN_LBL#</a>
            <rn:condition_else/>
                <a href="/app/
                #rn:config:CP_LOGIN_URL##rn:session#">#rn:msg:LOG_IN_LBL#
                </a>
            </rn:condition>
        </rn:condition>
        <br/><br/>
    </div>
```

3 Save *mobile.php*.

Editing link labels

To edit the Log In and Logout labels

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following lines of code.

```
        <rn:field name="Contact.Emails.PRIMARY.Address"/><rn:widget
        path="login/LogoutLink"/>
    <rn:condition_else />
        <rn:condition config_check="PTA_ENABLED == true">
            <a href="javascript:void(0);">#rn:msg:LOG_IN_LBL#</a>
        <rn:condition_else/>
            <a href="/app/
            #rn:config:CP_LOGIN_URL##rn:session#">#rn:msg:LOG_IN_LBL#</a>
        </rn:condition>
```

3 Edit the code with new link names. You'll add the *label* attribute to the LogoutLink widget and edit the login message base so your code resembles the following.

```
        <rn:field name="Contact.Emails.PRIMARY.Address"/><rn:widget
        path="login/LogoutLink" label="Sign Out Now" />
    <rn:condition_else />
            <rn:condition config_check="PTA_ENABLED == true">
            <a href="javascript:void(0);">Sign In Now</a>
        <rn:condition_else/>
            <a href="/app/#rn:config:CP_LOGIN_URL##rn:session#">Sign In
            Now</a>
        </rn:condition>
```

4 Save *mobile.php*.

Adding a welcome message

The first example adds a generic welcome message that does not distinguish between logged-in and logged-out customers. The second example uses the same generic welcome message for customers who are not logged in, but adds a personalized welcome for logged-in customers.

To add a generic welcome message

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following lines of code.

```
<div>
    <rn:condition logged_in="true">
        <rn:field name="Contact.Emails.PRIMARY.Address"/><rn:widget
        path="login/LogoutLink"/>
    <rn:condition_else />
        <rn:condition config_check="PTA_ENABLED == true">
            <a href="javascript:void(0);">#rn:msg:LOG_IN_LBL#</a>
        <rn:condition_else/>
            <a href="/app/
            #rn:config:CP_LOGIN_URL##rn:session#">#rn:msg:LOG_IN_LBL#
            </a>
        </rn:condition>
    </rn:condition>
    <br/><br/>
</div>
```

3 Add your welcome message between the `<div>` and `<rn:condition logged_in="true">` lines. Your code will resemble the following.

```
Welcome to Global Wireless
<br/><br/>
```

4 Save *mobile.php*.

To add a conditional personalized welcome message

Notice the placement of code with respect to the condition tags, where the generic message appears to customers who are not logged in and the personalized message appears to logged-in customers.

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following lines of code.

```
<div>
    <rn:condition logged_in="true">
        <rn:field name="Contact.Emails.PRIMARY.Address"/><rn:widget
        path="login/LogoutLink"/>
    <rn:condition_else />
        <rn:condition config_check="PTA_ENABLED == true">
            <a href="javascript:void(0);">#rn:msg:LOG_IN_LBL#</a>
        <rn:condition_else/>
            <a href="/app/
            #rn:config:CP_LOGIN_URL##rn:session#">#rn:msg:LOG_IN_LBL#
            </a>
        </rn:condition>
    </rn:condition>
    <br/><br/>
</div>
```

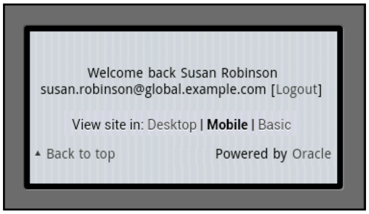
3 Edit the code to resemble the following.

```
<div>
    <rn:condition logged_in="true">
        Welcome back <rn:field name="Contact.LookupName"/>
        <rn:field name="Contact.Emails.PRIMARY.Address"/><rn:widget
        path="login/LogoutLink"/>
```

```
        <rn:condition_else />
        Welcome to Global Wireless
        <br/><br/>
            <rn:condition config_check="PTA_ENABLED == true">
                <a href="javascript:void(0);">#rn:msg:LOG_IN_LBL#</a>
            <rn:condition_else/>
                <a href="/app/
                #rn:config:CP_LOGIN_URL##rn:session#">#rn:msg:LOG_IN_LBL#
                </a>
            </rn:condition>
        </rn:condition>
        <br/><br/>
    </div>
```

4 Save *mobile.php*.

Customers who are not logged in will see the same message as in the first procedure. Logged-in customers will see a message resembling the following figure.



If you display customers' names, you might want to [remove their email addresses from the Log In link](#).

Adding the customer name

You can [display the customer's name as part of a personalized welcome message](#), or you might want to add just the name without a message. You might also want to display the organization associated with the customer.

To add customer name and organization

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following lines of code.

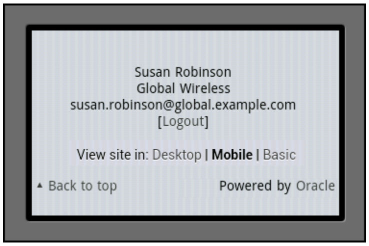
```
<rn:condition logged_in="true">
<rn:field name="Contact.Emails.PRIMARY.Address"/><rn:widget
```

```
path="login/LogoutLink"/>
```

3 Edit the code to add name and organization fields. This example puts each field and the Logout link on a separate line. Your code might resemble the following.

```
<rn:condition logged_in="true">
<rn:field name="Contact.LookupName"/>
<br/>
<rn:field name="Contact.OrganizationName"/>
<br/>
<rn:field name="Contact.Emails.PRIMARY.Address"/>
<br/>
<rn:widget path="login/LogoutLink"/>
```

4 Save *mobile.php*.



Removing the email address from the mobile template

If you don’t want the email address to be associated with the Log In/Logout link, you can remove it from the template.

To remove the email address

1 Open the *mobile.php* file in the */views/templates* folder.

2 Locate the following line of code.

```
<rn:field name="Contact.Emails.PRIMARY.Address"/><rn:widget
path="login/LogoutLink"/>
```

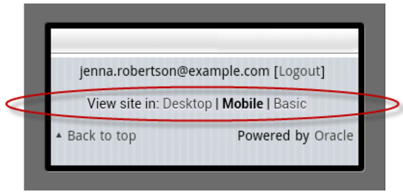
3 Edit the line to remove the `Contact.Emails.PRIMARY.Address` field.

```
<rn:widget path="login/LogoutLink"/>
```

4 Save *mobile.php*.

PageSetSelector

If you select the “Allow my current browser/user agent to be the deciding factor” check box on the Set Environment page of the Customer Portal Administration site, the page set is determined by the user agent accessing the pages. As a result, the mobile page set opens when mobile devices access the customer portal. The PageSetSelector widget lets customers select the option of viewing the standard reference implementation or the basic page set on their mobile device instead of viewing the mobile page set. (Cookies must be enabled on the customer’s browser to allow this option. If cookies are disabled and the Desktop or Basic option is selected, the mobile page simply refreshes.)



Login page

Clicking the Log In link on the template opens the login page, where customers can log in, request their user name or password, create a new account, or log in through an existing external account, such as Facebook, Twitter, and Google. (Refer to Customer portal open login.) Customers can also access this page by clicking Menu > Your Account > Log In.

Note The Facebook logo appears only if FACEBOOK_OAUTH_APP_ID and FACEBOOK_OAUTH_APP_SECRET have been defined on the **administration interface**. The Twitter logo appears only if TWITTER_OAUTH_APP_ID and TWITTER_OAUTH_APP_SECRET have been defined. And the Google logo appears only if GOOGLE_OAUTH_APP_ID and GOOGLE_OAUTH_APP_SECRET have been defined. Refer to Open login configuration settings.

The configuration options for the login page include the following.

- Working with OpenLogin widgets
- Editing labels on the page
- Removing the Password field
- Removing the Create a New Account link
- Editing the Create a New Account link

Working with OpenLogin widgets

You might decide to remove some or all of the OpenLogin widgets, change their labels, add URL text, or define a redirect page after customers log in. Select a link for one or more of the following procedures.

- Removing all OpenLogin widgets
- Removing selected OpenLogin widgets
- Changing labels on OpenLogin widgets
- Populating and pre-setting OpenID URLs
- Specifying the redirect page for customers after they log in to their external provider

Removing all OpenLogin widgets

To remove all OpenLogin widgets from the login page

1 Open the *login_form.php* file in the */views/pages/mobile/utils* folder.

2 Delete the following lines of code.

```
<div id="rn_ThirdPartyLogin"
class="rn_Padding">

    <h1>#rn:msg:LOG_REGISTER_SERVICES_CONTINUE_MSG#</h1>

    <rn:widget path="login/OpenLogin"/> <? /* Attributes Default to
    Facebook */ ?>

    <rn:widget path="login/OpenLogin"
    controller_endpoint="/ci/openlogin/oauth/authorize/twitter"
    label_service_button="Twitter"
    label_process_explanation="#rn:msg:CLICK_BTN_TWITTER_LOG_TWITTER_
    MSG#"
    label_login_button="#rn:msg:LOG_IN_USING_TWITTER_LBL#" />

    <rn:widget path="login/OpenLogin"
    controller_endpoint="/ci/openlogin/openid/authorize/google"
    label_service_button="Google"
    label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VE
    RIFY_MSG#"
    label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#" />

    <rn:widget path="login/OpenLogin"
    controller_endpoint="/ci/openlogin/openid/authorize/yahoo"
```

```
        label_service_button="Yahoo"
        label_process_explanation="#rn:msg:CLICK_BTN_YAHOO_LOG_YAHOO_VERI
        FY_MSG#"
        label_login_button="#rn:msg:LOG_IN_USING_YAHOO_LBL#" />

        <rn:widget path="login/OpenLogin"
        controller_endpoint="/ci/openlogin/openid/authorize"
        label_service_button="Wordpress"
        openid="true"
        preset_openid_url="http://[username].wordpress.com"
        openid_placeholder="[#rn:msg:YOUR_WORDPRESS_USERNAME_LBL#]"
        label_process_explanation="#rn:msg:YOULL_LOG_ACCT_WORDPRESS_WINDO
        W_MSG#"
        label_login_button="#rn:msg:LOG_IN_USING_WORDPRESS_LBL#" />

        <rn:widget path="login/OpenLogin"
        controller_endpoint="/ci/openlogin/openid/authorize"
        label_service_button="OpenID"
        openid="true"
        openid_placeholder="http://[provider]"
        label_process_explanation="#rn:msg:YOULL_OPENID_PROVIDER_LOG_PROV
        IDER_MSG#"
        label_login_button="#rn:msg:LOG_IN_USING_OPENID_LBL#" />

    </div>
```

3 Save *login_form.php*.

Continue configuring the mobile login page.

Removing selected OpenLogin widgets

To remove selected OpenLogin widgets from the login page

1 Open the *login_form.php* file in the */views/pages/mobile/utils* folder.

2 Identify the widgets you want to remove. The code `<rn:widget path="login/OpenLogin" />` is for the Facebook widget. All other widgets include the provider's name in the *controller_endpoint, label_service_button, label_process_explanation,* and *label_login_button* attributes. For example, here is the widget to log in with a Google account.

```
<rn:widget path="login/OpenLogin"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
```

```
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#" />
```

3 Delete the lines of code associated with open login providers you want to remove from the login page.

4 Save *login_form.php*.

Continue configuring the mobile login page.

Changing labels on OpenLogin widgets

This procedure uses the Google OpenLogin widget as an example, but you can use similar methods to edit labels on all of the OpenLogin widgets.

To change labels on OpenLogin widgets

1 Open the *login_form.php* file in the */views/pages/mobile/utils* folder.

2 Locate the code for the widget you want to edit. This example uses the Google widget.

```
<rn:widget path="login/OpenLogin"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#" />
```

3 To edit the email labels that appear when the service provider authenticates the customer but does not provide the customer's email address, add any of the following widget attributes to the code: *label_email_address, label_email_prompt, label_email_prompt_cancel_button, label_email_prompt_submit_button,* and *label_email_prompt_title*. Your code might resemble the following.

```
<rn:widget path="login/OpenLogin"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#"
label_email_prompt="We'll get you started just as soon as you enter
your email address." />
```

4 To change the label on the login button (in this example, "Log in using Google"), edit the *label_login_button* attribute. Your code will resemble the following.

```
<rn:widget path="login/OpenLogin"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
```

```
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
label_login_button="Use Google to log in now" />
```

5 To change the label that explains the process to customers (in this example, "When you click on this button you will be taken to Google. Once you log in, Google will verify you and send you back here where you'll be logged in!"), edit the *label_process_explanation* attribute.

```
<rn:widget path="login/OpenLogin"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="Google will verify you and log you in
instantly."
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#" />
```

6 To change the "What will happen:" label in the explanation area, add the *label_process_header* attribute. Your code will resemble the following.

```
<rn:widget path="login/OpenLogin"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#"
label_process_header="Why it is okay to do this" />
```

7 To change the text label that is hidden by the service provider's logo, edit the *label_service_button* attribute.

8 Save *login_form.php*.

Continue configuring the mobile login page.

Populating and pre-setting OpenID URLs

By default, the WordPress and OpenID widgets use the OpenID protocol and therefore have the *openid* attribute set to true.

Using the *openid_placeholder* attribute of the OpenLogin widget, you can preset the URL that displays when an OpenID widget opens, where the URL contains a space for the user name. For example, for the WordPress OpenLogin widget, you would edit the widget code to remove the *preset_openid_url* attribute and include:

```
openid_placeholder="http://openid.wordpress.com/[username]"
```

However, you might want the increased security of hiding the URL so the customer sees only a user name field to complete. The *preset_openid_url* attribute defines the URL but does not expose it on the page. The reference implementation uses the following attributes to hide the URL and name the default placeholder "Your WordPress username." That widget code includes the following attributes:

```
preset_openid_url="http://openid.wordpress.com/[username]"
openid_placeholder="[#rn:msg:YOUR_WORDPRESS_USERNAME_LBL#]"
```

Continue configuring the mobile login page.

Specifying the redirect page

By default, customers will be redirected to the page they were on when they used open login after they have successfully logged in. You can send them to a different page by defining the *redirect_url* attribute.

To redirect customers after login

1 Open the *login_form.php* file in the */views/pages/mobile/utils* folder.

2 Locate the code for the widget you want to edit. This example uses the Google widget.

```
<rn:widget path="login/OpenLogin"
controller_endpoint="/ci/openlogin/openid/authorize/google"
label_service_button="Google"
label_process_explanation="#rn:msg:CLICK_BTN_GOOGLE_LOG_GOOGLE_VERIFY
_MSG#"
label_login_button="#rn:msg:LOG_IN_USING_GOOGLE_LBL#" />
```

3 Add the *redirect_url* attribute to the widget code setting the value to the page where you want customers to be redirected.

4 Save *login_form.php*.

Continue configuring the mobile login page.

Editing labels on the login page

To edit labels on the login page

1 Open the *login_form.php* file in the */views/pages/mobile/utils* folder.

2 Locate the following line of code.

```
<rn:widget path="login/LoginForm"
redirect_url="/app/account/questions/list"/>
```

3 To change the Username label, add the *label_username* attribute to the LoginForm widget and set the value equal to the replacement label you want to use.

4 To change the Password label, add the *label_password* attribute to the LoginForm widget and set the value equal to the replacement label you want to use.

5 To change the Log In button's label, add the *label_login_button* attribute to the LoginForm widget and set the value equal to the replacement label you want to use. Your edited code may resemble the following.

```
<rn:widget path="login/LoginForm"
redirect_url="/app/account/questions/list"
label_username="Your name"
label_password="Your password"
label_login_button="Log In Now" />
```

6 Save *login_form.php*.

Continue configuring the mobile login page.

Removing the Password field

If your organization doesn't require its customers to have passwords, you can remove the Password field from the login page. If you want to remove it from the create account page as well, you can simply set the value of EU_CUST_PASSWD_ENABLED to No. (Keep in mind that changing this configuration setting also affects your standard page set.) If you want to remove the password only from the login page, leave the configuration setting at its default value of Yes and remove the field from the page using the following procedure. The value of the LoginForm widget's *disable_password* attribute overrides the value of the configuration setting.

Note If you remove the Password field, any customers who already have passwords will still be able to log in with only their user name.

To remove the Password field from the login page

1 Open the *login_form.php* file in the */views/pages/mobile/utils* folder.

2 Locate the following line of code.

```
<rn:widget path="login/LoginForm"
redirect_url="/app/account/questions/list"/>
```

3 Add the *disable_password* attribute to the LoginForm widget and set its value to true, as shown in the following code.

```
<rn:widget path="login/LoginForm"
redirect_url="/app/account/questions/list"
disable_password="true" />
```

4 Save *login_form.php*.

5 Next, you'll want to change message bases that refer to passwords.

Changing message bases after removing the Password field

After you've removed the Password field from the login page, you'll probably want to edit the following pages and widget to remove references to passwords.

- Edit the link on the login page
- Remove the link on the account settings page

Editing the password link on the login page

To edit the password link on the login page

1 Open the *login_form.php* file in the */views/pages/mobile/utils* folder.

2 Locate the following line of code.

```
<a href="/app/
#rn:config:CP_ACCOUNT_ASSIST_URL##rn:session#">#rn:msg:FORGOT_YOUR_US
ERNAME_OR_PASSWORD_MSG#</a>
```

3 Edit the message base to remove the reference to the password. Your code might resemble the following.

```
<a href="/app/#rn:config:CP_ACCOUNT_ASSIST_URL##rn:session#">Forgot
your username?</a>
```

4 Save *login_form.php*.

Continue changing messages to remove password references.

Removing the password link on the account settings page

To remove the password link on the account settings page

1 Open the *profile.php* file in the */views/pages/mobile/account* folder.

2 Delete the following line of code.

```
<rn:condition external_login_used="false">
    <rn:condition config_check="EU_CUST_PASSWD_ENABLED == true">
        <a href="/app/
        #rn:config:CP_CHANGE_PASSWORD_URL##rn:session#">#rn:msg:CHG_Y
        OUR_PASSWORD_CMD#</a><br/><br/>
    </rn:condition>
</rn:condition>
```

3 Save *profile.php*.

Removing the Create a New Account link

You may not want to let your customers create an account from the mobile customer portal. If that's the case, you can remove the "Not registered yet?" message and the Create a New Account link from the login page.

To remove the Create a New Account link

1 Open the *login_form.php* file in the */views/pages/mobile/utils* folder.

2 Delete the following lines of code.

```
<div>
    <h3>#rn:msg:NOT_REGISTERED_YET_MSG#</h3>
    <br/><a href='/app/utils/create_account/redirect/
    <?=urlencode(\RightNow\Utils\Url::getParameter('redirect'));?>#rn
    :session#'>#rn:msg:CREATE_NEW_ACCT_CMD#</a><br/><br/>
</div>
```

3 Save *login_form.php*.

Continue configuring the mobile login page.

Editing the Create a New Account link

To edit the Create a New Account link

1 Open the *login_form.php* file in the */views/pages/mobile/utils* folder.

2 Locate the following line of code.

```
<br/><a href='/app/utils/create_account/redirect/
<?=urlencode(\RightNow\Utils\Url::getParameter('redirect'));?>#rn:ses
sion#'>#rn:msg:CREATE_NEW_ACCT_CMD#</a><br/><br/>
```

3 Edit the code to change the link's label. Your code will resemble the following.

```
<br/><a href='/app/utils/create_account/redirect/
<?=urlencode(\RightNow\Utils\Url::getParameter('redirect'));?>#rn:ses
sion#'>Sign Up Now</a><br/><br/>
```

4 Save *login_form.php*.

[Continue configuring the mobile login page.](#)

Create account page

When customers who are not logged in click Menu > Your Account > Sign Up, a page opens to let them submit information for creating an account. This page also opens when customers click the Create a New Account button on the login page. You can add fields to this page, including a global **opt-in** selection, as well as remove fields and edit labels and message bases.

Configuration options on the mobile create account page include the following.

- Editing the page heading
- Adding fields

- Removing fields
- Editing the password label to specify password length

Editing the page heading

To edit the Create an Account heading

1 Open the *create_account.php* file in the */views/pages/mobile/utils* folder.

2 Locate the following line of code.

```
<h1>#rn:msg:CREATE_AN_ACCOUNT_CMD#</h1>
```

3 Type the replacement heading for the page between the `<h1>` tags.

4 Save *create_account.php*.

Adding fields

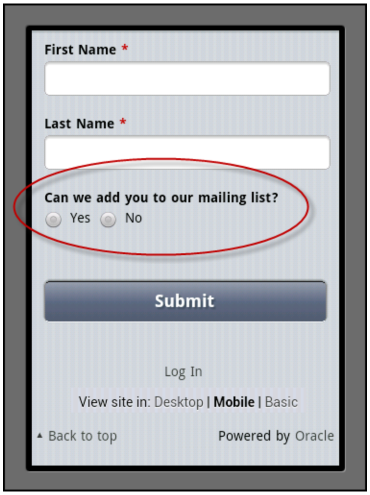
You can add fields to the create account page, including a global **opt-in** selection and additional contact and organization fields.

To add a global opt-in field

1 Open the *create_account.php* file in the */views/pages/mobile/utils* folder.

2 In the block of FormInput widgets, add code that uses another FormInput widget to ask customers if they want to be on your mailing list. Add the code wherever you want it to appear in the list of input fields. The following sample code adds the widget below the Last Name field. The sample code also changes the label.

```
<rn:widget path="input/FormInput"
name="Contact.MarketingSettings.MarketingOptIn"
label_input="Can we add you to our mailing list?" />
```



3 Save *create_account.php*.

To add a contact field

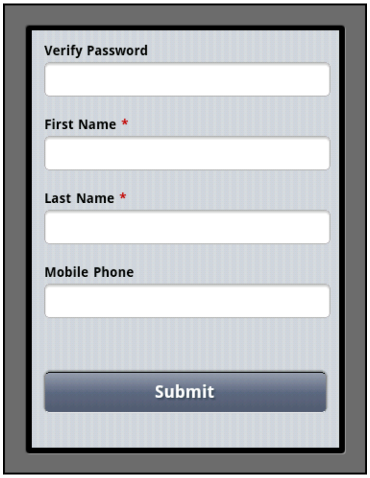
1 Open the *create_account.php* file in the */views/pages/mobile/utils* folder.

2 Add a line of code that calls the FormInput widget. For example, you might want to add a phone number field to the page. In this case, you would add the following code to the block of FormInput widgets for contact fields.

```
<rn:widget path="input/FormInput"
name="Contact.Phones.MOBILE.Number" />
```

Note To find the names of all the contact fields you can use for the FormInput widget, click the Framework tab and select Business objects on the Customer Portal Administration site.

3 Save *create_account.php*.



Removing fields

To remove fields on the create account page

1 Open the *create_account.php* file in the */views/pages/mobile/utils* folder.

2 To remove the Email Address field, delete the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
validate_on_blur="true"
initial_focus="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"  />
```

3 To remove the Login field, delete the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.Login"
required="true"
validate_on_blur="true"/>
```

4 To remove the Password and Verify Password fields, delete the following lines of code.

```
<rn:condition config_check="EU_CUST_PASSWD_ENABLED == true">
    <rn:widget path="input/FormInput"
    name="Contact.NewPassword"
```

```
    require_validation="true"
    label_input="#rn:msg:PASSWD_LBL#"
    label_validation="#rn:msg:VERIFY_PASSWD_LBL#"/>
</rn:condition>
```

5 To remove the First Name and Last Name fields, delete the following lines of code.

```
<rn:condition config_check="intl_nameorder == 1">
    <rn:widget path="input/FormInput"
    name="Contact.Name.Last"
    label_input="#rn:msg:LAST_NAME_LBL#"
    required="true"/>
    <rn:widget path="input/FormInput"
    name="Contact.Name.First"
    label_input="#rn:msg:FIRST_NAME_LBL#"
    required="true"/>
<rn:condition_else/>
    <rn:widget path="input/FormInput"
    name="Contact.Name.First"
    label_input="#rn:msg:FIRST_NAME_LBL#"
    required="true"/>
    <rn:widget path="input/FormInput"
    name="Contact.Name.Last"
    label_input="#rn:msg:LAST_NAME_LBL#"
    required="true"/>
</rn:condition>
```

6 To remove all contact custom fields with end-user visibility, delete the following line of code.

```
<rn:widget path="input/CustomAllInput"
table="Contact" />
```

7 Save *create_account.php*.

Editing the password label to specify password length

If you set a minimum password length that customers must enter when they're creating an account or changing their password, passwords are automatically required. You may want to edit the label on the mobile create account and change password pages so customers know how long their password must be before they enter one.

To edit the password label on the mobile create account page

1 Open the *create_account.php* file in the */views/pages/mobile/utils* folder.

2 Locate the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.NewPassword"
require_validation="true"
label_input="#rn:msg:PASSWD_LBL#"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"/>
```

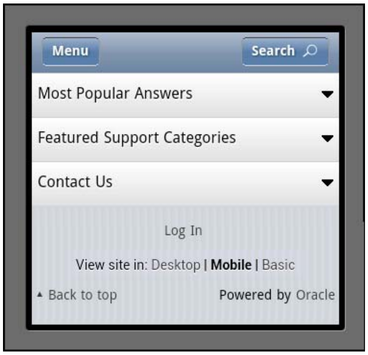
3 Edit the *label_input* attribute of the FormInput widget to define password length information. Your code will resemble the following.

```
<rn:widget path="input/FormInput"
name="Contact.NewPassword"
require_validation="true"
label_input="Password (8 characters minimum)"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"/>
```

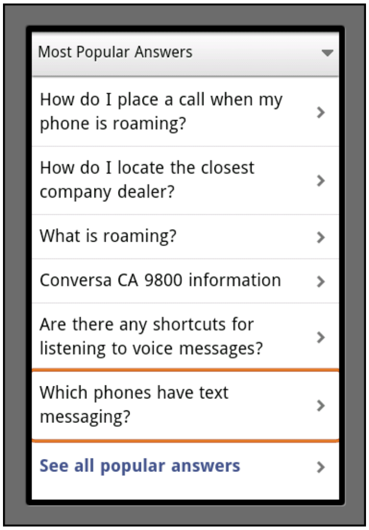
4 Save *create_account.php*.

Home page

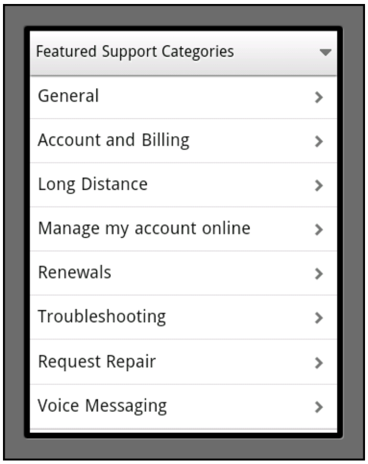
The default home page, */pages/mobile/home.php*, includes the top six most popular answers, the top-level support categories, and options for contacting your support team. This page uses three instances of the Accordion widget, which lets customers expand and collapse the Most Popular Answers, Featured Support Categories, and Contact Us headings. By default, the widgets for the Most Popular Answers and Contact Us headings are expanded, while the Featured Support Categories heading is collapsed. (The following figure shows all headings collapsed.) The home page uses the template for the mobile reference implementation, which means that it displays the Menu and Search buttons as well as a page set selector and links for Log In/Logout, Back to Top, and Powered by Oracle.



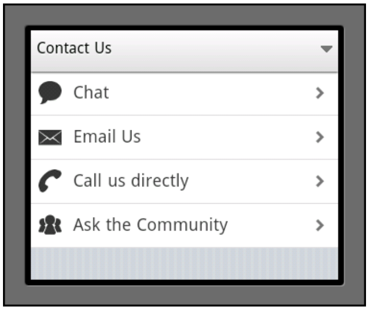
Most Popular Answers expanded



Featured Support Categories expanded



Contact Us expanded



The following configuration options are available for the mobile home page.

- Edit the Most Popular Answers section
- Edit the Featured Support Categories section
- Edit the Contact Us section
- Remove one or all of these sections

Removing home page widgets

You can remove the Most Popular Answers, Featured Support Categories, or Contact Us section from the home page.

To remove home page widgets

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 To remove Most Popular Answers, delete the following lines of code.

```
<div class="rn_Module">
    <rn:widget path="navigation/Accordion"
    toggle="rn_AccordTrigger"/>
    <h2 id="rn_AccordTrigger"
    class="rn_Expanded">#rn:msg:MOST_POPULAR_ANSWERS_LBL#<span
    class="rn_Expand"></span></h2>
    <div class="rn_Report">
        <rn:widget path="reports/MobileMultiline"
        report_id="194"
        per_page="6"/>
```

```
            <a class="rn_AnswersLink"
            href="/app/answers/
            list#rn:session#">#rn:msg:SEE_ALL_POPULAR_ANSWERS_UC_LBL#</a>
        </div>
    </div>
```

3 To remove Featured Support Categories, delete the following lines of code.

```
    <div class="rn_Module">
        <rn:widget path="navigation/Accordion"
        toggle="rn_ListTrigger"/>
        <h2 id="rn_ListTrigger"
        class="rn_Collapsed">#rn:msg:FEATURED_SUPPORT_CATEGORIES_LBL#<spa
        n
        class="rn_Expand"></span></h2>
        <div class="rn_Hidden">
            <rn:widget path="search/MobileProductCategoryList"
            data_type="categories" levels="1"
            label_title=""/>
        </div>
    </div>
```

4 To remove Contact Us, delete the following lines of code.

```
    <div class="rn_Module">
        <rn:widget path="navigation/Accordion"
        toggle="rn_ContactTrigger"/>
        <h2 id="rn_ContactTrigger"
        class="rn_Expanded">#rn:msg:CONTACT_US_LBL#<span
        class="rn_Expand"></span></h2>
        <ul class="rn_ContactChannels">
            <rn:condition config_check="MOD_CHAT_ENABLED == true">
                <li>
                    <a class="rn_ChatChannel"
                    href="/app/chat/chat_launch">#rn:msg:CHAT_LBL#</a>
                </li>
            </rn:condition>
            <li>
                <a class="rn_AskChannel"
                href="/app/ask">#rn:msg:EMAIL_US_LBL#</a>
            </li>
            <li>
                <a class="rn_VoiceChannel"
                href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#<
                /a>
```

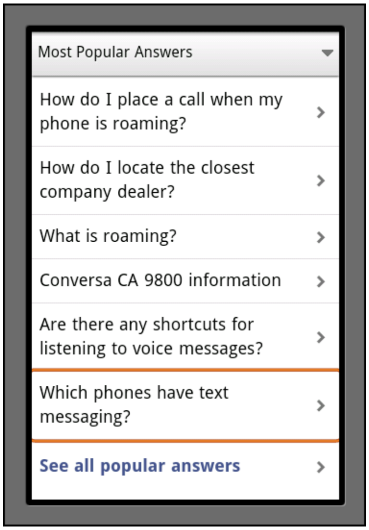
```
            </li>
            <rn:condition config_check="COMMUNITY_ENABLED == true">
                <li>
                    <a class="rn_CommunityChannel"
                    href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_
                    LBL#</a>
                </li>
            </rn:condition>
        </ul>
    </div>
```

5 Save *home.php*.

Most Popular Answers

The Most Popular Answers section of the mobile home page is generated using the Mobile-Multiline widget. You can edit the following attributes of this section.

- Whether the widget is expanded or collapsed
- The label for the section
- The number of answers displayed
- The report that is displayed
- The “See all popular answers” link at the bottom of the list



Collapsing the widget

By default, the Accordion widget for the Most Popular Answers section is expanded on the mobile home page. The following procedure results in the page opening with the widget collapsed.

To collapse the widget

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following lines of code.

```
<div class="rn_Module">
    <rn:widget path="navigation/Accordion"
    toggle="rn_AccordTrigger"/>
    <h2 id="rn_AccordTrigger"
    class="rn_Expanded">#rn:msg:MOST_POPULAR_ANSWERS_LBL#<span
    class="rn_Expand"></span></h2>
    <div class="rn_Report">
        <rn:widget path="reports/MobileMultiline"
        report_id="194"
        per_page="6"/>
        <a class="rn_AnswersLink"
        href="/app/answers/
        list#rn:session#">#rn:msg:SEE_ALL_POPULAR_ANSWERS_UC_LBL#</a>
```

```
    </div>
</div>
```

3 Edit the code as follows. (This code edit changes the CSS class to the one specified by the *collapsed_css_class* attribute and hides the MobileMultiline widget and “See all popular answers” link.)

```
<div class="rn_Module">
    <rn:widget path="navigation/Accordion"
    toggle="rn_AccordTrigger"/>
    <h2 id="rn_AccordTrigger"
    class="rn_Collapsed">#rn:msg:MOST_POPULAR_ANSWERS_LBL#<span
    class="rn_Expand"></span></h2>
    <div class="rn_Hidden">
        <rn:widget path="reports/MobileMultiline"
        report_id="194"
        per_page="6"/>
        <a class="rn_AnswersLink"
        href="/app/answers/
        list#rn:session#">#rn:msg:SEE_ALL_POPULAR_ANSWERS_UC_LBL#</a>
    </div>
</div>
```

4 Save *home.php*.

Editing the Most Popular Answers label

To edit the Most Popular Answers label

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code.

```
<h2 id="rn_AccordTrigger"
class="rn_Expanded">#rn:msg:MOST_POPULAR_ANSWERS_LBL#<span
class="rn_Expand"></span></h2>
```

3 Edit the code to replace the message base with your new title as shown in the following example.

```
<h2 id="rn_AccordTrigger"
class="rn_Expanded">See what other people are viewing<span
class="rn_Expand"></span></h2>
```

4 Save *home.php*.

Changing the number of displayed answers

To change the number of displayed answers

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code.

```
<rn:widget path="reports/MobileMultiline" report_id="194"
per_page="6"/>
```

3 Edit the code to change the *per_page* attribute of the report widget to the number of answers you want to display, as shown in the following example.

```
<rn:widget path="reports/MobileMultiline" report_id="194"
per_page="3"/>
```

4 Save *home.php*.

Changing the displayed report

The default answers report on the mobile home page is report 194, Popular Answers. If you want to replace this report, you must be sure that the report you use contains the answers.special_settings filter. (Learn how to check for the filter here.)

To change the report

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code.

```
<rn:widget path="reports/MobileMultiline" report_id="194"
per_page="6"/>
```

3 Edit the *report_id* attribute of the widget to identify the report you want to display on the home page. (Learn how to find a report's ID number here.) Your edited code will resemble the following.

```
<rn:widget path="reports/MobileMultiline" report_id="100015"
per_page="6"/>
```

4 Save *home.php*.

Editing the See All Popular Answers link

To edit the See All Popular Answers link

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code.

```
<a class="rn_AnswersLink"
href="/app/answers/
list#rn:session#">#rn:msg:SEE_ALL_POPULAR_ANSWERS_UC_LBL#</a>
```

3 Edit the code to replace the message base as shown in the following example.

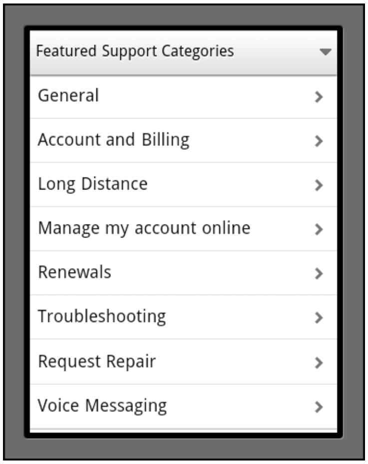
```
<a class="rn_AnswersLink"
href="/app/answers/list#rn:session#">View additional answers</a>
```

4 Save *home.php*.

Featured Support Categories

The Featured Support Categories section of the mobile home page is generated using the MobileProductCategoryList widget. You can edit the following attributes of this section.

- Whether the widget is expanded or collapsed
- Whether products or categories are displayed
- The label for the section
- The number of category levels to display
- The maximum number of top-level categories to display
- The specific categories to display
- The report that is displayed



Expanding the widget

By default, the Accordion widget for the Featured Support Categories section is collapsed on the mobile home page.

To expand the widget

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following lines of code.

```
<div class="rn_Module">
    <rn:widget path="navigation/Accordion"
    toggle="rn_ListTrigger"/>
    <h2 id="rn_ListTrigger"
    class="rn_Collapsed">#rn:msg:FEATURED_SUPPORT_CATEGORIES_LBL#<spa
    n
    class="rn_Expand"></span></h2>
    <div class="rn_Hidden">
        <rn:widget path="search/MobileProductCategoryList"
        data_type="categories"
        levels="1"
        label_title=""/>
    </div>
</div>
```

3 Edit the code as follows.

```
<div class="rn_Module">
    <rn:widget path="navigation/Accordion"
    toggle="rn_ListTrigger"/>
    <h2 id="rn_ListTrigger"
    class="rn_Expanded">#rn:msg:FEATURED_SUPPORT_CATEGORIES_LBL#<span

    class="rn_Expand"></span></h2>
    <div>
        <rn:widget path="search/MobileProductCategoryList"
        data_type="categories"
        levels="1"
        label_title=""/>
    </div>
</div>
```

4 Save *home.php*.

Displaying products instead of categories

If you decide to display **products** instead of **categories**, you don't need to set the *data_type* attribute because its default is product. However, you will want to change the title of this section so it doesn't say Featured Support Categories when you are displaying products.

To display products instead of categories

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following lines of code.

```
<h2 id="rn_ListTrigger"
class="rn_Collapsed">#rn:msg:FEATURED_SUPPORT_CATEGORIES_LBL#<span
class="rn_Expand"></span></h2>
<div class="rn_Hidden">
    <rn:widget path="search/MobileProductCategoryList"
    data_type="categories"
    levels="1"
    label_title=""/>
```

3 Edit the code as follows, changing the message base for products and removing the *data_type* attribute.

```
<h2 id="rn_ListTrigger"
class="rn_Collapsed">#rn:msg:FEATURED_SUPPORT_PRODUCTS_LBL#<span
class="rn_Expand"></span></h2>
<div class="rn_Hidden">
    <rn:widget path="search/MobileProductCategoryList"
    levels="1"
    label_title=""/>
```

4 Save *home.php*.

Editing the Featured Support Categories label

To edit the Featured Support Categories label

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code.

```
<h2 id="rn_ListTrigger"
class="rn_Collapsed">#rn:msg:FEATURED_SUPPORT_CATEGORIES_LBL#<span
class="rn_Expand"></span></h2>
```

3 Edit the code to replace the message base with your new title as shown in the following example code.

```
<h2 id="rn_ListTrigger"
class="rn_Collapsed">View Answers by Category<span
class="rn_Expand"></span></h2>
```

4 Save *home.php*.

Editing the number of category levels

By default, only the top-level categories are displayed on the mobile home page, but you can add a second level.

To display two levels of categories

1 Open the *home.php* file in the */views/pages/mobile* folder.

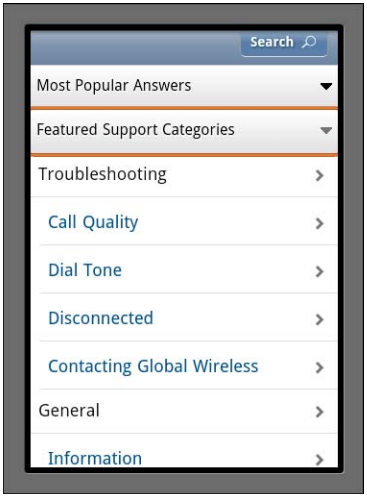
2 Locate the following line of code.

```
<rn:widget path="search/MobileProductCategoryList"
data_type="categories"
levels="1"
label_title=""/>
```

3 Edit the code to remove the *levels* attribute as shown in the following example code. (Although the home page uses a single category level, the default level for the widget is 2 so you don't need to edit the attribute. You can just delete it.)

```
<rn:widget path="search/MobileProductCategoryList"
data_type="categories"
label_title=""/>
```

4 Save *home.php*.



Editing the number of top-level categories

To edit the number of top-level categories

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code.

```
<rn:widget path="search/MobileProductCategoryList"
data_type="categories"
levels="1"
label_title=""/>
```

3 Edit the code to add the *maximum_top_levels* attribute to define the number of categories you want to display. Your code will resemble the following.

```
<rn:widget path="search/MobileProductCategoryList"
data_type="categories"
levels="1"
label_title=""
maximum_top_levels="5"/>
```

4 Save *home.php*.

Displaying specific categories

To display specific categories

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code.

```
<rn:widget path="search/MobileProductCategoryList"
data_type="categories"
levels="1"
label_title=""/>
```

3 Edit the code to add the *only_display* attribute to define the specific top-level categories you want to display. List each category by its ID number and separate them with commas. Go here if you need help to determine an ID number. (The procedure shows you how to find a product ID number, but the procedure is the same for categories.) Your edited code will resemble the following.

```
<rn:widget path="search/MobileProductCategoryList"
data_type="categories"
levels="1"
label_title=""
only_display="64,98,61" />
```

4 Save *home.php*.

Displaying a different report page

By default, clicking a category on the mobile home page opens the answers list page. If you create a different page and want to display that page instead, you can edit the *report_page_url* attribute, which must begin with */app/*. You can also display a page by using a fully qualified URL in the attribute definition. The following procedure assumes you've created a *list_2.php* file you want to use and saved it in the *answers* folder.

To display a different report page

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code.

```
<rn:widget path="search/MobileProductCategoryList"
data_type="categories"
levels="1"
label_title=""/>
```

3 Edit the code to add the *report_page_url* attribute. Your edited code will resemble the following.

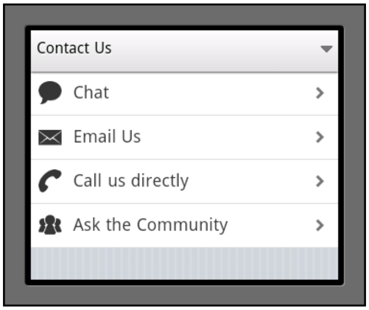
```
<rn:widget path="search/MobileProductCategoryList"
data_type="categories"
levels="1"
label_title=""
report_page_url="/app/answers/list_2" />
```

4 Save *home.php*.

Contact Us

You can edit the following attributes of the Contact Us section on the home page.

- Whether the widget is expanded or collapsed
- The label for the section
- Which default links are displayed
- The Call Us Directly link
- The Ask the Community link



Collapsing the widget

By default, the Accordion widget for the Contact Us section is expanded on the mobile home page.

To collapse the widget

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following lines of code.

```
<div class="rn_Module">
    <rn:widget path="navigation/Accordion"
    toggle="rn_ContactTrigger"/>
    <h2 id="rn_ContactTrigger"
    class="rn_Expanded">#rn:msg:CONTACT_US_LBL#<span
    class="rn_Expand"></span></h2>
    <ul class="rn_ContactChannels">
        <rn:condition config_check="MOD_CHAT_ENABLED == true">
            <li>
                <a class="rn_ChatChannel"
                href="/app/chat/chat_launch">#rn:msg:CHAT_LBL#</a>
            </li>
        </rn:condition>
        <li>
            <a class="rn_AskChannel"
            href="/app/ask">#rn:msg:EMAIL_US_LBL#</a>
        </li>
        <li>
            <a class="rn_VoiceChannel"
            href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#<
            /a>
        </li>
        <rn:condition config_check="COMMUNITY_ENABLED == true">
            <li>
                <a class="rn_CommunityChannel"
                href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_
                LBL#</a>
            </li>
        </rn:condition>
    </ul>
</div>
```

3 Edit the code as follows.

```
<div class="rn_Module">
    <rn:widget path="navigation/Accordion"
    toggle="rn_ContactTrigger"/>
    <h2 id="rn_ContactTrigger"
    class="rn_Collapsed">#rn:msg:CONTACT_US_LBL#<span
    class="rn_Expand"></span></h2>
    <div class="rn_Hidden">
    <ul class="rn_ContactChannels">
        <rn:condition config_check="MOD_CHAT_ENABLED == true">
```

```
            <li>
                <a class="rn_ChatChannel"
                href="/app/chat/chat_launch">#rn:msg:CHAT_LBL#</a>
            </li>
        </rn:condition>
        <li>
            <a class="rn_AskChannel"
            href="/app/ask">#rn:msg:EMAIL_US_LBL#</a>
        </li>
        <li>
            <a class="rn_VoiceChannel"
            href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#<
            /a>
        </li>
        <rn:condition config_check="COMMUNITY_ENABLED == true">
            <li>
                <a class="rn_CommunityChannel"
                href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_
                LBL#</a>
            </li>
        </rn:condition>
    </ul>
    </div>
</div>
```

4 Save *home.php*.

Editing the Contact Us label

To edit the Contact Us label

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code.

```
<h2 id="rn_ContactTrigger"
class="rn_Expanded">#rn:msg:CONTACT_US_LBL#<span
class="rn_Expand"></span></h2>
```

3 Edit the code to replace the message base with your new title as shown in the following example code.

```
<h2 id="rn_ContactTrigger"
class="rn_Expanded">Select a Contact Channel<span
class="rn_Expand"></span></h2>
```

4 Save *home.php*.

Removing links

To remove Contact Us links

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 To remove the Chat option, delete the following lines of code.

```
<rn:condition config_check="MOD_CHAT_ENABLED == true">
    <li>
        <a class="rn_ChatChannel" href="/app/chat/
        chat_launch">#rn:msg:CHAT_LBL#</a>
    </li>
</rn:condition>
```

3 To remove the Email Us option, delete the following lines of code.

```
<li>
    <a class="rn_AskChannel"
    href="/app/ask">#rn:msg:EMAIL_US_LBL#</a>
</li>
```

4 To remove the Call Us Directly option, delete the following lines of code.

```
<li>
    <a class="rn_VoiceChannel"
    href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#</a>
</li>
```

5 To remove the Ask the Community option, delete the following lines of code.

```
<rn:condition config_check="COMMUNITY_ENABLED == true">
    <li>
        <a class="rn_CommunityChannel"
        href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_LBL#</a>
    </li>
</rn:condition>
```

6 Save *home.php*.

Adding a URL for Call Us Directly

By default, the URL for the Call Us Directly option is void so you won't unknowingly link to a site you don't want to link to. To activate the option, you'll want to specify a URL that takes customers to a web page containing your organization's contact information.

If you prefer to display your phone number in the menu, you can change the message base to add the phone number.

To define a URL for the Call Us Directly option

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code.

```
<a class="rn_VoiceChannel"
href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#</a>
```

3 Replace `javascript:void(0);` with the URL for your contact page. Your edited code will resemble the following.

```
<a class="rn_VoiceChannel"
href="http://www.oracle.com/company-
contact.php">#rn:msg:CALL_US_DIRECTLY_LBL#</a>
```

4 Save *home.php*.

Adding a phone number

To add a phone number to the Contact Us options

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code.

```
<a class="rn_VoiceChannel"
href="javascript:void(0);">#rn:msg:CALL_US_DIRECTLY_LBL#</a>
```

3 Edit the code to replace the Call Us Directly message base with your phone number. Your edited code will resemble the following.

```
<a class="rn_VoiceChannel"
href="javascript:void(0);">Call us at (406) 555-1212</a>
```

4 Save *home.php*.

Adding a URL for Ask the Community

By default, the URL for the **Ask the Community** option is void so you won't unknowingly link to a site you don't want to link to. To activate the option, you'll need to specify a URL that takes customers to the community forum page where they can submit their questions.

To define a URL for the Ask the Community option

1 Open the *home.php* file in the */views/pages/mobile* folder.

2 Locate the following code.

```
<a class="rn_CommunityChannel"
href="javascript:void(0);">#rn:msg:ASK_THE_COMMUNITY_LBL#</a>
```

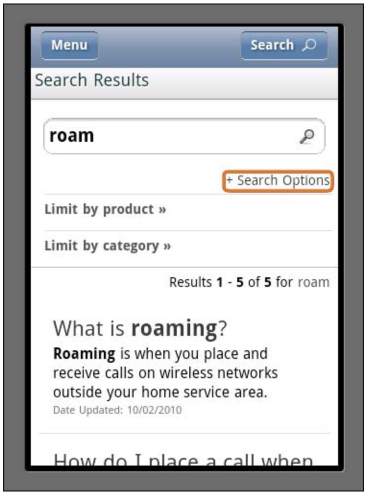
3 Replace `javascript:void(0);` with the URL for your community forum page that lets customers submit questions, being sure to append the community token `(#rn:community_token#)`to the end. Your edited code will resemble the following.

```
<a class="rn_CommunityChannel"
href="http:/
/community.example.com/resources/b1248fb2a1
/summary#rn:community_token#">#rn:msg:ASK_THE_COMMUNITY_LBL#</a>
```

4 Save *home.php*.

Answers list page

The answers list page, */pages/mobile/answers/list.php*, includes widgets for a search field, search button, product and category search filters, and a **multiline** report that has been optimized for mobile devices. Keyword highlighting is used on the page to highlight search terms.



Configuration options that you can change on the answers list page include the following.

- The answers report that is displayed
- The Search Results heading
- The display of product and category filters
- Whether search terms are highlighted
- Whether the number of results is displayed
- Whether pagination controls are displayed

Changing the displayed report

The default search report on the answers list page is Answers–Complex Expressions Search Default (report ID 176). If you want to replace this report with another standard answers report or a custom answers report, you must be sure that the report you use contains the answers.special_settings filter. (Learn how to check for the filter here.)

To change the report

1 Open the *list.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following line of code.

```
<rn:container report_id="176">
```

3 Replace `176` with the ID number of the report you want to replace the default report with. (Learn how to find a report's ID number here. For information about containers, refer to Applying common attributes to multiple widgets.)

4 Save *list.php*.

Editing the Search Results heading

To edit the Search Results heading

1 Open the *list.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following line of code.

```
<h1>#rn:msg:SEARCH_RESULTS_CMD#</h1>
```

3 Replace the message base with your new heading so your code resembles the following.

```
<h1>New Search Results Heading</h1>
```

4 Save *list.php*.

Displaying product and category filters

By default, the product and category filters are displayed on the answers list page using the MobileProductCategorySearchFilter widget. The + Search Options control on the page lets the customer toggle between hiding and displaying the filters. You can remove this ability to toggle, and you can also remove one or both of the filters. The following list lets you link to these and other configuration options for the search filters.

- Remove the option to toggle between displaying and hiding the filters
- Hide filters by default
- Display only products or only categories
- Edit labels on the filters

Removing the option to toggle filters

The default answers list page on the mobile reference implementation lets your customers toggle the product and category filters on and off by clicking + Search Options. If you want to remove that ability, you'll need to decide whether you want the filters to be displayed or removed.

To display product and category filters

1 Open the *list.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following lines of code.

```
<rn:widget path="navigation/Accordion"
toggle="rn_Advanced"/>
<div class="rn_Padding">
    <a class="rn_AlignRight"
    href="javascript:void(0);"
    id="rn_Advanced">#rn:msg:PLUS_SEARCH_OPTIONS_LBL#</a>
    <div>
        <rn:widget path="search/MobileProductCategorySearchFilter"
        filter_type="products" />
        <rn:widget path="search/MobileProductCategorySearchFilter"
        filter_type="categories" />
    </div>
</div>
```

3 Delete the first four lines you located in step 2 and the last two lines. The remaining code defines the two widgets.

```
<rn:widget path="search/MobileProductCategorySearchFilter"
filter_type="products" />
```

```
        <rn:widget path="search/MobileProductCategorySearchFilter"
        filter_type="categories" />
```

4 Save *list.php*.

To remove product and category filters

1 Open the *list.php* file in the */views/pages/mobile/answers* folder.

2 Delete the following lines of code.

```
<rn:widget path="navigation/Accordion"
toggle="rn_Advanced"/>
<div class="rn_Padding">
    <a class="rn_AlignRight"
    href="javascript:void(0);"
    id="rn_Advanced">#rn:msg:PLUS_SEARCH_OPTIONS_LBL#</a>
    <div>
        <rn:widget path="search/MobileProductCategorySearchFilter"
        filter_type="products" />
        <rn:widget path="search/MobileProductCategorySearchFilter"
        filter_type="categories" />
    </div>
</div>
```

3 Save *list.php*.

Hiding filters when page opens

By default, the answers list page opens with the product and category filters displayed. Customers can hide the filters by clicking + Search Options. If you want the page to open with the filters hidden instead, use the following procedure. Modifying the answers list page according to this procedure still lets customers display the filters by using the + Search Options toggle. If you want to remove the filters entirely, click here.

To hide filters when the answers list page opens

1 Open the *list.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following lines of code.

```
<rn:widget path="navigation/Accordion"
toggle="rn_Advanced"/>
<div class="rn_Padding">
    <a class="rn_AlignRight"
    href="javascript:void(0);"
```

```
        id="rn_Advanced">#rn:msg:PLUS_SEARCH_OPTIONS_LBL#</a>
        <div>
            <rn:widget path="search/MobileProductCategorySearchFilter"
            filter_type="products" />
            <rn:widget path="search/MobileProductCategorySearchFilter"
            filter_type="categories" />
        </div>
    </div>
```

3 In the section of code you located in step 2, replace the line containing `<div>` with the following line.

```
<div class="rn_Hidden">
```

4 Save *list.php*.

Displaying only one filter

To display only one filter

1 Open the *list.php* file in the */views/pages/mobile/answers* folder.

2 To display only the product filter, delete the following line of code.

```
<rn:widget path="search/MobileProductCategorySearchFilter"
filter_type="categories" />
```

3 To display only the category filter, delete the following line of code.

```
<rn:widget path="search/MobileProductCategorySearchFilter"
filter_type="products" />
```

4 Save *list.php*.

Editing filter labels

To change filter labels

1 Open the *list.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following lines of code.

```
    <rn:widget path="search/MobileProductCategorySearchFilter"
    filter_type="products" />
    <rn:widget path="search/MobileProductCategorySearchFilter"
    filter_type="categories" />
```

3 To edit the default label for the product filter, add the *label_input* attribute to the widget. Your edited code will resemble the following.

```
<rn:widget path="search/MobileProductCategorySearchFilter"
filter_type="products"
label_input="New Product Filter Label"/>
```

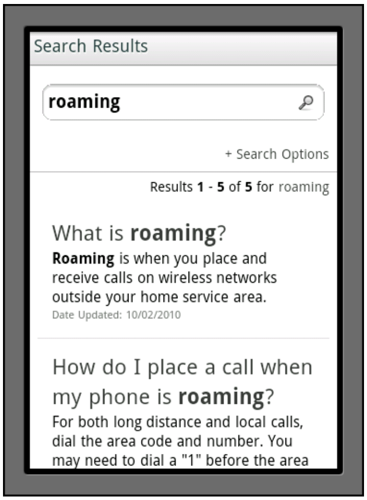
4 To edit the default label for the category filter, add the *label_input* attribute to the widget. Your edited code will resemble the following.

```
<rn:widget path="search/MobileProductCategorySearchFilter"
filter_type="categories"
label_input="New Category Filter Label"/>
```

5 Save *list.php*.

Disabling search term highlighting

By default, the search terms your customers enter are highlighted with bold text in the list of answers that match their search.



To disable search term highlighting

1 Open the *list.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="reports/MobileMultiline" />
```

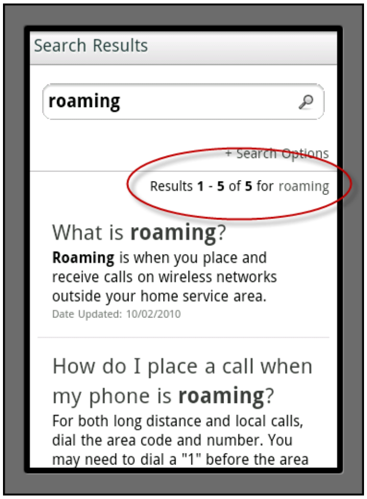
3 Edit the code to turn off search term highlighting by adding the *highlight* attribute.

```
<rn:widget path="reports/MobileMultiline"
highlight="false"/>
```

4 Save *list.php*.

Removing the number of results

By default, the mobile answers list page shows the number of results returned from a customer's search. This procedure shows you how to remove the number of results.



To remove the number of results

1 Open the *list.php* file in the */views/pages/mobile/answers* folder.

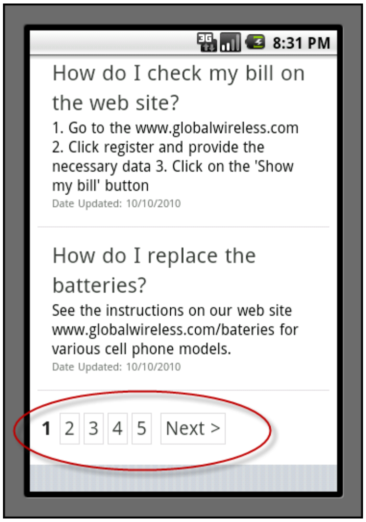
2 Delete the following line of code.

```
<rn:widget path="reports/ResultInfo" />
```

3 Save *list.php*.

Removing the pagination control

By default, the mobile answers list page displays a pagination control that lets your customers go to the next or previous page if the number of displayed answers is greater than ten. The following procedure shows you how to remove the control.



To remove the pagination control

1 Open the *list.php* file in the */views/pages/mobile/answers* folder.

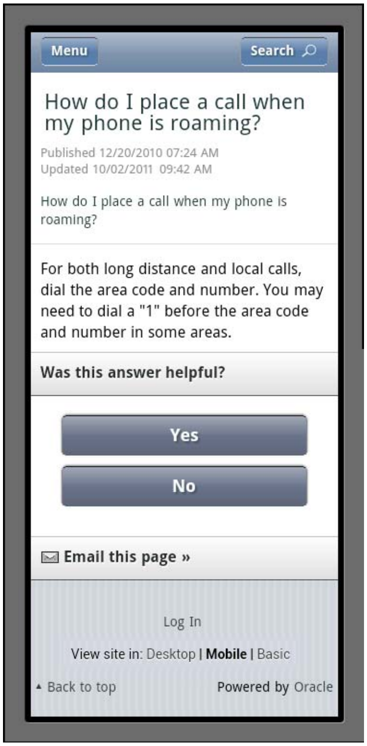
2 Delete the following line of code.

```
<rn:widget path="reports/Paginator" />
```

3 Save *list.php*.

Answer details page

The answer details page, */pages/mobile/answers/detail.php*, displays the details of an answer and allows customers to provide answer feedback. Keyword highlighting is used on the page to highlight search terms. Also, customers have the option of emailing the answer.



The following configuration options are available for the answer details page on the mobile reference implementation.

- Providing guided assistance to customers
- Disabling search term highlighting
- Changing the Published and Updated labels
- Turning off published on and updated on dates
- Disabling file attachments
- Removing related answers
- Disabling answer feedback

- Disabling the ability to email the page

Providing guided assistance to customers

Guided assistance lets your customers find the most appropriate answers to their questions by leading them through a series of branching questions. When answers are created on the **administration interface** for your organization's **knowledge base**, they can be associated with a specific guide. Then, whenever that answer is opened, customers are asked questions that lead them to the correct answer for their particular situation. It's also possible to specify a single guide that opens every time any answer is viewed.

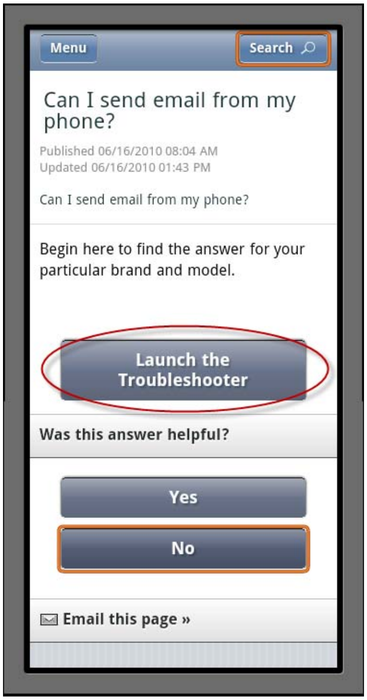
Creating a guide is done on the administration interface, and you can view an overview of guided assistance here. There are recommended best practices for using guided assistance on the mobile customer portal.

Guidelines for guided assistance on the mobile customer portal

Certain practices produce guides that are optimized for use on mobile devices, while others produce a less-than-optimal result. For example, image questions can display poorly if the images aren't scaled for mobile displays. Best practices include the following.

- The best question types for mobile guides are Button, Yes/No, Text, and Menu.
- Although the default configuration opens guides in a separate window, a better customer experience will result if you change the answer details page so it displays single answers inline on the page. Refer to Opening the guide inline.
- Because mobile devices may not be able to open certain file types, avoid using guides that include answers containing file attachments.
- Avoid long menu options to prevent wrapping display problems on a mobile device.
- Avoid the use of wide elements, such as tables, images, and inline web pages, within a question's content to help prevent a confusing display, particularly since horizontal scrolling is not available on many mobile devices.
- Save answer responses for the last node in a guide to prevent the answer from taking control of the screen, thereby preventing the customer's return to the guide.
- Avoid list questions to prevent problems that can occur when customers' previous responses do not display, as sometimes happens on mobile devices.
- Restrict the use of images as much as possible for the best display with the fewest number of alignment issues on the mobile display. Optimal image size is approximately 300 pixels. However, the *mobile/site.css* file will automatically resize images within answer content.
- Displaying a single question at a time generally results in a better customer experience than appending each new question to the previous ones.

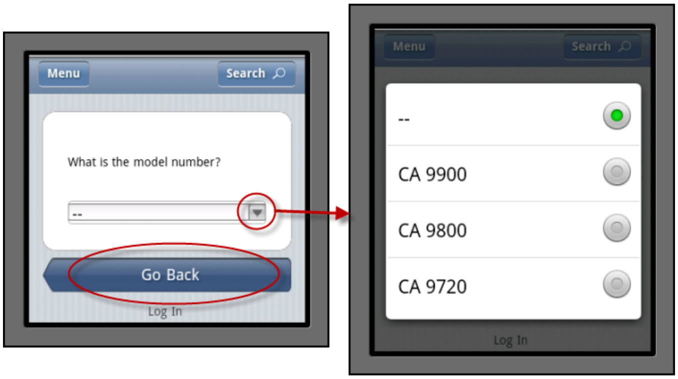
The default answer details page for the mobile customer portal includes the GuidedAssistant widget. A Launch the Troubleshooter button appears on the answer details page when an answer that is associated with a guide is opened.



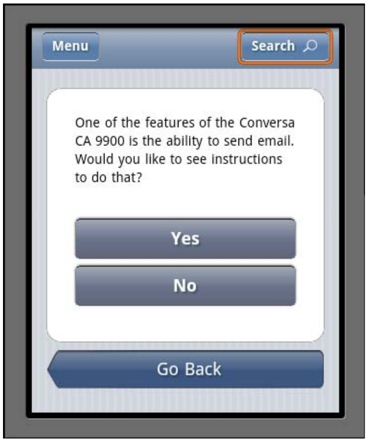
When customers click the Launch the Troubleshooter button, the first question appears. Depending on the type of question, customers may select a menu or list option, a button, radio button, or image, or type text in a field. The following figure shows a menu option.

After customers respond to the first question, they can return to the previous screen and change their answer by clicking the Go Back button. Questions are presented one at a time on the mobile customer portal.

Note Note that clicking the mobile device's Back button may take customers back to the answer where the guide was launched, it may return them to the device's home page, or it may exhibit some other behavior. Different mobile devices and operating systems implement the Back button differently.



Customers continue to answer questions that lead them to a solution in the form of a text explanation, an answer from your knowledge base, a URL, or an external event. They may also be led to another guide that asks additional questions until a solution is presented.



Configuring guided assistance

The following configuration options are available for the GuidedAssistant widget.

- Whether the guide opens in a separate window or inline
- Whether only one question is displayed at a time
- Whether the same guide opens with every answer
- Labels
  - ▷ Label when the response is an answer from the knowledge base
  - ▷ Launch button label
  - ▷ Back button label
  - ▷ Start over button
  - ▷ Label on the response button that appears with text explanations
  - ▷ Label when the response is a text explanation

Opening the guide inline

By default, clicking the Launch the Troubleshooter button opens the guide in a separate window that displays the guided assistance page (*/views/pages/mobile/utils/guided_assistant.php*). Although this is the default configuration, using pop-up windows may cause browsing and backward navigation problems. For this reason, we suggest that you configure the customer portal so guides open inline on the answer details page. When you do this, you must modify the GuidedAssistant widget on the answer details page since you are no longer directing customers to the *guided_assistant* page. When you open the guide inline, it's also a good idea to display a single question at a time, which is the default behavior of the GuidedAssistant widget.

To open the guide inline on the answer details page

1 Open the *detail.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following code.

```
<rn:widget path="knowledgebase/GuidedAssistant"
popup_window_url="/app/utils/guided_assistant"
label_text_result="#rn:msg:PLEASE_READ_THIS_RESPONSE_MSG#" />
```

3 Edit the GuidedAssistant widget to remove the *popup_window_url* attribute and add the *single_question_display* attribute. Your edited code is the following.

```
<rn:widget path="knowledgebase/GuidedAssistant"
single_question_display="true"
label_text_result="#rn:msg:PLEASE_READ_THIS_RESPONSE_MSG#"/>
```

4 Save *detail.php*.

Displaying multiple questions inline

When the guide opens on the guided assistance page, the GuidedAssistant widget displays one question at a time, with each new question displaying a button that lets customers return to the previous question. (However, the default behavior of the GuidedAssistant widget is to display multiple questions on a page, so the code for the mobile guided assistant page sets the widget's *single_question_display* attribute to true.) This generally results in a better customer experience than generating a long page of questions. If you'd prefer to display the full series of questions, you can edit the widget to do so.

Note The list of questions is generated one at a time since each subsequent question depends on the customer's previous answer. As a result, even when you choose to display multiple questions, only the first question is displayed when the guide initially launches.

To display multiple questions

1 Open the *guided_assistant.php* file in the */views/pages/mobile/utils* folder.

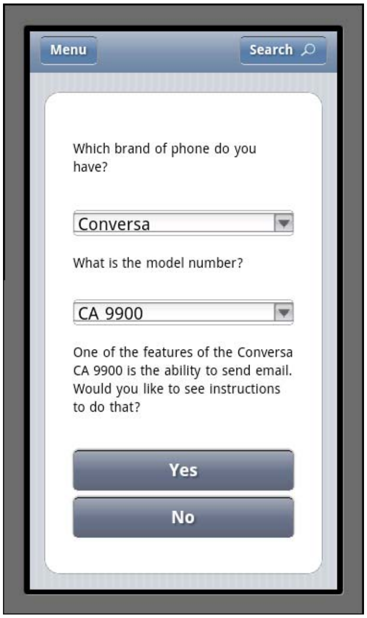
2 Locate the following line of code.

```
<rn:widget path="knowledgebase/GuidedAssistant"
single_question_display="true"
label_question_back="#rn:msg:GO_BACK_CMD#" />
```

3 Delete the *single_question_display* attribute from the code so the edited line is as follows. (The default value for the attribute is false, so you don't need to include it in the code if you want the default.)

```
<rn:widget path="knowledgebase/GuidedAssistant"
label_question_back="#rn:msg:GO_BACK_CMD#" />
```

4 Save *guided_assistant.php*.



Displaying the same guide for every answer

Even if the answers that customers select are associated with a **guide**, you can override that association and specify one guide to open on the answer details page regardless of the answer. To do that, you define the ID of the guide in the widget's code.

Note Most procedures in this section make changes to the guided assistance page. Because you want the guide to open regardless of the answer being displayed, this change must be made to the answer details page.

To open the same guide on every answer

1 Open the *detail.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following code.

```
<rn:widget path="knowledgebase/GuidedAssistant"
popup_window_url="/app/utils/guided_assistant"
label_text_result="#rn:msg:PLEASE_READ_THIS_RESPONSE_MSG#" />
```

3 Edit the GuidedAssistant widget to add the *static_guide_id* attribute and specify the ID of the guide. (Click here if you need help finding a guide's ID.)

```
<rn:widget path="knowledgebase/GuidedAssistant"
popup_window_url="/app/utils/guided_assistant"
label_text_result="#rn:msg:PLEASE_READ_THIS_RESPONSE_MSG#"
static_guide_id="21" />
```

4 Save *detail.php*.

GuidedAssistant labels

You'll edit labels for the GuidedAssistant widget on the guided assistant page (*/mobile/utils/guided_assistant.php*) if you're using the default mobile page set that opens guides on a new page. If you're opening guides on the answer details page (*/mobile/answers/detail.php*), you'll edit the widget on that page. The only exception is the Launch the Troubleshooter button, which must be edited on the answer details page.

To edit the GuidedAssistant button label

1 Open the *detail.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following line of code.

```
<rn:widget path="knowledgebase/GuidedAssistant"
popup_window_url="/app/utils/guided_assistant"
label_text_result="#rn:msg:PLEASE_READ_THIS_RESPONSE_MSG#" />
```

3 Add the *label_popup_launch_button* attribute. Your code will resemble the following.

```
<rn:widget path="knowledgebase/GuidedAssistant"
popup_window_url="/app/utils/guided_assistant"
label_text_result="#rn:msg:PLEASE_READ_THIS_RESPONSE_MSG#"
label_popup_launch_button="Start Here" />
```

4 Save *detail.php*.

To edit other labels on the GuidedAssistant widget

1 Open the *guided_assistant.php* file in the */views/pages/mobile/utils* folder.

2 Locate the following line of code.

```
<rn:widget path="knowledgebase/GuidedAssistant"
single_question_display="true"
label_question_back="#rn:msg:GO_BACK_CMD#" />
```

3 To change the Go Back label that returns customers to the previous question in the guide, edit the *label_question_back* attribute. Your code will resemble the following.

```
<rn:widget path="knowledgebase/GuidedAssistant"
single_question_display="true"
label_question_back="Previous Question" />
```

4 To change any of the other labels on the GuidedAssistant widget, add the associated label attribute to the widget code and define its value with the text you want.

a To edit the message displayed when the customer reaches a solution that is an answer from the knowledge base (default is "Please consult the following information"), add the *label_answer_result* attribute. Your code will resemble the following.

```
<rn:widget path="knowledgebase/GuidedAssistant"
single_question_display="true"
label_question_back="#rn:msg:GO_BACK_CMD#"
label_answer_result="This information should answer your
question."/>
```

b To edit the Start Over label when the customer reaches the end of the guide, add the *label_start_over* attribute to the widget code.

c To edit the OK button that customers click to enter a text response, add the *label_text_response_button* attribute to the widget code.

d To edit the message displayed when the customer reaches a text explanation, add the *label_text_result* attribute. Your widget code will resemble the following.

```
<rn:widget path="knowledgebase/GuidedAssistant"
single_question_display="true"
label_question_back="#rn:msg:GO_BACK_CMD#"
label_text_result="The following information answers your
question." />
```

5 Save *guided_assistant.php*.

Disabling search term highlighting

By default, the search terms your customers enter are highlighted on the answer details page.

To disable search term highlighting

1 Open the *detail.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following three lines of code. Note that these lines are not sequential.

```
<h1 id="rn_Summary"><rn:field name="Answer.Summary" highlight="true"/
></h1>
<rn:field name="Answer.Question" highlight="true"/>
<rn:field name="Answer.Solution" highlight="true"/>
```

3 Remove `highlight="true"` from each line.

4 Save *detail.php*.

Changing the Published and Updated labels

To change the Published and Updated labels

1 Open the *detail.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following lines of code.

```
#rn:msg:PUBLISHED_LBL# <rn:field name="Answer.CreatedTime" />
<br/>
#rn:msg:UPDATED_LBL# <rn:field name="Answer.UpdatedTime" />
```

3 To edit the Published label, edit the first line of the code you located in step 2 so it resembles the following.

```
This answer was orginally published on <rn:field
name="Answer.CreatedTime" />
```

4 To edit the Updated label, edit the last line of the code you located in step 2 so it resembles the following.

```
This answer was last updated on <rn:field name="Answer.UpdatedTime" />
```

5 Save *detail.php*.

Removing the Published and Updated dates

To remove the Published and Updated dates

1 Open the *detail.php* file in the */views/pages/mobile/answers* folder.

2 Delete the following lines of code.

```
#rn:msg:PUBLISHED_LBL# <rn:field name="Answer.CreatedTime" />
<br/>
#rn:msg:UPDATED_LBL# <rn:field name="Answer.UpdatedTime" />
```

3 Save *detail.php*.

Disabling the file attachments display

If files are attached to the answer displayed on the answer details page, the attachments will be displayed as part of the answer unless you disable their display with this procedure.

To disable the file attachments display

1 Open the *detail.php* file in the */views/pages/mobile/answers* folder.

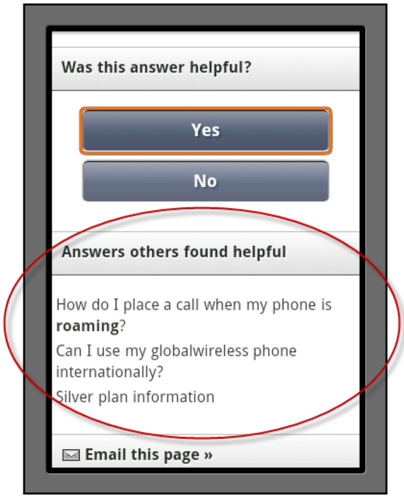
2 Delete the following lines of code.

```
<div id="rn_FileAttach">
    <rn:widget path="output/DataDisplay"
    name="Answer.FileAttachments"
    label="#rn:msg:ATTACHMENTS_LBL#"/>
</div>
```

3 Save *detail.php*.

Removing related answers

By default, related answers appear on the answer details page if the answer being displayed is related to any other answers in your knowledge base. The section is labeled Answers Others Found Helpful. View information about related answers here.



To remove related answers

1 Open the *detail.php* file in the */views/pages/mobile/answers* folder.

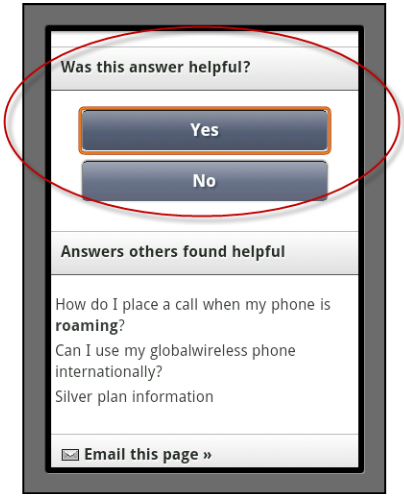
2 Delete the following line of code.

```
<rn:widget path="knowledgebase/RelatedAnswers" />
```

3 Save *detail.php*.

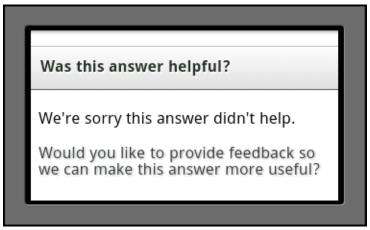
Disabling answer feedback

The default answer details page uses the MobileAnswerFeedback widget to let customers provide feedback on the answer they are viewing.



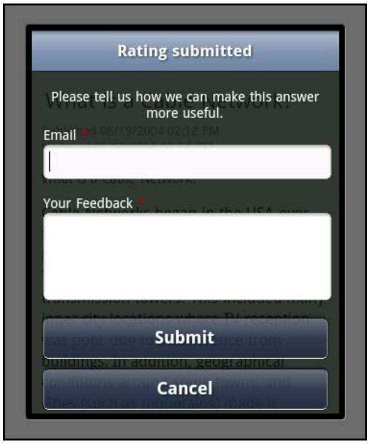
If customers answer Yes, their feedback is recorded and a thank-you message acknowledges the feedback. If they answer No, they have an opportunity to provide additional feedback.

Click to view



If customers select the link, another window opens where feedback can be entered. If customers are not logged in, the Email field is displayed and is required. If customers are logged in, only the Your Feedback field is displayed.

Click to view



You can edit all the labels on the MobileAnswerFeedback widget. The following table lists the widget attribute and its associated label.

Table 383: Label Attributes for the MobileAnswerFeedback Widget

Attribute	Default Label
label_cancel_button	Cancel
label_comment_box	Your Feedback
label_dialog_prompt	Please tell us how we can make this answer more useful.
label_dialog_title	Rating submitted
label_dissatisfied	We're sorry this answer didn't help.
label_email_address	Email
label_feedback_submit_success	Thanks for your feedback.
label_no_button	No
label_provide_feedback	Would you like to provide feedback so we can make this answer more useful?
label_satisfied	Thanks for your feedback.

Table 383: Label Attributes for the MobileAnswerFeedback Widget (Continued)

Attribute	Default Label
label_send_button	Submit
label_title	Was this answer helpful?
label_yes_button	Yes

If you don't want to offer your customers the chance to offer answer feedback on the mobile implementation, you can disable the feature.

To disable answer feedback

1 Open the *detail.php* file in the */views/pages/mobile/answers* folder.

2 Delete the following line of code.

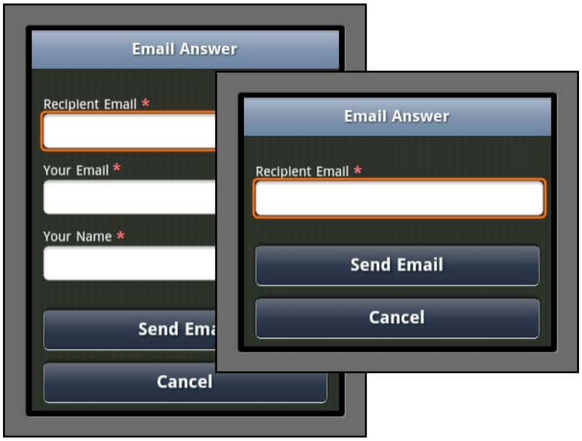
```
<rn:widget path="feedback/MobileAnswerFeedback" />
```

3 Save *detail.php*.

Disabling the ability to email the page

The default answer details page lets customers email the displayed answer.

When customers are not logged in, the widget displays fields for the customer's email address and name. Logged-in customers need to enter only the recipient's email address, as shown in the overlay on the right.



If you want to remove the ability for customers to email an answer, you can delete the EmailAnswerLink widget from the answer details page.

To remove EmailAnswerLink

1 Open the *detail.php* file in the */views/pages/mobile/answers* folder.

2 Delete the following line of code.

```
<rn:widget path="utils/EmailAnswerLink" />
```

3 Save *detail.php*.

Adding answer details

You might want to provide additional information about the answer being viewed on the answer details page. This procedure shows you how to add fields to the page.

To add fields on the answer details page

1 Open the *detail.php* file in the */views/pages/mobile/answers* folder.

2 Locate the following line of code and add the details in the following steps below this line.

```
<rn:field name="Answer.Solution"
highlight="true"/>
```

3 To add the answer's ID, add the following line of code.

```
<p>Answer ID <rn:field
```

```
name="Answer.ID" /></p>
```

4 To add product information for the answer, add the following line of code.

```
<rn:widget path="output/DataDisplay"
name="Answer.Products" />
```

5 To add category information for the answer, add the following line of code.

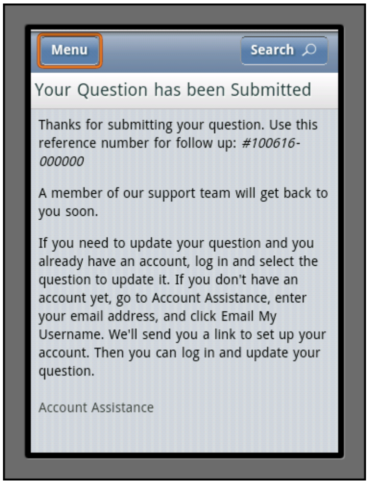
```
<rn:widget path="output/DataDisplay"
name="Answer.Categories" />
```

6 Save *detail.php*.

Asking a question on the mobile customer portal

Customers can submit a question to your support team using their mobile device by clicking the Email Us button under Contact Us on the mobile home page. Alternately, they can click Menu > Contact Us > Email Us to open the page for submitting their question. The default page lets customers enter their email address (if they are not logged in), submit their question, select **product** and **category**, and complete any **incident custom fields** your organization has added.

After customers have submitted their question, they receive a confirmation message that includes an incident reference number for the question. If the customer is logged in, the incident's reference number is a clickable link that re-opens the question when the customer clicks it.



Workflow configuration options

If customers do not already have an account when they submit a question, the default workflow automatically creates one for them. Other workflow configurations are also supported. Review workflow options here, or click one of the following workflows for a description and configuration procedure.

- The default email-only workflow automatically creates an account when customers who do not have an account submit a question.
- The email check workflow requires customers without an account to create one before asking a question.
- The login required workflow requires customers to log in before asking a question.
- The additional contact fields workflow requires customers to complete other contact fields you have placed on the page before they can submit a question.

Additional configuration options for the ask a question page

Besides setting up the workflow, the following options are available for configuring the page on the mobile interface where customers ask questions.

- Configure the SmartAssistantDialog widget
- Require customers to have an SLA before submitting their questions
- Remove the Subject field

- Specify the required number of levels for products or categories
- Automatically populate products or categories
- Let customers attach images to their questions

Ask a question page workflows

The workflows on the mobile customer portal pages are the same as those for the standard customer portal. For a complete discussion of each workflow on the standard reference implementation, including flowcharts and comparisons of advantages and disadvantages, click here. The following sections provide a summary of this information for the mobile customer portal.

The default workflow asks for only an email address, letting customers complete that field quickly and then submit their incident without requiring account creation or login. However, we recognize that your site may have different needs, so the mobile customer portal supports each of the following workflows.

- **Email-only**—If your organization determines that an email address is adequate customer identification, this default workflow is ideal. It can also be useful when most of your customers update their incidents through email instead of logging in to the customer portal. Refer to Email-only default workflow.
- **Email check**—Use this workflow when you require customers to have an account before they can submit a question. The customer portal checks the email address, letting customers with an associated contact record submit the question while requiring those without contact records to create an account first. Refer to Email check.
- **Login required**—When you want customers to not only have an account, but also to be logged in prior to asking questions, you can set up the ask a question page to require login. Refer to Requiring login.
- **Additional contact fields**—This workflow is similar to the email-only flow, but it requires customers to complete additional fields on the ask a question page before they can submit a question. Refer to Additional contact fields workflow.

Logged-in customers

The differences among the workflows are apparent only when customers are not logged in. When customers are logged in, the ask a question process is the same for all workflows.

- The ask a question page opens without an Email Address field because the customer is logged in (and, therefore, the email address is known).
- The customer completes the fields and submits the question.

- Oracle Service Cloud converts the question into an incident, which is associated with the customer's contact record.

Email-only default workflow

If customers are not logged in when they select Email Us (from either the Contact Us section on the home page or by clicking the Menu button and selecting Contact Us > Email Us), they must enter their email address before submitting their question. If the email address matches an existing contact record, the resulting incident is associated with that contact record. If the email address does not match an existing contact record, a new record is created for the customer and the incident is associated with that record. The new contact record contains only the email address, so customers will be required to use account assistance if they want to log in to the customer portal in the future. This workflow is implemented by default.

For more specific information about this workflow, click here.

Email check

Although the default workflow has been tested for its usability and adopted in the reference implementation, your organization may require more customer information than just an email address. The best way to ensure getting this information is to require customers to create an account before they can ask a question.

For more specific information about this workflow, click here.

To implement this workflow, you'll first need to modify the ask a question page to display the EmailCheck and ProgressBar widgets. Then you'll edit the create account page to add the ProgressBar widget.

Editing the ask a question page for the email check workflow

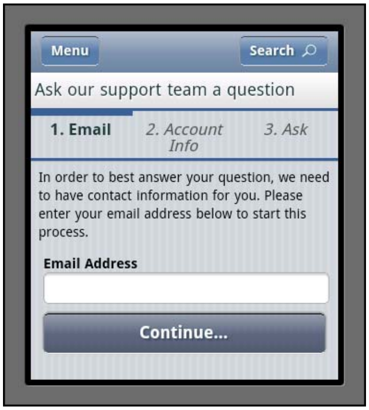
First, you'll edit the default ask a question page to achieve the following objectives.

- Display the EmailCheck widget when customers are not logged in so they can enter their email address.
  - ▷ If the email address matches an existing contact record, return customers to the ask a question page, where the Email Address field is populated.
  - ▷ If the submitted email address does not match a contact record in the knowledge base, take customers to the create account page. The Email Address field on this page is populated with the submitted information.

- Display the ProgressBar widget so customers who are in this workflow can determine which step of the process they're currently on.

Note Because the only step for logged-in customers is to complete the ask a question fields, the ProgressBar widget is enclosed in conditional tags so it won't appear to them. The ProgressBar widget includes a *current_step* attribute that gets set from the EmailCheck widget's *redirect_after_contact_creation* attribute.

Here's what customers who are not logged in will see when they click Menu > Contact Us > Email Us. The progress bar below the heading indicates to customers that they are on the email entry step of the process.



Here is the code for the revised ask a question page (*/views/pages/mobile/ask.php*). It includes the EmailCheck and ProgressBar widgets and the conditions for displaying them.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#"
template="mobile.php"
clickstream="incident_create"/>
<section id="rn_PageTitle"
class="rn_AskQuestion">
    <h1>#rn:msg:ASK_OUR_SUPPORT_TEAM_A_QUESTION_LBL#</h1>
    <rn:condition logged_in="false" url_parameter_check="step != null">
        <rn:condition url_parameter_check="step == null">
            <rn:widget path="utils/ProgressBar"/>
        <rn:condition_else/>
            <rn:widget path="utils/ProgressBar"
            current_step="#rn:url_param_value:step#"/>
```

```
        </rn:condition>
    </rn:condition>
</section>
<section id="rn_PageContent"
class="rn_AskQuestion">
    <div class="rn_Padding">
        <!--Logged in or on final step of process-->
        <rn:condition logged_in="true"
        url_parameter_check="step == 3">
            <form id="rn_QuestionSubmit"
            onsubmit="return false;">
                <div id="rn_ErrorLocation"></div>
                <fieldset>
                <rn:condition logged_in="false">
                <rn:widget path="input/FormInput"
                name="Contact.Emails.PRIMARY.Address"
                required="true" />
                <rn:widget path="input/FormInput"
                name="Incident.Subject" required="true" />
                <rn:condition_else/>
                <rn:widget path="input/FormInput"
                required="true"
                name="Incident.Subject" />
                </rn:condition>
        <rn:condition answers_viewed="2"
        searches_done="1">
        <rn:condition_else/>
            <rn:widget path="input/SmartAssistantDialog"
            display_answers_inline="true"
            label_prompt="#rn:msg:FLLOWING_ANS_HELP_IMMEDIATELY_MSG#"
            accesskeys_enabled="false"
            label_solved_button="#rn:msg:MY_QUESTION_IS_ANSWERED_MSG#"
            label_cancel_button="#rn:msg:EDIT_QUESTION_CMD#" />
        </rn:condition>
                <rn:widget path="input/FormInput"
                name="Incident.Threads"
                required="true"
                label_input="#rn:msg:ADD_ADDITIONAL_DETAILS_CMD#"/>
                <rn:widget path="input/FileAttachmentUpload"/>
                <rn:widget path="input/MobileProductCategoryInput" />
                <rn:widget path="input/MobileProductCategoryInput"
                data_type="Category"/>
                <rn:widget path="input/CustomAllInput"
```

```
                table="Incident"
                always_show_mask="true"/>
                <br/><br/><br/>
                <rn:widget path="input/FormSubmit"
                label_button="#rn:msg:CONTINUE_ELLIPSIS_CMD#"
                on_success_url="/app/ask_confirm"
                error_location="rn_ErrorLocation" />
                </fieldset>
            </form>
        <rn:condition_else/>
            <!-- Not logged in or on one of initial steps-->
            <rn:condition url_parameter_check="step == null">
                <p>In order to best answer your question, we need to have
                contact information for you. Please enter your email
                address below to start this process. </p>
                <rn:widget path="input/EmailCheck"
                initial_focus="true"
                redirect_existing_contact="/app/ask/step/3"
                redirect_after_contact_creation="/app/ask/step/3"
                redirect_new_contact="/app/utils/create_account/step/2" /
                >
            </rn:condition>
        </rn:condition>
    </div>
</section>
```

Next, go to Editing the create account page.

Editing the create account page

Next, you'll edit the create account page. You want customers who access the page from the email check workflow to see the progress bar so they know how far along they are in the process of asking their question. However, it's not necessary or helpful to display it to customers who access the page normally.

Although this procedure modifies the default create account page, you may want to create a separate page for this workflow if your default page contains many fields. Because you've interrupted a customer who is trying to submit a question, we recommend that you display only the minimum number of fields your organization requires to create an account. Customers can then return quickly to the initial task.

The following procedure checks the step parameter you added to the EmailCheck widget on the ask a question page. If the step parameter in the URL is not null, the ProgressBar widget appears on the create account page. The EmailCheck widget on the ask a question page uses the default value for the *redirect_after_contact_creation* attribute. (The default value is `/app/ask/step3`.) Clicking Submit on the create account page then redirects the customer to the ask a question page, where the progress bar shows step 3.

To edit the create account page

1 Open the *create_account.php* file in the */views/pages/mobile/utils* folder.

2 Locate the following line of code.

```
<h1>#rn:msg:CREATE_AN_ACCOUNT_CMD#</h1>
```

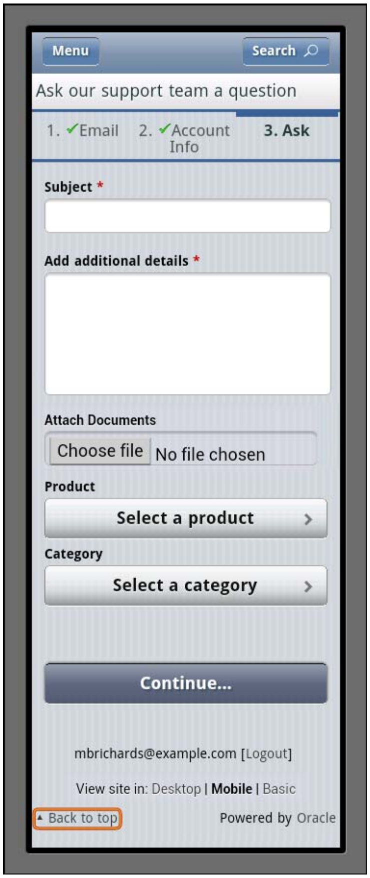
3 Add the following lines of code immediately below the line you located in step 2.

```
<rn:condition url_parameter_check="step != null">
    <rn:widget path="utils/ProgressBar"
    current_step="#rn:url_param_value:step#"/>
</rn:condition>
```

4 Save *create_account.php*.

After customers enter their email address and click the Continue button on the EmailCheck widget, the create account page opens. Notice that the Email Address field is populated and the progress bar indicates the Account Info step of the flow.

When customers complete the information on the create account page and click Continue, they are logged in and redirected to the ask a question page.



Requiring login

Another workflow approach is to simply require customers to log in before they can submit a question. (The email check workflow requires customers to have an account, but does not require them to log in prior to submitting questions.) The open login feature enhances the ease of customer login by letting them log in through their Facebook, Twitter, Google, or other open login accounts. (Refer to Customer portal open login.)

For more specific information about this workflow, refer to Requiring login.

By default, the *login_required* page meta tag attribute is false, so setting it to true requires you to add the attribute to the page code. After you've completed the following procedure, customers who click Email Us when they're not logged in will be redirected to the Login page. After logging in or creating an account, the ask a question page opens.

Note The ask a question confirmation page should have the same value for the *login_required* page meta tag as the ask a question page. The following procedure adds the *login_required* attribute to both pages.

To require login on the ask a question page

1 Open the *ask.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code at the top of the file.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#"
template="mobile.php"
clickstream="incident_create"/>
```

3 Edit the code to add the *login_required* page meta tag.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#"
template="mobile.php"
clickstream="incident_create"
login_required="true" />
```

4 Save *ask.php*.

5 Open the *ask_confirm.php* file in the */views/pages/mobile* folder.

6 Locate the following line of code at the top of the file.

```
<rn:meta title="#rn:msg:QUESTION_SUBMITTED_LBL#"
template="mobile.php"
clickstream="incident_confirm"/>
```

7 Edit the code to add the *login_required* page meta tag.

```
<rn:meta title="#rn:msg:QUESTION_SUBMITTED_LBL#"
template="mobile.php"
clickstream="incident_confirm"
login_required="true" />
```

8 Save *ask_confirm.php*.

Additional contact fields workflow

You may find yourself wanting to collect more customer information than just an email address (the only information provided by the default email-only workflow) from a new customer who wants to ask a question on your site, but you don't want to require that they complete the create account page (as you do with the email check workflow). One way you can accomplish this is by adding contact fields on the ask a question and requiring (or simply allowing) your customers to answer them prior to submitting a question.

For more specific information about this workflow, refer to Additional contact fields workflow.

Oracle Service Cloud treats the data that is entered into fields on the mobile ask a question page the same way it does for fields on the standard ask a question page. You might want to review the different scenarios before adding fields to your mobile ask a question page.

The following procedure shows you how to add first and last names and make them required. We'll display these fields only to customers who are not logged in, remembering that any additions or changes made by customers who are not logged in but who already have an email address in the knowledge base will not be recorded.

Note Find the names of the contact fields you can use by clicking Framework > Business Objects on the Customer Portal Administration site.

To add contact fields to the ask a question page

1 Open the *ask.php* file in the */views/pages/mobile* folder.

2 Locate the following lines of code between the `<rn:condition logged_in="false">` condition tags.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
<rn:widget path="input/FormInput"
name="Incident.Subject"
required="true" />
```

3 Add the following code between the two widgets you located in step 2.

```
<rn:widget path="input/FormInput"
name="Contact.Name.First"
required="true" />
<rn:widget path="input/FormInput"
```

```
name="Contact.Name.Last"
required="true" />
```

4 Save *ask.php*.

Other configuration options for the ask a question page

Besides setting up the workflow, the following options are available for configuring the page on the mobile interface where customers ask questions.

- Configure the SmartAssistantDialog widget
- Require customers to have an SLA before submitting their questions
- Remove the Subject field
- Specify the required number of levels for products or categories
- Automatically populate products or categories

Configuring the SmartAssistantDialog widget

When your customers click the Continue button after asking a question, the default mobile ask a question page displays a Finish Submitting Question page, generated by the SmartAssistantDialog widget. However, this dialog appears only if you have first configured an **incident rule** that appends **SmartAssistant** responses. (To create an incident rule for this purpose, log in to the **administration interface** and click here.)

Customers can click any of the suggested answers to open it and see if it offers a solution to the question they want to submit. If it does, they can click the My Question is Answered button to abandon their question and be redirected to the home page.

If you do not have a SmartAssistant incident rule set up on the administration interface, this dialog won't appear. Instead, the confirmation page is displayed immediately after the customer clicks the Continue button.

By default, the SmartAssistantDialog does not open if the customer has either opened two answers or conducted one search. You can configure the condition to a different number of answers or searches or you can remove the condition so the dialog always opens.

After you've configured a SmartAssistant incident rule, the following configuration options are available for the SmartAssistantDialog widget.

- Change the number of answers to be viewed or searches to be conducted

- Display the dialog always, regardless of answers viewed or searches done
- Edit the buttons
- Redirect customers when their questions is answered
- Remove the SmartAssistantDialog

Changing the widget display conditions

The default mobile ask a question page uses a condition tag to determine whether the SmartAssistantDialog widget appears when the customer clicks the Continue button or whether the confirmation page is displayed immediately. By default, SmartAssistant suggested answers are displayed after customers submit a question unless they have viewed two answers or conducted a search before asking the question.

To change the answers viewed or searches done condition

1. Open the *ask.php* file in the */views/pages/mobile* folder.
2. Locate the following line of code.

   ```
   <rn:condition answers_viewed="2" searches_done="1">
   ```

3. Edit the code to either delete or change the value of the *answers_viewed* or *searches_done* attributes. This example code assumes you want to change the number of answers viewed and remove the requirement to perform a search.

   ```
   <rn:condition answers_viewed="3">
   ```

4. Save *ask.php*.

Removing widget display conditions

If you remove the condition tags around the SmartAssistantDialog widget, it will always propose answers to your customers before they can finish submitting their question, regardless of the number of answers they've viewed or searches they've conducted. (You still need to have set up a SmartAssistant incident rule in order for the widget to appear.)

To remove conditions for the SmartAssistantDialog widget

1. Open the *ask.php* file in the */views/pages/mobile* folder.
2. Locate the following lines of code.

   ```
   <rn:condition answers_viewed="2" searches_done="1">
   <rn:condition_else/>
       <rn:widget path="input/SmartAssistantDialog"
       accesskeys_enabled="false" display_button_as_link=""/>
   ```

```
</rn:condition>
```

3 Delete the two lines of code beginning with `<rn:condition` and the `</rn:condition>` line. All that should remain is the code that calls the SmartAssistantDialog widget.

4 Save *ask.php*.

Editing buttons

The SmartAssistantDialog widget on the mobile ask a question page contains three buttons: My Question is Answered, Finish Submitting Question, and Edit Question. You can edit the labels for the buttons, change their display order on the dialog, or change the buttons to links.

To change the buttons on the SmartAssistantDialog widget

1 Open the *ask.php* file in the */views/pages/mobile* folder.

2 Locate the following lines of code.

```
<rn:widget path="input/SmartAssistantDialog"
accesskeys_enabled="false" display_button_as_link=""/>
```

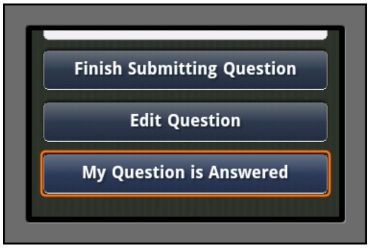
3 To change the labels on the buttons, add the *label_solved_button*, *label_cancel_button*, and *label_submit_button* attributes. Your code will resemble the following.

```
<rn:widget path="input/SmartAssistantDialog"
accesskeys_enabled="false" display_button_as_link=""
label_solved_button="This answered my question"
label_cancel_button="Return to my question"
label_submit_button="I still need an answer"/>
```

4 To change the buttons' display order, add the *button_ordering* attribute. (By default, the display order for buttons is *label_solved_button, label_submit_button, label_cancel_button*.) Your code will resemble the following.

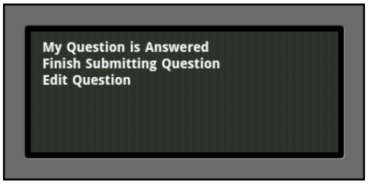
```
<rn:widget path="input/SmartAssistantDialog"
accesskeys_enabled="false"
```

```
display_button_as_link=""
button_ordering="label_submit_button, label_cancel_button,
label_solved_button" />
```



5 To change the buttons to links, edit the *display_button_as_link* attribute. Your code will resemble the following.

```
<rn:widget path="input/SmartAssistantDialog"
accesskeys_enabled="false"
display_button_as_link="label_solved_button, label_submit_button,
label_cancel_button" />
```



6 Save *ask.php*.

Redirecting customers when their questions are answered

By default, customers who click the My Question is Answered button are redirected to the home page. If you want to direct them to a different page, you can add the *solved_url* attribute to the SmartAssistantDialog widget.

To redirect customers when questions are answered

1 Open the *ask.php* file in the */views/pages/mobile* folder.

2 Locate the following lines of code.

```
<rn:widget path="input/SmartAssistantDialog"
accesskeys_enabled="false"
display_button_as_link="" />
```

3 Edit the widget code to add the *solved_url* attribute. Your code will resemble the following.

```
<rn:widget path="input/SmartAssistantDialog"
accesskeys_enabled="false"
display_button_as_link=""
solved_url="/app/answers/list"/>
```

4 Save *ask.php*.

Removing the SmartAssistantDialog

If you remove the SmartAssistantDialog widget, answers will never be suggested to your customers after they click the Continue button. Instead, the confirmation page will always open.

To remove the SmartAssistantDialog widget

1 Open the *ask.php* file in the */views/pages/mobile* folder.

2 Delete the following lines of code.

```
<rn:condition answers_viewed="2"
searches_done="1">
<rn:condition_else/>
    <rn:widget path="input/SmartAssistantDialog"
    accesskeys_enabled="false"
    display_button_as_link="" />
</rn:condition>
```

3 Save *ask.php*.

Requiring SLAs

You might want to let only customers with **SLAs** (service level agreements) submit a question through your mobile ask a question page. When customers who are not logged in click Email Us on the home page or Menu > Contact Us > Email Us, they are redirected to the login page, so their SLA can be confirmed. Customers who are logged in but do not have the required SLA type will see a Permission Denied message.

To require an SLA on the ask a question page

1 Open the *ask.php* file in the */views/pages/mobile* folder.

2 Locate the following line of code at the top of the file.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#"
template="mobile.php"
```

```
clickstream="incident_create"/>
```

3 Edit the code to add the *login_required* page meta tag, *sla_required_type meta tag,* and *sla_failed_page* meta tag. Your code will resemble the following.

```
<rn:meta title="#rn:msg:ASK_QUESTION_HDG#"
template="mobile.php"
clickstream="incident_create"
login_required="true"
sla_required_type="incident"
sla_failed_page="/app/error/error_id/2" />
```

4 Save *ask.php*.

Removing the Subject field

When a customer asks a question, an **incident** is created in **Oracle RightNow Cloud Service**, and the Subject field of the incident is the same as the Subject field the customer completes on the ask a question page.

You can remove the Subject field from the mobile ask a question page. Then, when an incident is created, the first 80 characters of the customer's question are automatically used as the incident's Subject field. If you do this, you might also want to change the "Add additional details" label since it could be misleading without the Subject field.

To remove the Subject field from the ask a question page

1 Open the *ask.php* file in the */views/pages/mobile* folder.

2 Delete the following line of code from the file to remove the Subject field when the customer is not logged in.

```
<rn:widget path="input/FormInput"
name="Incident.Subject"
required="true" />
```

3 Delete the following lines of code from the file to remove the Subject field when the customer is logged in.

```
<rn:condition logged_in="true">
    <rn:widget path="input/FormInput"
    name="Incident.Subject"
    required="true"/>
</rn:condition>
```

4 To change the "Add additional details" label, first locate the following line of code.

```
<rn:widget path="input/FormInput"
name="Incident.Threads"
required="true"
label_input="#rn:msg:ADD_ADDITIONAL_DETAILS_CMD#"/>
```

a Edit the message base. Your code might resemble the following.

```
<rn:widget path="input/FormInput"
name="Incident.Threads"
required="true"
label_input="Enter your question here"/>
```

5 Save *ask.php*.

Requiring selection of products and categories

The mobile ask a question page does not require that customers select a minimum number of **product** or **category** levels related to their question, but you can edit the page to require them to select one or more levels of products or categories. (If none of your products have end-user visibility specified (refer to Adding and editing products, categories, and dispositions for the step to define visibility), the product selection drop-down menu will not appear. Similarly, the category menu will not appear if no categories have end-user visibility.)

Preventing form abandonment

Best practice recommends against requiring product and category selection to prevent form abandonment by your customers.

To require product and category levels

1 Open the *ask.php* file in the */views/pages/mobile* folder.

2 Locate the following lines of code in the file.

```
<rn:widget path="input/MobileProductCategoryInput" />
<rn:widget path="input/MobileProductCategoryInput"
data_type="Category" />
```

3 Add the *required_lvl* attribute to both MobileProductCategoryInput widgets to specify how many levels you want your customers to select. If you want to require two levels of products and one level of categories, your code will look like the following.

```
<rn:widget path="input/MobileProductCategoryInput"
required_lvl="2" />
<rn:widget path="input/MobileProductCategoryInput"
data_type="Category"
```

```
required_lvl="1" />
```

4 To specify how many levels will be displayed to the customer, add the *max_lvl* attribute to the MobileProductCategoryInput widgets. (If the value for *required_lvl* is greater than the value for *max_lvl*, the *max_lvl* value will be set equal to the *required_lvl* value.) Your code will resemble the following.

```
<rn:widget path="input/MobileProductCategoryInput"
required_lvl="2"
max_lvl="4" />
<rn:widget path="input/MobileProductCategoryInput"
data_type="Category"
required_lvl="1"
max_lvl="3" />
```

5 Save *ask.php*.

Populating products and categories automatically

The mobile ask a question page contains fields for **products** and **categories**, which are empty until the customer makes a menu selection in the fields. If you want, you can set the page to open with the product or category already populated. In order to do that, you must know the product's ID number. The following procedures show you first how to determine a product's ID and then how to make the changes to populate the Product field when the page opens.

To identify a product's ID number

1 Log in to Oracle Service Cloud.

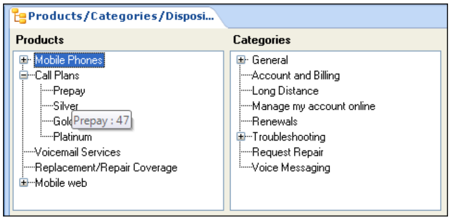
2 Click the Configuration button.

3 Double-click Products/Categories/Dispositions under Service.

4 Expand the product or category tree if necessary to view the product or category you want to add.

5 Hover over the product or category to display the ID number, and make a note of it.

6 If you are selecting a sub-product, you also need to know the ID numbers of its parent product or products. For example, in the following figure, the ID for the Prepay subproduct is 47, but you also need to know that its parent product Call Plans has an ID of 421. The full ID for Prepay is then 421,47.



Now edit the ask a question page to populate the Product field.

Populating the Product field

Note The procedure for populating the Category field is the same.

To populate the Product field

1 Open the *ask.php* file in the */views/pages/mobile* folder.

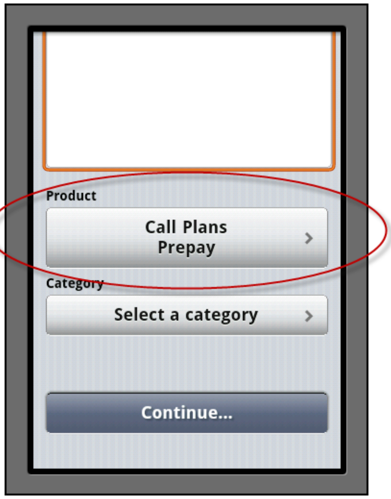
2 Locate the following line of code.

```
<rn:widget path="input/MobileProductCategoryInput" />
```

3 Add the *default_value* attribute to the MobileProductCategoryInput widget to specify the product you just identified the ID number for. Your code will resemble the following.

```
<rn:widget path="input/MobileProductCategoryInput"
default_value="421,47" />
```

4 Save *ask.php*.



Attaching files to questions

Your customers may want to attach image files to their questions, which they can do from their mobile device. For example, they can take a photo of a defective product and send it with their question. Thumbnails appear next to the image name when files have been attached.

Note It's possible that the image orientation might be different from the original sent by a customer, but staff members working the incident on the Service Console can reorient the image, save it to their desktop, then attach the correct orientation to the incident.

Chatting on the mobile customer portal

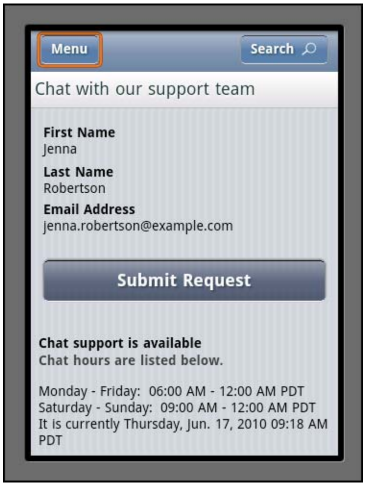
Using their mobile devices, customers can request a **chat session** with a member of your support team by clicking the Chat button under Contact Us on the mobile home page. Or they can click Menu > Contact Us > Chat to open a chat request.

- Requesting a chat
- Chatting on the mobile customer portal

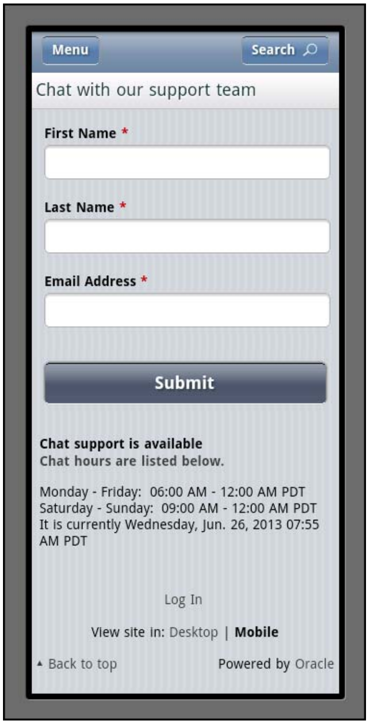
Requesting a chat

When customers click the Chat button on the mobile customer portal, the chat launch page opens. If the customer is logged in, the page displays first and last names and email address. If the customer is not logged in, fields for entering that information appear instead.

Chat request page when customer is logged in



Chat request page when customer is not logged in



When a chat request has been submitted and customers are waiting to be connected, they see a page that asks them to wait. As soon as a connection is established, customers are notified of their position in the queue.

Chat request queue notification

You can configure the following options on the chat launch page.

- Change message bases
- Change the chat hours
- Add a field where customers can enter their question
- Remove fields
- Require an SLA

Changing the message bases

You can change the default “Chat with our support team” and “Chat support is available” message bases on the mobile chat launch page.

To change the Chat with our Support Team heading

1 Open the *chat_launch.php* file in the */views/pages/mobile/chat* folder.

2 Locate the following line of code.

```
<h1>#rn:msg:CHAT_WITH_OUR_SUPPORT_TEAM_LBL#</h1>
```

3 Type the new heading between the `<h1>` and `</h1>` tags.

4 Save *chat_launch.php*.

To change the Chat Support available message

1 Open the *chat_launch.php* file in the */views/pages/mobile/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatStatus"/>
```

3 Add the *label_chat_available* attribute to the code. Your changes will resemble the following example.

```
<rn:widget path="chat/ChatStatus"
label_chat_available="Agents are currently available." />
```

4 Save *chat_launch.php*.

Adding a field for the customer question

You might want to add a field on the chat launch page for customers to enter their question. This gives the chat agent a better glimpse into the customer's needs when accepting the chat session request.

To add a question field on the chat launch page

1 Open the *chat_launch.php* file in the */views/pages/mobile/chat* folder.

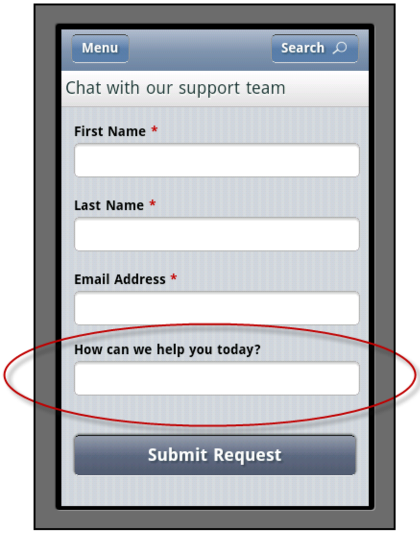
2 Locate the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
```

3 Add the following code immediately below the code you located in step 2.

```
<rn:widget path="input/FormInput"
name="Incident.Subject"
label_input="How can we help you today?"/>
```

4 Save *chat_launch.php*.



Removing fields

To remove fields from the chat launch page

1 Open the *chat_launch.php* file in the */views/pages/mobile/chat* folder.

2 Locate the following lines of code.

```
<fieldset>
    <rn:condition config_check="COMMON:intl_nameorder == 1">
        <rn:widget path="input/FormInput"
        name="Contact.Name.Last"
        label_input="#rn:msg:LAST_NAME_LBL#"
        required="true"/>
        <rn:widget path="input/FormInput"
        name="Contact.Name.First"
        label_input="#rn:msg:FIRST_NAME_LBL#"
        required="true"/>
    <rn:condition_else/>
        <rn:widget path="input/FormInput"
        name="Contact.Name.First"
        label_input="#rn:msg:FIRST_NAME_LBL#"
        required="true"/>
        <rn:widget path="input/FormInput"
        name="Contact.Name.Last"
```

```
        label_input="#rn:msg:LAST_NAME_LBL#"
        required="true"/>
    </rn:condition>
    <rn:widget path="input/FormInput"
    name="Contact.Emails.PRIMARY.Address"
    required="true"
    label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
</fieldset>
```

3 To remove the Last Name field and display only the first name, delete the following line of code from both condition cases.

```
<rn:widget path="input/FormInput"
name="Contact.Name.Last"
label_input="#rn:msg:LAST_NAME_LBL#"
required="true"/>
```

4 To remove the Address field, delete the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#"/>
```

5 Save *chat_launch.php*.

Requiring an SLA

You can make the chat launch page content conditional on the customer having an **SLA** or you can simply add a meta tag to the page to prevent customers without a chat SLA from requesting a chat. Customers who do not have an SLA will see a Permission Denied message on the page, and customers who are not logged in will be directed to the login page so their SLAs can be checked.

To set an SLA condition for displaying page content

1 Open the *chat_launch.php* file in the */views/pages/mobile/chat* folder.

2 Locate the following line of code.

```
<section id="rn_PageContent"
class="rn_LiveHelp">
```

3 Add the following line of code immediately before the code you located in step 2.

```
<rn:condition sla="chat" />
```

4 Add the following code after the last line in the *chat_launch.php* file.

```
<rn:condition_else />
<div id="rn_PageContent"
class="rn_AnswerDetail">
    <div class="rn_Padding">
        <h2>#rn:msg:PERMISSION_DENIED_LBL#</h2>
        <p>#rn:msg:CHAT_SLA_REQUIRED_LBL#</p>
    </div>
</div>
</rn:condition>
```

5 Save *chat_launch.php*.

To set a page meta tag to require an SLA

1 Open the *chat_launch.php* file in the */views/pages/mobile/chat* folder.

2 Add the *sla_required_type* page meta tag to the first line of the file, which should now read:

```
<rn:meta title="#rn:msg:LIVE_CHAT_LBL#"
template="mobile.php"
clickstream="chat_request"
sla_required_type="chat" />
```

3 Save *chat_launch.php*.

Note If you require a chat SLA on the chat launch page, you should also require one on the chat page. Edit the *chat_landing.php* file in the same manner by adding `sla_required_type="chat"` to the first line in the file.

Chatting on the mobile customer portal

After an agent accepts a chat request, the customer and agent can begin chatting. The chat landing page displays the agent's opening comments and a transcript of the ongoing chat between the customer and agent.

Important By default, the *chat_landing.php* file for the mobile chat page contains the *include_chat* page meta tag, which is set to true. If you create additional pages that contain a chat application, you must include this meta tag and set it true in the page file. When the *include_chat* tag is set to true, the page includes all the required JavaScript files for **Oracle RightNow Chat Cloud Service**.

The following configuration options are available on the chat landing page.

- Configuring the primary chat widgets (Although the default chat landing page includes multiple widgets, only the following three widgets are actually necessary to create a usable chat page.)
  - ▷ ChatServerConnect widget
  - ▷ ChatTranscript widget
  - ▷ ChatPostMessage widget
- Additional chat widgets
- Allow customers the option to chat off the record
- Set customer posts to always be off the record

Configuring the primary chat widgets

The chat page requires, at a minimum, the following three widgets, which you can configure.

- ChatServerConnect widget
- ChatTranscript widget
- ChatPostMessage widget

Configuring ChatServerConnect widget

The ChatServerConnect widget is used to communicate with customers who have just requested a **chat session**. Besides changing the loading icon and specifying a page to be loaded in the chat window when the chat session ends, you can modify the messages that appear when connecting, when the connection succeeds or fails, and when the session is terminated.

To configure the ChatServerConnect widget

1 Open the *chat_landing.php* file in the */views/pages/mobile/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatServerConnect"/>
```

3 To change the loading icon, add the *loading_icon_path* attribute to the widget. Your code will resemble the following.

```
<rn:widget path="chat/ChatServerConnect"
loading_icon_path="images/indicator_2.gif" />
```

4 To edit any of the following default labels (shown in quotation marks), add the associated attribute (shown in italics) and define it with your new label. ([Learn about editing message bases here.]())

label_connecting—"Please wait while we establish a connection to the Chat Server."

label_connection_fail—"There was a problem connecting to the Chat Server."

label_connection_success—"A connection to the Chat Server has been established successfully."

label_terminate_session—"This action will terminate your current session. Do you want to continue?"

Your code may resemble the following.

```
<rn:widget path="chat/ChatServerConnect"
label_connecting="We are connecting to the chat server now." />
```

5 Save *chat_landing.php*.

Configuring the ChatTranscript widget

The ChatTranscript widget lets you replace the default icons and labels that appear on the transcript window.

Note Hyperlinks are disabled in the chat transcript to prevent customers from following a link and then being unable to return to the chat session.

Replacing ChatTranscript widget icons

You can replace any of the default icons, which are specified as attributes of the ChatTranscript widget, by defining the path and file name for the replacement icon. In the *chat_landing.php* file, the code for the ChatTranscript widget is the following.

```
<rn:widget path="chat/ChatTranscript"
mobile_mode="true"/>
```

Note Setting the *mobile_mode* attribute to true disables the Close button, so customers must use the Menu button to navigate away from the chat window.

All default icons are in the */cp/customer/assets/themes/mobile/images* folder, but you can reference the path in the widget attribute simply by typing `images/[filename]`.

Table 384: ChatTranscript Widget Default Icons

Icon	Attribute	Default Value
Agent Message Icon	*agent_message_icon_path*	*images/chatAgent.png.*
Alert Icon	*alert_icon_path*	*images/chatAlert.png*
End-user Message Icon	*enduser_message_icon_path*	*images/chatEndUserMessage.png*
Off the Record Icon	*off_the_record_icon_path*	*images/chatOffTheRecord.png*

To replace the default Agent Message icon, for example, your code will resemble the following.

```
<rn:widget path="chat/ChatTranscript"
agent_message_icon_path="images/chatAgentNew.png" />
```

Editing ChatTranscript widget labels

You can replace any of the default labels, which are specified as attributes of the ChatTranscript widget, by defining the new label. Go to https://<your_site>/ci/tags/widgets/standard/chat/ChatTranscript for specific information about where each label is used. You can learn about editing message bases here.

Configuring the ChatPostMessage instructions

By default, the ChatPostMessage label on the mobile chat page says, "Type your message and send."

To edit the ChatPostMessage label

1 Open the *chat_landing.php* file in the */views/pages/mobile/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatPostMessage"
label_send_instructions="#rn:msg:TYPE_YOUR_MESSAGE_AND_SEND_LBL#"
mobile_mode="true"/>
```

Note Setting the *mobile_mode* attribute to true blurs the input panel to allow more of the transcript to be viewed on the mobile device.

3 Edit the *label_send_instructions* attribute to change the default message base. Your code will resemble the following.

```
<rn:widget path="chat/ChatPostMessage"
label_send_instructions="Your new instructions for sending a message"
mobile_mode="true"/>
```

4 Save *chat_landing.php*.

Adding the option to chat off-the-record

You can add a button to the mobile chat page that lets customers send an off-the-record message during the chat session. Any information the customer types in the Off the Record Message dialog that opens when the button is clicked does not appear on the Messages tab of the incident that is created from the chat session. Instead, the incident displays “Message Removed.” Text that is submitted off-the-record is displayed with a different color and icon in the chat transcript window.

To add the option to chat off-the-record

1 Open the *chat_landing.php* file in the */views/pages/mobile/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatEngagementStatus"/>
```

Note You can place the button wherever you want. In this example, we’re placing it below the status line.

3 Add the following lines of code immediately below the line you located in step 2.

```
<rn:widget path="chat/ChatOffTheRecordDialog"/>
<rn:widget path="chat/ChatOffTheRecordButton"
off_the_record_icon_path=""
label_off_the_record="#rn:msg:SEND_AN_OFF_THE_RECORD_MESSAGE_CMD#"/>
```

4 Save *chat_landing/php*.

Setting all chat posts off-the-record

To set all chat posts off-the-record

1 Open the *chat_landing.php* file in the */views/pages/mobile/chat* folder.

2 Locate the following line of code.

```
<rn:widget path="chat/ChatPostMessage"
label_send_instructions="#rn:msg:TYPE_YOUR_MESSAGE_AND_SEND_LBL#"
mobile_mode="true"/>
```

3 Edit the widget to add the *all_posts_off_the_record* attribute, as shown in the following code.

```
<rn:widget path="chat/ChatPostMessage"
label_send_instructions="#rn:msg:TYPE_YOUR_MESSAGE_AND_SEND_LBL#"
mobile_mode="true"
all_posts_off_the_record="true" />
```

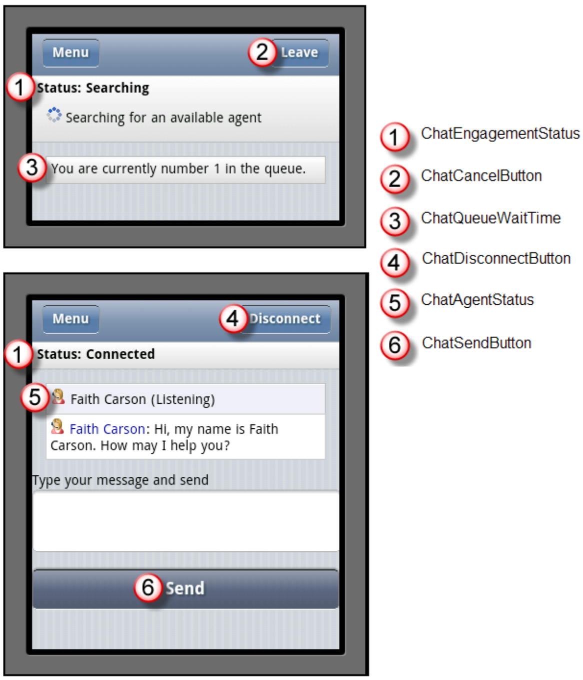
4 Save *chat_landing.php*.

Configuring the other chat widgets

Although only three widgets are required for a working chat page, the additional chat widgets shown in this figure provide increased functionality.

Note The following chat widgets are not available on the mobile customer portal.

- ChatAttachFileButton
- ChatPrintButton
- ChatQueueSearch
- ChatSoundButton



Customer account pages

Customers can manage their accounts on their mobile devices by viewing and updating the questions they've submitted to your support team. They can also update their account information and change their password.

You can configure the following customer account pages.

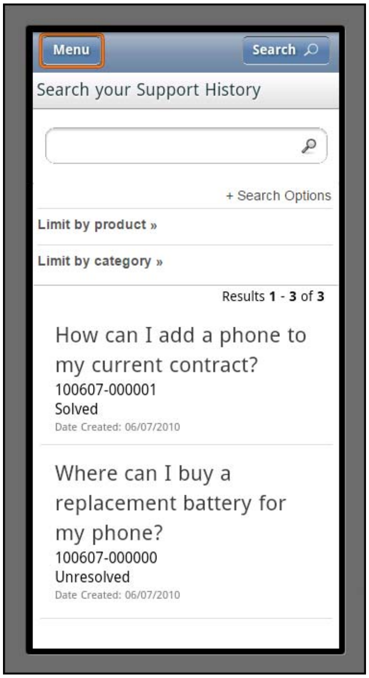
- Support history page
- Question details page
- Account settings page
- Change password page

Configuring the support history page

Customers can view the incidents they have submitted when they click Menu > Your Account > View Your Support History. The page displays a list of the **incidents** associated with the customer, including each incident's status and the date it was created. Your customers can filter the search results by product and category.

You can configure the following options on the support history page.

- Edit the page title
- Remove the search field
- Remove product and category filters
- Change the report that displays customer questions



Editing the page title

The default heading for the mobile support history page is Search Your Support History.

To edit the support history heading

1 Open the *list.php* file in the */views/pages/mobile/account/questions* folder.

2 Locate the following line of code.

```
<h1>#rn:msg:SEARCH_YOUR_SUPPORT_HISTORY_CMD#</h1>
```

3 Edit the code to replace the message base with the new page heading between the <h1> tags. Your edited code will resemble the following.

```
<h1>Search your recent questions here</h1>
```

4 Save *list.php*.

Removing the search field

If you remove the search field from the support history page, you'll probably also want to change the page heading so it doesn't refer to searching.

To remove the search field from the support history page

1 Open the *list.php* file in the */views/pages/mobile/account/questions* folder.

2 Remove the following lines of code.

```
<form onsubmit="return false;">
    <rn:widget path="search/KeywordText" label_text=""
    initial_focus="true"/>
    <rn:widget path="search/SearchButton"
    icon_path="images/icons/search.png"/>
</form>
```

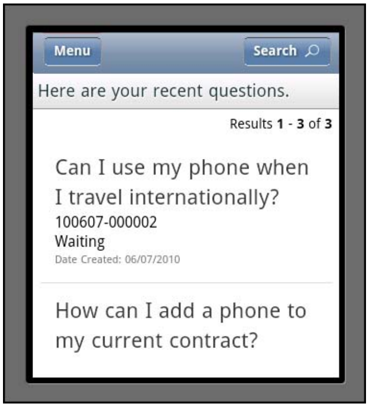
3 Locate the following line of code used for the page heading.

```
<h1>#rn:msg:SEARCH_YOUR_SUPPORT_HISTORY_CMD#</h1>
```

4 Edit the code you located in step 3 to replace the default message base that refers to the search feature you just removed. Type the new page heading between the `<h1>` tags. Your edited code will resemble the following.

```
<h1>Here are your recent questions.</h1>
```

5 Save *list.php*.



Removing product and category filters

By default, the support history pages lets customers filter their incidents by product and category.

To remove product and category filters

1 Open the *list.php* file in the */views/pages/mobile/account/questions* folder.

2 Delete the following lines of code.

```
<rn:widget path="navigation/Accordion" toggle="rn_Advanced"/>
<div class="rn_Padding">
    <a class="rn_AlignRight" href="javascript:void(0);"
    id="rn_Advanced">#rn:msg:PLUS_SEARCH_OPTIONS_LBL#</a>
    <div>
        <rn:widget path="search/MobileProductCategorySearchFilter"
        filter_type="products"/>
        <rn:widget path="search/MobileProductCategorySearchFilter"
        filter_type="categories"/>
    </div>
</div>
```

3 Save *list.php*.

Changing the report

By default, the support history page uses the Questions report (ID 196).

To change the report used by the support history page

1 Open the *list.php* file in the */views/pages/mobile/account/questions* folder.

2 Locate the following line of code.

```
<rn:container report_id="196">
```

3 Replace `196` with the standard or custom report you want to use instead. (Learn how to find a report’s ID number.)

4 Save *list.php*.

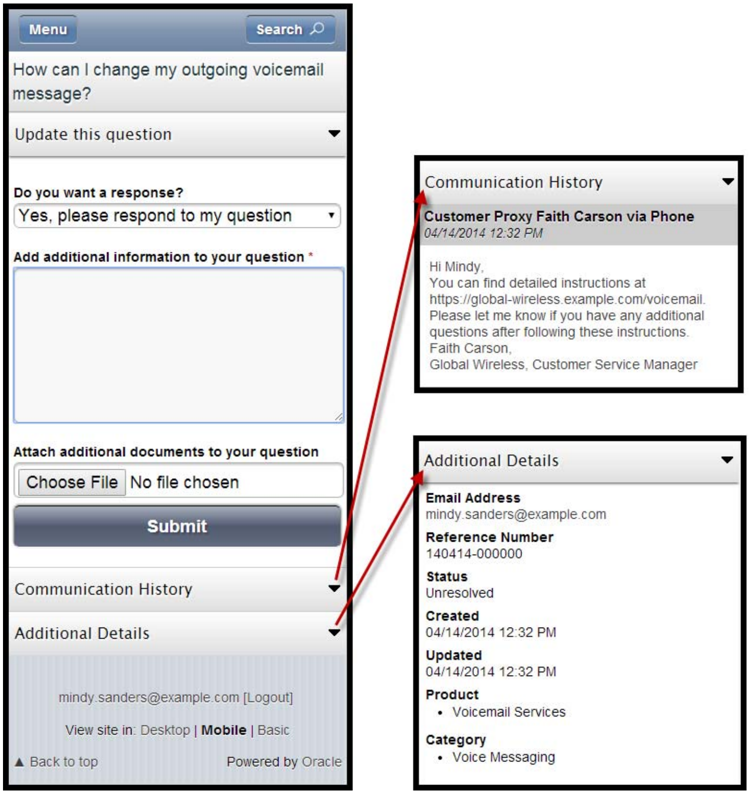
Configuring the question details page

When customers submit questions, **incidents** are created in the Oracle Service Cloud knowledge base. They can view the list of their questions on the support history page of the mobile customer portal. Selecting an individual question on the support history then opens the details page for that question, where customers can update their question by adding more information and requesting or declining a response from your support team. They can also view additional incident details, including the communication history, their email address, the incident's reference number and status, and the dates it was created and last updated.

Whenever customers respond to the "Do you want a response?" question with "Yes, please respond to my question," the Add Additional Information to Your Question field is automatically marked as a required field, and customers must enter something in the field before submitting their request.

Besides changing message bases on the question details page, other configuration options on the page include the following.

- Collapsing the Update This Question section when the page opens
- Expanding Communication History or Additional Details when the page opens
- Editing labels on the page
- Changing which details are displayed in the Additional Details section
- Preventing customers from updating solved incidents



Collapsing the Update This Question section

By default, the Update This Question section is expanded when the mobile question details page opens. Follow this procedure if you want the Accordion widget to be collapsed when the page opens.

To collapse the Update This Question section

1 Open the *detail.php* file in the */views/pages/mobile/account/questions* folder.

2 Locate the following lines of code.

```
<div class="rn_Module">
    <rn:widget path="navigation/Accordion"
    toggle="rn_QuestionUpdate"/>
    <h2 id="rn_QuestionUpdate">#rn:msg:UPDATE_THIS_QUESTION_CMD#<span
```

```
        class="rn_Expand"></span></h2>
        <form id="rn_UpdateQuestion"
        onsubmit="return false;">
            <div id="rn_ErrorLocation"></div>
            <rn:widget path="input/FormInput"
            name="Incident.StatusWithType.Status"
            label_input="#rn:msg:DO_YOU_WANT_A_RESPONSE_MSG#"/>
            <rn:widget path="input/FormInput"
            name="Incident.Threads"
            label_input="#rn:msg:ADD_ADDTL_INFORMATION_QUESTION_CMD#"
            initial_focus="true"
            required="true" />
            <rn:widget path="input/FileAttachmentUpload"
            label_input="#rn:msg:ATTACH_ADDTL_DOCUMENTS_QUESTION_LBL#"/>
            <rn:widget path="input/FormSubmit"
            label_button="#rn:msg:SUBMIT_CMD#"
            on_success_url="/app/account/questions/list"
            error_location="rn_ErrorLocation"/>
        </form>
    </div>
```

3 Edit the code as follows.

```
    <div class="rn_Module">
        <rn:widget path="navigation/Accordion"
        toggle="rn_QuestionUpdate"/>
        <h2
        id="rn_QuestionUpdate"><class="rn_Collapsed">#rn:msg:UPDATE_THIS_
        QUESTION_CMD#<span class="rn_Expand"></span></h2>
        <div class="rn_Hidden rn_QuestionThreadContent">
            <form id="rn_UpdateQuestion"
            onsubmit="return false;">
                <div id="rn_ErrorLocation"></div>
                <rn:widget path="input/FormInput"
                name="Incident.StatusWithType.Status"
                label_input="#rn:msg:DO_YOU_WANT_A_RESPONSE_MSG#"/>
                <rn:widget path="input/FormInput"
                name="Incident.Threads"
                label_input="#rn:msg:ADD_ADDTL_INFORMATION_QUESTION_CMD#"

                initial_focus="true"
                required="true" />
                <rn:widget path="input/FileAttachmentUpload"
                label_input="#rn:msg:ATTACH_ADDTL_DOCUMENTS_QUESTION_LBL#
                "/>
```

```
                <rn:widget path="input/FormSubmit"
                label_button="#rn:msg:SUBMIT_CMD#"
                on_success_url="/app/account/questions/list"
                error_location="rn_ErrorLocation"/>
            </form>
        </div>
    </div>
```

4 Save *detail.php*.

Expanding Communication History or Additional Details

To expand Communication History when the page opens

1 Open the *detail.php* file in the */views/pages/mobile/account/questions* folder.

2 Locate the following lines of code.

```
<h2 id="rn_QuestionThread">#rn:msg:COMMUNICATION_HISTORY_LBL#<span
class="rn_Expand"></span></h2>
<div class="rn_Hidden rn_QuestionThreadContent">
```

3 Edit the code as follows.

```
<h2 id="rn_QuestionThread"
class="rn_Expanded">#rn:msg:COMMUNICATION_HISTORY_LBL#<span
class="rn_Expand"></span></h2>
<div>
```

4 Save *detail.php*.

To expand Additional Details when the page opens

1 Open the *detail.php* file in the */views/pages/mobile/account/questions* folder.

2 Locate the following lines of code.

```
<h2 id="rn_QuestionDetails">#rn:msg:ADDITIONAL_DETAILS_LBL#<span
class="rn_Expand"></span></h2>
<div class="rn_Hidden rn_Padding">
```

3 Edit the code as follows.

```
<h2 id="rn_QuestionDetails"
class="rn_Expanded">#rn:msg:ADDITIONAL_DETAILS_LBL#<span
class="rn_Expand"></span></h2>
<div class="rn_Padding">
```

4 Save *detail.php*.

Editing labels on the page

You can edit any of the message bases on the question details page. This procedure provides an example, but the process is the same for other labels and messages. Review information about changing message bases here.

To edit labels on the question details page

1 Open the *detail.php* file in the */views/pages/mobile/account/questions* folder.

2 To edit the Update This Question label, locate the following line of code.

```
<h2 id="rn_QuestionUpdate">#rn:msg:UPDATE_THIS_QUESTION_CMD#<span
class="rn_Expand"></span></h2>
```

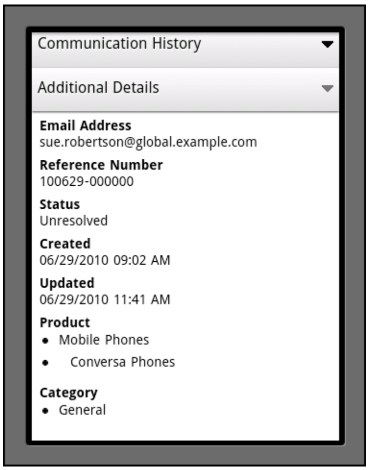
3 Edit the message base so your code resembles the following.

```
<h2 id="rn_QuestionUpdate">Provide updated information<span
class="rn_Expand"></span></h2>
```

4 Save *detail.php*.

Changing displayed details

The Additional Details section on the question details page lists the customer's email address and information about the incident, including reference number, status, dates created and updated, and the associated product and category.



To add or remove incident details on the question details page

1 Open the *detail.php* file in the */views/pages/mobile/account/questions* folder.

2 Locate the following lines of code and notice the block of DataDisplay widgets below them. Each line defines one of the details displayed on the page.

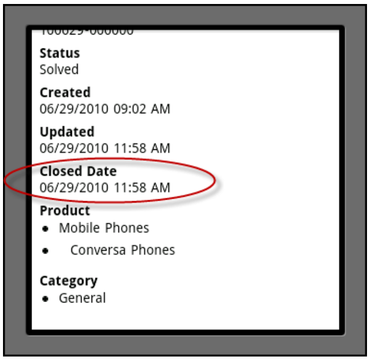
```
<div class="rn_Module">
    <rn:widget path="navigation/Accordion"
    toggle="rn_QuestionDetails"/>
    <h2 id="rn_QuestionDetails">#rn:msg:ADDITIONAL_DETAILS_LBL#<span
    class="rn_Expand"></span></h2>
    <div class="rn_Hidden rn_Padding">
```

3 To add an incident detail, add a line of code that adds the DataDisplay widget to the block of DataDisplay code for incident fields. You can find the names of all the incident fields you can add to the page by clicking the Framework tab and selecting Business objects on the Customer Portal Administration site.

```
<rn:widget path="output/DataDisplay"
name="Incident.ClosedTime"
label="#rn:msg:CLOSED_LBL#" left_justify="true"/>
```

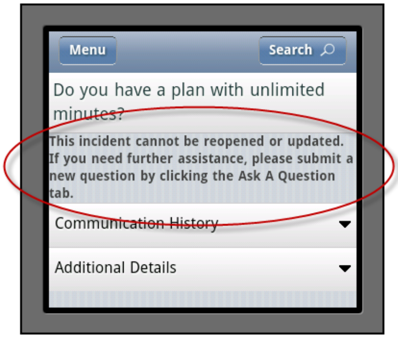
4 To remove one of the incident fields, locate the line of code that displays the field and delete it.

5 Save *detail.php*.



Preventing update of solved incidents

By default, the question details page uses a condition to prevent customers from updating **incidents** (customers' questions) that have been solved for more than one week (168 hours). You can change the amount of time until an incident can no longer be updated or you can prevent customers from ever updating a closed incident, regardless of how recently it's been solved.



Notice that the default message refers to the Ask a Question tab, which applies to the standard reference implementation but not the mobile page set. When you prevent customers from updating closed incidents, you should probably change that message base as well.

To prevent customers from updating solved incidents

1 Open the *detail.php* file in the */views/pages/mobile/account/questions* folder.

2 Locate the following line of code.

```
<rn:condition incident_reopen_deadline_hours="168">
```

3 Edit the code to change the value for the *incident_reopen_deadline_hours* attribute to 0.

```
<rn:condition incident_reopen_deadline_hours="0">
```

4 Now change the message base by first locating the following line of code.

```
<h4>#rn:msg:INC_REOPENED_UPD_FURTHER_ASST_PLS_MSG#</h4>
```

5 Edit the code to change the message that is displayed when the incident cannot be updated.

```
<h4>This incident can no longer be opened or updated. For help, submit
a new question to our support team.</h4>
```

6 Save *detail.php*.

Configuring the account settings page

When customers click Menu > Your Account > Change Your Account Settings, the page displays information entered when they first created their account or most recently updated it. By default, this page displays fields for user name, first and last names, email address, street address, and phone numbers. Customers can also change their password from this page.

Configuration options for this page include the following.

- Changing the page title
- Changing other message bases on the page
- Adding and removing fields


Menu
Search
Account Settings
Account
Username *
susan
Change your password.
Contact Information
First Name *
Susan
Last Name *
Robertson
Email Address *
sue.robertson@global.example.con
Street
City
Country
--
State/Province
--
Postal Code
Home Phone
Office Phone
Mobile Phone
Save Changes

Editing the page title

To edit the account settings page title

1 Open the *profile.php* file in the */views/pages/mobile/account* folder.

2 Locate the following line of code.

```
<h1>#rn:msg:ACCOUNT_SETTINGS_LBL#</h1>
```

3 Edit the code with your new heading to resemble the following.

```
<h1>Your Current Profile Settings</h1>
```

4 Save *profile.php*.

Editing message bases and labels

You can edit any of the message bases and labels on the account settings page. This procedure provides an example, but the process is the same for other labels and messages. [Review information about changing message bases here.]()

To edit message bases and labels on the account settings page

1 Open the *profile.php* file in the */views/pages/mobile/account* folder.

2 To change the "Change your password" message, locate the following line of code.

```
<a href="/app/account/
change_password#rn:session#">#rn:msg:CHG_YOUR_PASSWORD_CMD#</a><br/
><br/>
```

a Edit the code with your new message to resemble the following.

```
<a href="/app/account/change_password#rn:session#">Click here to
change your password.</a><br/><br/>
```

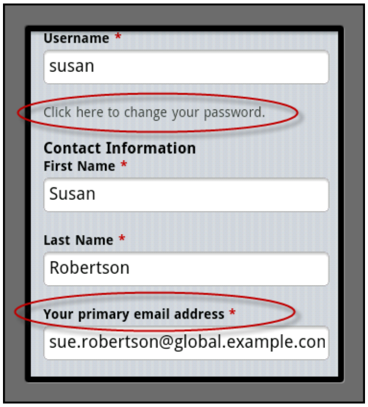
3 To change the label for the Email Address field, locate the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
validate_on_blur="true"
label_input="#rn:msg:EMAIL_ADDR_LBL#" />
```

a Edit the code with your new message to resemble the following.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.PRIMARY.Address"
required="true"
validate_on_blur="true"
label_input="Your primary email address" />
```

4 Save *profile.php.*



Adding and removing fields

To add or remove contact fields on the account settings page

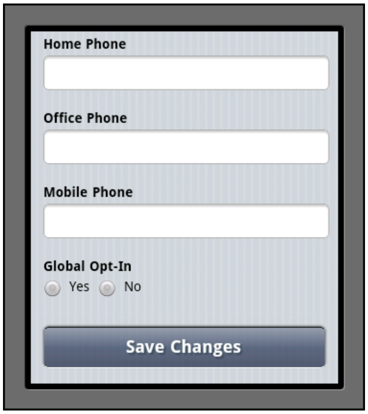
1 Open the *profile.php* file in the */views/pages/mobile/account* folder.

2 To add a field to the account settings page, insert a line of code that calls the FormInput widget in the location on the page where you want the field to appear. You can find the names of all the contact fields you can use by clicking the Framework tab and selecting Business objects on the Customer Portal Administration site. For example, to add the alternate email address fields to the page, add the following lines of code.

```
<rn:widget path="input/FormInput"
name="Contact.Emails.ALT1.Address" />
<rn:widget path="input/FormInput"
name="Contact.Emails.ALT2.Address" />
```

3 To add a radio button selection that lets customers opt in to communications from your marketing department, add the following code wherever you want in the block of FormInput widgets on the page.

```
<rn:widget path="input/FormInput"
name="Contact.MarketingSettings.MarketingOptIn" />
```



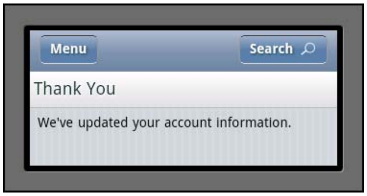
4 To remove one of the contact fields, locate the line of code that displays the field and delete it. For example, to remove the physical address fields, you would delete the following lines of code.

```
<rn:condition language_in="ja-JP,ko-KR,zh-CN,zh-HK,zh-TW">
    <rn:widget path="input/FormInput"
    name="Contact.Address.PostalCode" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.Country" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.StateOrProvince" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.City" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.Street" />
<rn:condition_else />
    <rn:widget path="input/FormInput"
    name="Contact.Address.Street" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.City" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.Country" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.StateOrProvince" />
    <rn:widget path="input/FormInput"
    name="Contact.Address.PostalCode" />
</rn:condition>
```

5 Save *profile.php*.

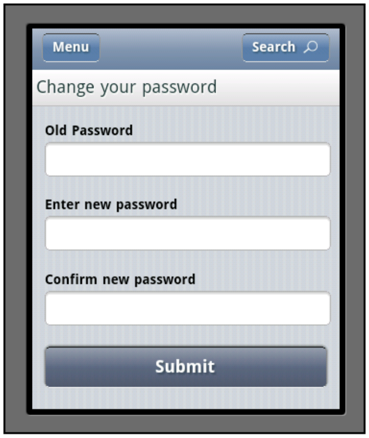
Confirmation of updated account settings

After customers edit their profile information and click Submit, they receive the following confirmation message.



Configuring the change password page

When customers click the Change Your Password link on the account settings page, the following page opens. After they submit their current and new password, a confirmation page opens.



Configuration options for this page include the following.

- Editing message bases
- Editing the Password label to indicate the password minimum length requirement

Editing message bases on the change password page

To edit message bases on the change password page

1 Open the *change_password.php* file in the */views/pages/mobile/account* folder.

2 To edit the heading, locate the following line of code and type the new heading between the <h1> tags.

```
<h1>#rn:msg:CHANGE_YOUR_PASSWORD_CMD#</h1>
```

3 To edit labels for any of the password fields, locate the following line of code.

```
<rn:widget path="input/PasswordInput"
name="Contact.NewPassword"
require_validation="true"
require_current_password="true"
label_input="#rn:msg:PASSWD_LBL#"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"
initial_focus="true"/>
```

a To edit the Current Password label, add the *label_current_password* attribute and set its value to the label you want.

b To edit the Password label, edit the value for the *label_input* attribute.

c To edit the Verify Password label, edit the value for the *label_validation* attribute.

4 Save *change_password.php*.

Editing the password label to specify password length

If you set a minimum password length that customers must enter when they're creating an account or changing their password, passwords are automatically required. You may want to edit the label so customers know how long their password must be before they enter one.

To edit the password label on the change password page

1 Open the *change_password.php* file in the */views/pages/mobile/account* folder.

2 Locate the following line of code.

```
<rn:widget path="input/FormInput"
name="Contact.NewPassword"
require_validation="true"
label_input="#rn:msg:PASSWD_LBL#"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"
initial_focus="true"/>
```

3 Edit the *label_input* attribute of the FormInput widget to define password length information. Your code will resemble the following.

```
<rn:widget path="input/FormInput"
name="Contact.NewPassword"
require_validation="true"
label_input="Password (8 characters minimum)"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#"
initial_focus="true"/>
```

4 Save *change_password.php*.

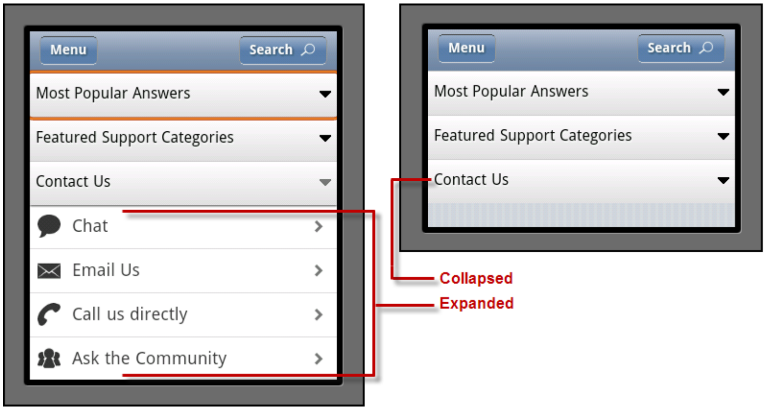
Mobile widgets

The mobile reference implementation uses the following widgets. All but the Accordion widget are intended for use only on the mobile pages.

- Accordion—Allows expandable/collapsible sections, which are especially useful with the limited screen size of mobile devices.
- MobileAnswerFeedback—Provides the response mechanism for customers to give feedback on the answer details page.
- MobileMultiline—Displays an answers report on the answers list page in a format optimized for mobile devices.
- MobileNavigationMenu—Displays a button that toggles between displaying and hiding content on a page, such as the Menu and Search buttons on the template.
- MobileProductCategoryInput—Displays products and categories for selection on the ask a question page.
- MobileProductCategoryList—Displays a list of products and categories. The home page uses this widget to display Featured Support Categories.
- MobileProductCategorySearchFilter—Lets customers filter an answers report to display only answers related to the selected product or category.
- MobileSimpleSearch—Displays a search field and Search button that let customers enter search terms on their mobile device.
- PageSetSelector—Allows customers to select the option of viewing the standard and basic page set on their mobile device.

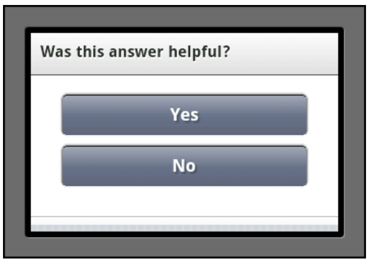
Accordion widget

The accordion widget is an expandable/collapsible container. Customers can click it to toggle between expanding and collapsing the elements contained in it. The default home page of the mobile reference implementation contains three of these widgets: Most Popular Answers, Featured Support Categories, and Contact Us.

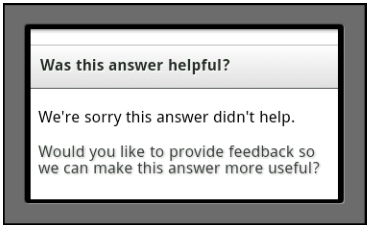


MobileAnswerFeedback

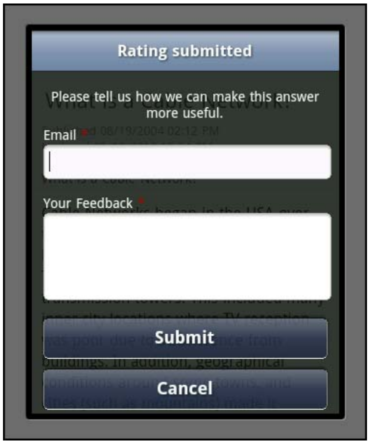
The MobileAnswerFeedback widget on the answer details page lets customers provide feedback on the answer they are viewing.



Positive feedback is recorded and a thank-you message acknowledges the feedback. If the answer is No, customers are offered the chance to provide additional feedback.

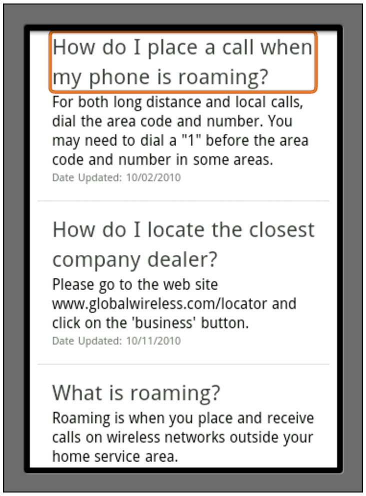


Selecting the link opens another window where feedback can be entered.



MobileMultiline widget

The MobileMultiline widget displays an answers report on the answers list page using a format that is optimized for mobile devices.

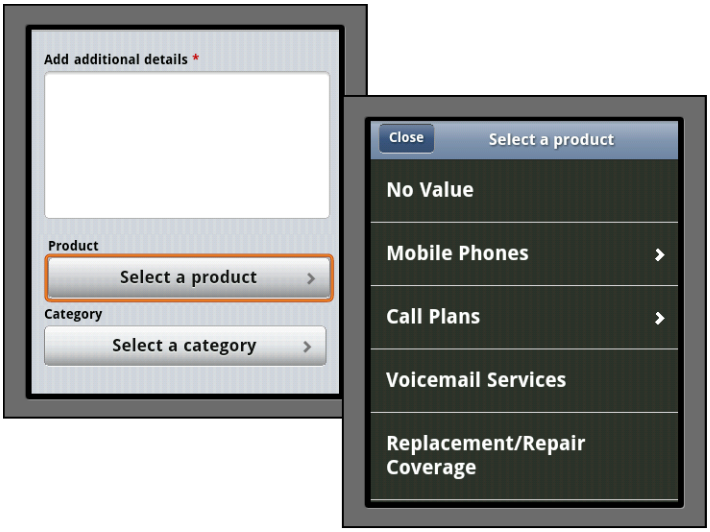


MobileNavigationMenu widget

The MobileNavigationMenu widget is a button that toggles between opening and closing content. The Menu and Search buttons on the template are both MobileNavigationMenu widgets. The MobileNavigationMenu widget code requires a label for the button, an ID of the div element that is displayed when the button is clicked (the *submenu* attribute), and the CSS class used by the button. When the button is first clicked, the defined element opens. When it is clicked again, the element closes.

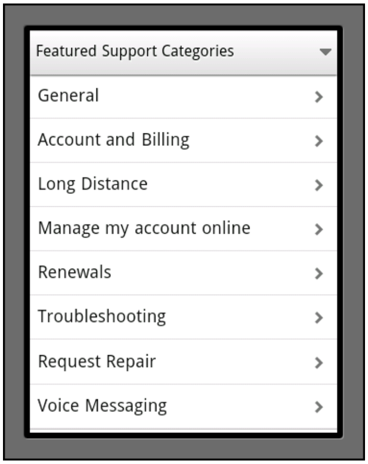
MobileProductCategoryInput

The MobileProductCategoryInput widget displays a drop-down menu for selecting products and categories on question and contact forms. By default, it appears on the ask a question page. When adding the MobileProductCategoryInput widget to a page, you must define the *table* attribute.



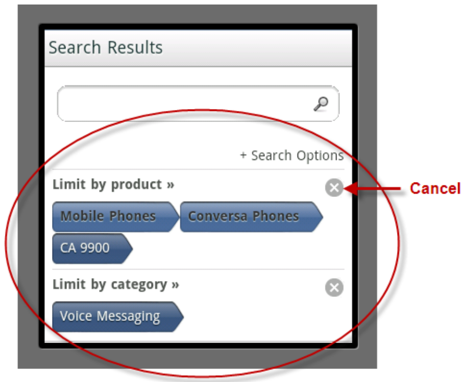
MobileProductCategoryList widget

The MobileProductCategoryList widget is used to display the Featured Support Categories on the home page. You can specify one or two levels of products or categories in the widget code. When customers click a product or category, all answers that are associated with that category are opened on the answers list page.



MobileProductCategorySearchFilter widget

The MobileProductCategorySearchFilter widget displays product and category filters on the answers list page so customers can restrict the displayed answers by the selected product and category. The answers list page displays both product and category filters, but you can include just one on the page or remove both of them. (Configure the search filter display on the answers list page.) Clicking a cancel button clears the filter choice.

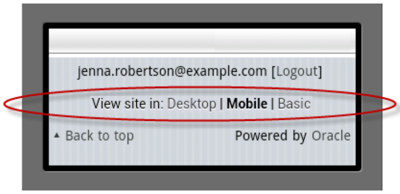


MobileSimpleSearch widget

The MobileSimpleSearch widget opens when the primary Search button on the template is clicked. When customers enter text in the search field, the field displays an X button to quickly clear the entered text. To optimize the mobile experience and prevent an unmanageable number of search results, searching will not occur if search terms have not been entered in the field when the Search button is clicked. When customers clear product or category search filters, they must click Search again because the search does not refresh automatically.

PageSetSelector

The PageSetSelector widget lets customers select the option of viewing the standard and basic reference implementation on their mobile device instead of viewing the mobile page set. Cookies must be enabled to allow this option. If cookies are disabled on the customer's browser and the Desktop option is selected, the mobile page refreshes instead of switching to the reference implementation. If customers view your site in Desktop mode, they won't have a way to return to the Mobile mode while their cookie is active unless you have modified your standard reference implementation to let them select the Mobile mode.



Other customer portal widgets

The Accordion widget and the nine mobile widgets are the only widgets designed specifically for the mobile reference implementation. In addition to these widgets, the following standard widgets are also supported in the mobile reference implementation. Many have modified presentation CSS in the */cp/customer/assets/themes/mobile/widgetCss* folder. As a result, their display on a mobile device is different from their display in the standard Customer Portal reference implementation.

- All widgets in the *chat* folder, **except** ChatAttachFileButton, ChatCoBrowseButton, ChatPrintButton, ChatQueueSearch, and ChatSoundButton
- All widgets in the *input* folder, **except** FileAttachmentUpload and ProductCategoryInput (The MobileProductCategoryInput is used on the mobile reference implementation to select products and categories.)
- *knowledgebase* folder
  - ▷ GuidedAssistant
  - ▷ PreviousAnswers
  - ▷ RelatedAnswers
- *login* folder
  - ▷ EmailCredentials
  - ▷ LoginForm

    - LogoutLink
    - ResetPassword
- All widgets in the *output* folder
- *reports* folder
    - Paginator
    - ResultInfo
- *search* folder
    - CombinedSearchResults
    - KeywordText
    - SearchButton
- *utils* folder
    - EmailAnswerLink

Important It's possible that additional customer portal widgets beyond these may function on your mobile pages, but the listed ones are the only supported widgets for the mobile page set. You must customize the presentation CSS of any non-supported widgets you add to your mobile pages because the default CSS is not compatible with an acceptable display on a mobile device.

Developer information

The mobile reference implementation offers a JavaScript Module meta tag that enhances performance of the customer portal on mobile devices. Another difference between the mobile and standard reference implementations is the styling of the development header and the information it contains. In order to automatically display the mobile page set to customers with mobile devices, the customer portal provides user agent mapping so you can define the page sets your customers see based on the browser they are using.

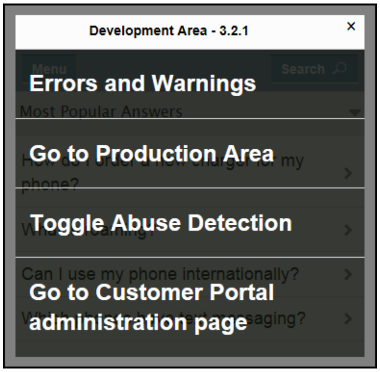
JavaScript Module meta tag

To support the higher latency on mobile browsers, a new page meta tag called *javascript_module* has been added. If this tag is omitted, the same framework JavaScript as used in the standard reference implementation is loaded. Selecting the *mobile* option for this tag loads core components, but omits large and unnecessary modules. No deprecated code will be loaded, and the *autoload.js* file will not be loaded either.

Development header

The mobile reference implementation uses an abbreviated version of the development header that lets you view errors, warnings, and notifications and contains links for the production pages and the Customer Portal Administration site. Clicking the Development Area header toggles between expanding and collapsing the header.

Click to view



Clicking Errors and Warnings lets you view any problems on the page. Clicking Go to Production Area displays the page in production mode. Clicking Toggle Abuse Detection puts your development site in an abuse simulation mode so you can test what happens under abuse conditions. And clicking Go to Customer Portal Administration Page opens the */ci/admin* page of your site.

61

Basic Page Set for the Customer Portal

The majority of customers who access your customer portal are most likely using either mobile devices or standard browsers on desktops and laptops. But you may have others using older devices and browsers with limited or no JavaScript capabilities. These include certain older versions of the Japanese Keitai phones and Symbian OS devices, which are still very much in use internationally. They also include embedded browsers such as those found in some gaming systems, "smart" home appliances, and GPS devices.

The Customer Portal's basic page set significantly expands the number of customers who can access your customer portal because it supports this wide variety of lower-capability devices and browsers. The page set detects the browser's level of JavaScript capability in order to present the best experience to the customer. Devices that display the basic page set must meet the following minimum requirements.

- **HTML doctype**—The device must be capable of rendering XHTML Basic 1.1, which is the current recommendation from W3C (World Wide Web Consortium) for mobile devices. The XHTML Basic 1.1 doctype is included in the reference implementation for the basic page set. If you use any other doctype, you must modify the template, pages, and possibly your widgets.
- **CSS**—The basic page set has been designed to deliver the pages in XHTML markup if the device or browser supports limited or no CSS. Some minimal styling has been added and will be rendered on devices that support CSS. The reference implementation supports CSS 2.1, but you can remove the CSS styling completely if necessary.
- **Cookies and authentication**—The basic page set requires cookies for customer and staff member login authentication. Session tracking works on all devices regardless of their ability to support cookies, but customer login authentication works only when cookies are supported and enabled. Administrative login requires authentication as well.

The following differences exist between the basic page set and the standard and mobile pages.

- Multiple reports will work on a basic page only if no search filtering widgets are included on the page.
- Clickstream reporting is based on customers performing a search.

- The following features are not supported in the basic page set.
  - ▷ **Guided assistance**
  - ▷ **Chat**
  - ▷ Community integration
  - ▷ Open login
  - ▷ CAPTCHAs on form submission
  - ▷ **Web indexing** of external documents
  - ▷ **Topic browsing**
  - ▷ **Search priority words**
  - ▷ Filtering incidents by organization

Detection of JavaScript capability

The CapabilityDetector widget is included on the standard, mobile, and basic templates. The widget detects the customer's browser capabilities, but it is not visible to customers because it is not rendered on the template. Here's how the widget works.

- When customers who are using a browser that has no or limited JavaScript capabilities try to access a standard or mobile page, a link is displayed advising them to switch to a different format. When they click the link, the basic page set opens. If you prefer to direct them to the basic page set automatically, you can set a widget attribute to do so. Refer to the procedure for automatically redirecting customers to the basic page set below.

  If the basic page set is not enabled, the message will tell them that their current browser will not display the pages well.
- When customers access the basic page set with a browser that supports modern JavaScript, you can set a widget attribute (disabled by default) to display a message that encourages them to use a different page set for a better experience. Refer to the procedure below for recommending the standard page set instead of the basic pages.

To automatically redirect customers to the basic page set

1 Open the *standard.php* file in the */views/templates* folder.

2 Locate the following line (around line number 22).

```
<rn:widget path="utils/CapabilityDetector" />
```

3 Edit the widget code as follows:

```
<rn:widget path="utils/CapabilityDetector"
automatically_redirect_on_failure="true" />
```

4 Save *standard.php*.

To recommend the standard page set instead of the basic pages

1 Open the *basic.php* file in the */views/templates* folder.

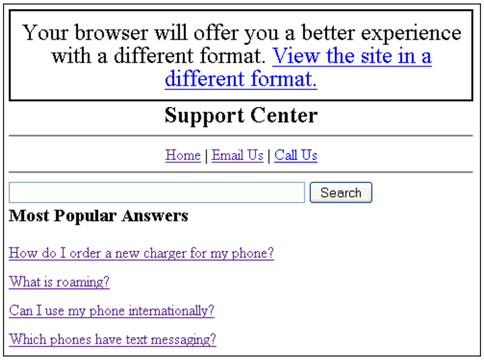
2 Locate the following line (around line number 62).

```
<rn:widget path="utils/CapabilityDetector" />
```

3 Edit the widget code to add the *display_tests_pass* attribute so that your code is:

```
<rn:widget path="utils/CapabilityDetector"
display_tests_pass="true" />
```

4 Save *basic.php*.



When customers click the link, they are directed to the standard page set, which results in a better web experience.

Form validation

Because the basic page set does not use JavaScript to preprocess data in form submissions, a separate set of form input widgets are used with these pages. The <rn:form> tag provides server-side validation of input fields and also supports a function that processes the data.

When customers submit information on the basic page set, they are notified if the information they enter is determined to be invalid, for example, if an email address is not in the usual email format. Error messages occur in the following circumstances.

- When the field is required and no information is entered.
- When the value for an integer field does not fall within the minimum and maximum allowable values.
- When the length of a string value does not fall within the minimum and maximum allowable values.
- When email and URL field types do not use a recognizable format.
- When fields with a mask do not conform to the mask definition.

Note If customers submit a form that returns a form validation error, they can no longer change the product or category except to select a sub-level of the selected product or category.

Features of form validation on the basic page set include the following.

- **Preservation of entered data**—When customers enter invalid data in a field and receive an error message, the other information they entered on that page is retained so they don't have to re-enter it.
- **Password verification**—If customers create an account and submit a password that does not meet the requirements defined on the Service Console, the page refreshes to indicate the missing password requirements.
- **Answer feedback**—Email address and feedback content are validated prior to submission.
- **Login credential validation**—When login information is incorrect, an error message is displayed to the customer.
- **State and province selection**—When the country is selected, a list of states or provinces associated with that country is displayed. Refer to Defining the State/Province field.

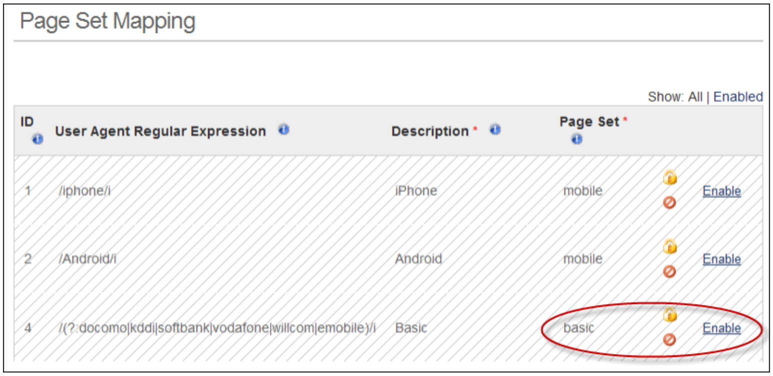
Enabling the basic page set

You must enable the basic **page set mapping** if you want customers who use the target devices and browsers to see the basic pages. This action is performed on the Customer Portal Administration site.

To enable the basic page set

1 In a web browser, type `https://<your_site>/ci/admin`. After you log in, the Customer Portal Dashboard displays.

2 Click the Page Set Mappings shortcut on the dashboard.



3 Click Enable in the right column for the basic page set. The link changes to Disable and the basic page set is enabled.

4 To add your organization's name to the basic page set, follow these steps.

  a Open the *basic.php* file in the */views/templates* folder.

  b Locate the `<body>` line (approximately line 60), and add the following code immediately below it.

```
<h1>My Company Name</h1>
```

  c Save *basic.php*.

Basic template configuration

You can customize the basic page set just as you can customize the standard and mobile page sets. The template (*/cp/customer/development/views/templates/basic.php*) includes the customizable header, called Support Center in the **reference implementation**, the Home, Email Us, and Call Us links, the BasicLogoutLink widget, and the PageSetSelector widget. Additionally, the template for the basic page set uses a special JavaScript Module type `None` that tells the Customer Portal framework not to load any framework or widget JavaScript.

Configuring security

Clickjacking is an attack on browser security that can mislead your customers into clicking a concealed link. To prevent clickjacking, you cannot let your site be put into an iFrame on another site. If you do not use iFrames, make the following edits to the template file.

Note If you intentionally run your customer portal inside an iFrame, do not use the following procedure.

To configure the template for security

1. Open the *basic.php* file in the */views/templates* folder.

2. Locate the following first lines of code.

```
<rn:meta javascript_module="none"/>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML Basic 1.1//EN" "http://
www.w3.org/TR/xhtml-basic/xhtml-basic11.dtd">
<html lang="#rn:language_code#">
    <head>
```

3. Immediately after the `<head>` tag you located in step 2, add the following code.

```
<script>
if (top!= self) top.location.href = self.document.location;
if (parent!= self) top.location.href = location.href;
if (top.frames.length!=0) top.location=self.document.location;
if (window!= window.top) top.location.href = location.href;
</script>
```

4. Save *basic.php*.

5. Open the *hooks.php* file in the */customer/development/config* folder.

6. Add the following code to the pre_page_render hook to prevent clickjacking in modern browsers. Refer to Adding hooks.

```
header("X-Frame-Options:deny");
```

7. Save *hooks.php*.

Support for Shift-JIS

Shift-JIS, a non-UTF-8 encoding character set used for the Japanese language, has been implemented for the basic page set. If you do not set up the page set for Shift-JIS, your basic page set uses the standard UTF-8 character encoding.

You can create a page set specifically for Shift-JIS, or you can configure the basic page set so it uses Shift-JIS. In either case, you must define which page sets should use Shift-JIS and note them in the new configuration setting CP_SHIFT_JIS_PAGE_SETS.

To define the CP_SHIFT_JIS_PAGE_SETS configuration setting

1. Log in to Oracle Service Cloud.
2. Click the Configuration button on the navigation pane.
3. Double-click Configuration Settings under Site Configuration. The Search window opens.
4. Type CP_SHIFT_JIS_PAGE_SETS in the Key field and click Search. A single-line report for the configuration setting opens.
5. Click the Value column so you can enter a value.
6. To use the Shift-JIS character set with the basic page set, type `basic` in the Value column.
7. To use the Shift-JIS character set with a page set you have created, type the page set name in the Value column.
8. To add more than one page set, separate the values with a comma.
9. Click the Save button on the ribbon.

To use Shift-JIS with the basic page set

1. Open the *basic.php* file in the */views/templates* folder.
2. Confirm that the *javascript_module* value in the first line of code is “none.”
   ```
   <rn:meta javascript_module="none"/>
   ```
3. Locate the following line of code.
   ```
   <meta http-equiv="content-type" content="text/html; charset=UTF-8"/>
   ```
4. Edit the code you located to change *charset* from UTF-8 to Shift-JIS.
   ```
   <meta hettp-equiv="content-type"
   ```

```
content="text/html;
charset=SHIFT_JIS"/>
```

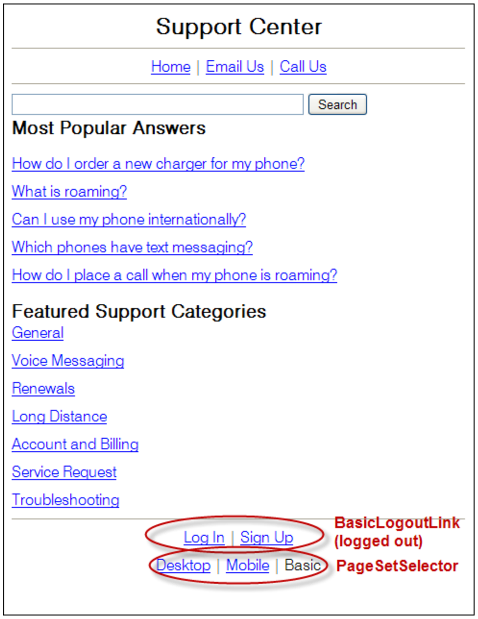
5 Save *basic.php*.

6 Stage and promote your customer portal.

When customers access any of the pages that use the basic template, the character encoding now uses Shift-JIS.

CapabilityDetector widget

Besides the BasicLogoutLink and PageSetSelector widgets, the basic template also includes the CapabilityDetector widget described in Detection of JavaScript capability. The PageSetSelector widget lets customers select the desktop or mobile page set from the basic page. If the customer is not logged in, the BasicLogoutLink widget displays Log In and Sign Up links.

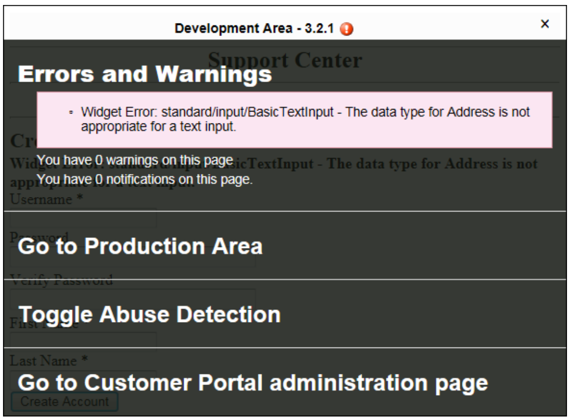


If the customer is logged in, the customer's name is displayed along with Logout and Your Account links.

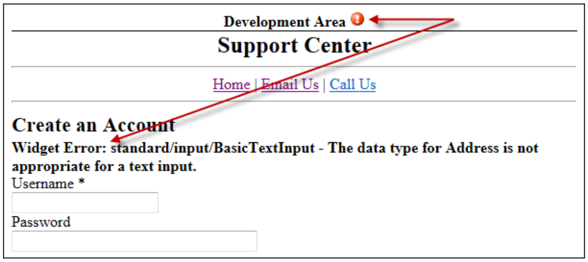
Development header

Just as you do in the standard and mobile page sets, you work with your pages in the development mode until you are ready to stage and promote them. This prevents your customers from seeing the changes you are making until you make them public. You can verify that you're working in development mode because the development header appears at the top of your page.

If your code contains errors, you'll see an exclamation point symbol in the header and the error is described at the top of the page. If JavaScript is enabled, you can click on the symbol to display the errors.



If the browser doesn't support JavaScript, the development area header is simplified and the exclamation point is inactive. The error is noted near the affected widget.



Besides Errors and Warnings, the following options also appear when you click the Development Area header on the basic page set.

- **Go to Production Area**—Click to open the equivalent page on the production site.
- **Toggle Abuse Detection**—Click to put your development site in an abuse simulation mode so you can test what happens under abuse conditions. The header indicates that your development site is now in abuse mode.

Important The CAPTCHAs that appear on the standard and mobile pages require JavaScript to display. Because the basic page set does not support JavaScript, your customers will see a generic error message if an abuse situation is detected.

- **Go to Customer Portal administration page**—Click to open the Customer Portal Administration site.

Basic pages

The following pages are described in this document.

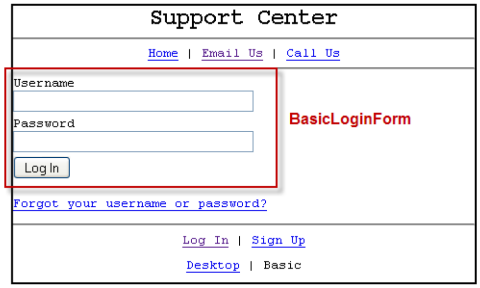
- Login page
- Create an Account page
- Account Assistance page
- Home page
- Search results page
- Answer details page
- Answer feedback page
- Email Us page
- Account Overview page

- Account Settings page
- Questions list page
- Question details page
- Change Password page

The BasicFormStatusDisplay widget is included on the pages that let customers enter and submit information in a form. This widget is not visible on the page but is used to display status and error messages based on form inputs.

Login page

The login page contains a simple form for entering the user name and password to log in to your customer portal. When customers log in, they are redirected to the page they were on before they logged in (unless you redirect them to a different page). The BasicLoginForm widget appears on this page. Customers can also click the Forgot Your Username or Password? link to be directed to the Account Assistance page where they can request their user name or reset their password. You can change the labels for user name, password, and the Log In button.



To edit labels on the Login page

1 Open the *login_form.php* file in the */views/pages/basic/utils* folder.

2 Locate the following line of code.

```
<rn:widget path="login/BasicLoginForm"/>
```

3 To change the Username label, add the *label_username* attribute to the BasicLoginForm widget. Your code will resemble the following.

```
<rn:widget path="login/BasicLoginForm"
label_username="New Username"/>
```

4 To change the Password label, add the *label_password* attribute to the BasicLoginForm widget. Your code will resemble the following.

```
<rn:widget path="login/BasicLoginForm"
label_password="New Password"/>
```

5 To change the Log In label on the button, add the *label_login_button* attribute to the BasicLoginForm widget. Your code will resemble the following.

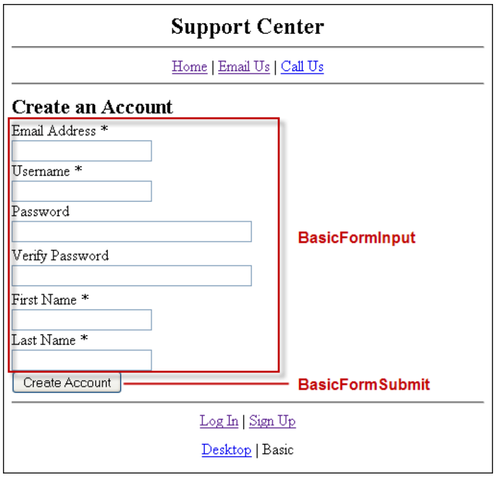
```
<rn:widget path="login/BasicLoginForm"
label_login_button="New Log In" />
```

6 Save *login_form.php*.

Create an Account page

When customers who are not logged in click the Sign Up link at the bottom of a page, the Create an Account page opens. This page contains the following widgets.

- **BasicFormStatusDisplay**—Appears only if status and error messages are displayed.
- **BasicFormInput**—Lets customers enter their email address, user name, password, and first and last names.
- **CustomDisplayAll**—Displays input fields for any contact custom fields with end-user visibility.
- **BasicFormSubmit**—Displays the Create Account button.



To edit the Create an Account page

1 Open the *create_account.php* file in the */views/pages/basic/utils* folder.

2 To edit the Create an Account page heading, locate the following code.

```
<h1>#rn:msg:CREATE_AN_ACCOUNT_CMD#</h1>
```

Replace the text between the `<h1>` markers. Your code will resemble the following.

```
<h1>Your New Create an Account Heading</h1>
```

3 To change the label for any of the input fields (Email Address, Username, Password, First Name, and Last Name), edit the *label_input* attribute for the corresponding BasicFormInput widget. For example, to edit the Username label, your edited code will resemble:

```
<rn:widget path="input/BasicFormInput"
name="Contact.Login"
required="true"
label_input="Login Name"/>
```

4 To add a field to the page, decide where you want to locate the field on the page, identify its database name (refer to Input and output widgets), and add the necessary code. For example, to add a phone number field after the customer’s last name, you would add a line such as the following immediately below the BasicFormInput for Contact.Name.Last. Notice that there are two last name widgets in the page code, one in conditional tags for international conventions. You will probably want to add the phone number field after each of them.

```
<rn:widget path="input/BasicFormInput"
name="Contact.Phones.MOBILE.Number"
label_input="Mobile Phone Number"/>
```

5 To remove a field, delete its associated line of code. For example, if your customers use their email address as their login, you could remove the following line of code.

```
<rn:widget path="input/BasicFormInput"
name="Contact.Login"
required="true"
label_input="Login Name"/>
```

6 Save *create_account.php*.

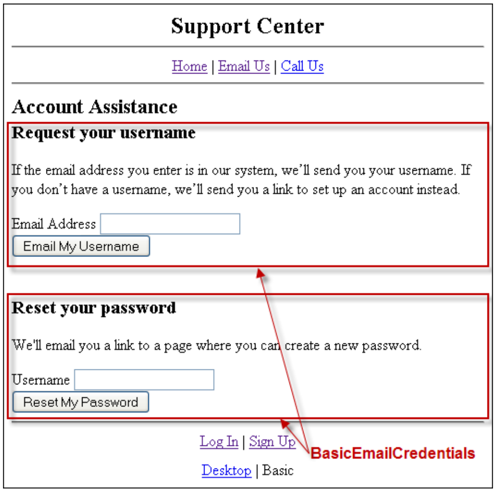
Account Assistance page

When customers click the Forgot Your Username or Password? link on the login page, they are directed to the Account Assistance page where they can request their user name or reset their password. The page contains the following widgets.

- **BasicFormStatusDisplay**—Appears only if status and error messages are displayed.
- **BasicEmailCredentials**—Lets customers retrieve their user name or reset their password.

When customers enter their email address and click the Email My Username button, their user name is sent to that address if it exists in the knowledge base. If no record of the customer's email address exists in the knowledge base, they will be sent a link to set up an account instead.

If customers know their user name but not their password, they can enter the user name and click Reset My Password. An email containing a link to reset the password will be sent to the email address associated with the user name that was entered.

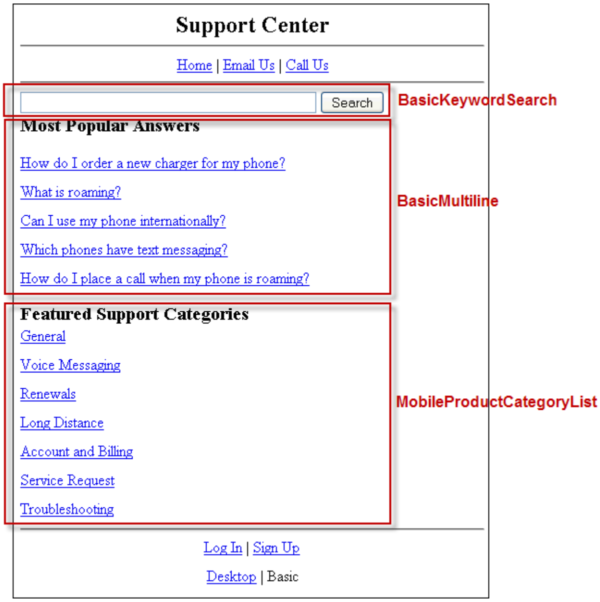


Home page

The home page contains a search field, a list of the five most popular answers, and featured support categories. Widgets on this page include the following.

- **BasicKeywordSearch**—Lets customers enter search terms to find the information they need.
- **BasicMultiline**—Displays the top five frequently viewed answers.
- **MobileProductCategoryList**—Displays a list of categories that can be used as search filters.

Your customers have several options for finding information from the home page. They can enter a search term in the field on the home page and click the Search button to open the search results page, which displays all the answers that match their search term. They can select an answer directly from the Most Popular Answers report, which opens the answer details page for that answer. Or they can browse answers related to one of the listed categories by clicking a category and viewing all answers related to that category.



To edit the home page

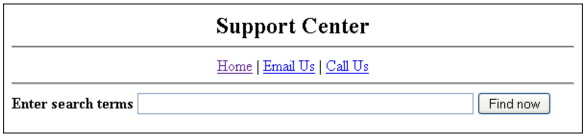
1 Open the *home.php* file in the */views/pages/basic/* folder.

2 To edit the search field, locate the following code.

```
<rn:widget path="search/BasicKeywordSearch"
label_text=""
report_page_url="/app/answers/list"/>
```

You can add a label to the search field and change the label of the Search button. Your code will resemble the following.

```
<rn:widget path="search/BasicKeywordSearch"
label_text="Enter search terms"
label_button="Find now"
report_page_url="/app/answers/list"/>
```

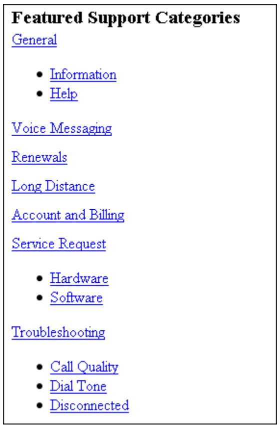


3 To change the number of answers displayed under Most Popular Answers from the default of five, locate the following line of code and edit the *per_page* attribute to the value you want.

```
<<rn:widget path="reports/BasicMultiline"
report_id="194"
per_page="5"/>
```

4 To display a second level of Featured Support Categories for those categories that have sub-levels, locate the following line of code and delete `levels="1"`. (Because 2 is the default value for the *levels* attribute, the widget defaults to that value when no level is defined.)

```
<rn:widget path="search/MobileProductCategoryList"
data_type="categories"
levels="1" label_title=""/>
```



5 To display products instead of categories, locate the following line of code and delete `data_type="categories"`. (Because products are the default value for the *data_type* attribute, the widget defaults to that value when no data type is defined.)

```
<rn:widget path="search/MobileProductCategoryList"
levels="1"
label_title=""/>
```

Now edit the title of the list by changing the `<h2>` line immediately above the code for the MobileProductCategoryList widget to the following.

```
<h2>#rn:msg:FEATURED_SUPPORT_PRODUCTS_LBL#</h2>
```

6 Save *home.php*.

Search results page

The search results page includes a search field and the ability to limit the returned answers by **product** or **category**. Customers reach this page by entering a search term on the home page or by selecting one of the listed categories (or products), also on the home page. The widgets on the search results page include the following.

- **BasicProductCategorySearchFilter**—Lets customers filter search results by product and category. The page contains two instances of this widget, one for products and one for categories.
- **BasicKeywordSearch**—Lets customers enter search terms to find the information they need.
- **BasicDisplaySearchFilters**—Displays the product and category filters selected by the customer.
- **BasicResultInfo**—Displays the number of search results.
- **BasicMultiline**—Displays the report containing all answers returned from the search.
- **BasicPaginator**—Lets customers move to a different page of search results when more than one page is required to display all returned answers.

To edit the search results page

1 Open the *list.php* file in the */views/pages/basic/answers* folder.

2 To edit the search field, locate the following code.

```
<rn:widget path="search/BasicKeywordSearch" label_text=""/>
```

You can add a label to the search field and change the label of the Search button as was shown on the home page in To edit the home page. Your code will resemble the following.

```
<rn:widget path="search/BasicKeywordSearch"
label_text="Enter search terms"
label_button="Find now"/>
```

3 To remove the link that lets your customers filter answers by product, delete the following line of code.

```
<a href="/app/answers/list/selectFilter/product/#rn:url_param:c#/
#rn:url_param:kw##rn:session#">#rn:msg:LIMIT_BY_PRODUCT_LBL#</a><br/>
```

4 To remove the link that lets your customers filter answers by category, delete the following line of code.

```
<a href="/app/answers/list/selectFilter/category/#rn:url_param:p#/
#rn:url_param:kw##rn:session#">#rn:msg:LIMIT_BY_CATEGORY_LBL#</a>
```

5 To change the labels on the selected product and category filters from All Products and All Categories, add the *label_all_products* and *label_all_categories* attributes to the widget, setting their values to the labels you want. Your code will resemble the following.

```
<rn:widget path="search/BasicDisplaySearchFilters"
label_all_products="Selected Product Filter"
label_all_categories="Selected Category Filter"/>
```

6 To remove the display of the selected product and category filters, delete the following line of code.

```
<rn:widget path="search/BasicDisplaySearchFilters" />
```

Note Deleting this code deletes the display of both product and category filters.

7 To change the number of displayed answers on the search results page from the default value of ten answers per page, locate the code for the BasicMultiline widget and add the *per_page* attribute, setting its value to the number of answers you want to display. You also need to add the same attribute and value to the BasicResultInfo widget. Your code will resemble the following.

```
<rn:widget path="reports/BasicResultInfo"
per_page="5"/>
<rn:widget path="reports/BasicMultiline"
per_page="5"/>
```

8 To display more or fewer characters of an answer than the default value of 100, add the *truncate_size* attribute to the BasicMultiline widget and set its value to the number of characters you want to display. Your code will resemble the following.

```
<rn:widget path="reports/BasicMultiline"
truncate_size="50" />
```

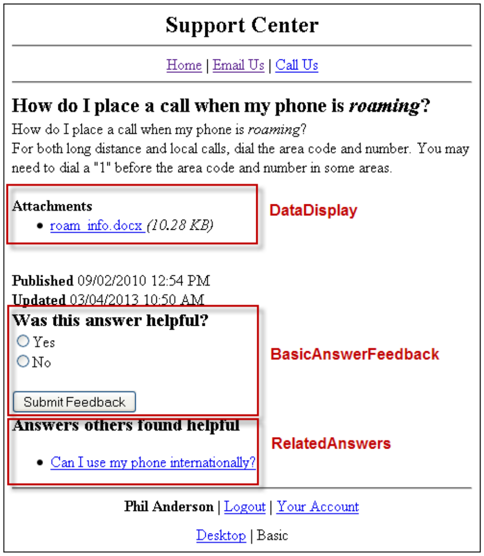
9 Save *list.php*.

Answer details page

When a customer selects an answer from the Most Popular Answers report on the home page or from the list of answers on the search results page, the answer details page opens. This page displays the answer content, any **file attachments** the answer might contain, the dates the answer was first published and last updated, an answer feedback section, and a list of additional answers that other customers found helpful after viewing the displayed answer.

The widgets on the answer details page include the following.

- **BasicFormStatusDisplay**—Appears only if status and error messages are displayed.
- **DataDisplay**—Displays any file attachments associated with the answer.
- **BasicAnswerFeedback**—Lets customers submit feedback on the answer.
- **RelatedAnswers**—Lists answers other customers found helpful.



To edit the answer details page

1 Open the *details.php* file in the */views/pages/basic/answers* folder.

2 To edit the date labels, locate the following lines of code.

```
<b>#rn:msg:PUBLISHED_LBL#</b> <rn:field name="Answer.CreatedTime"/>
<br />
<b>#rn:msg:UPDATED_LBL#</b> <rn:field name="Answer.UpdatedTime" />
```

```
<br />
```

Change the labels to the names you choose. Your code will resemble:

```
<b>First published on</b> <rn:field name="Answer.CreatedTime"/>
<br />
<b>Last edited on</b> <rn:field name="Answer.UpdatedTime" />
<br />
```

3 To remove the date labels, delete the code you located in step 2.

4 To edit the file attachments display, locate the following line of code.

```
<rn:widget path="output/DataDisplay"
name="Answer.FileAttachments"
left_justify="true"
label="#rn:msg:ATTACHMENTS_LBL#"/>
```

a To remove the file attachments display, delete the line of code you located. Also delete the preceding `<div>` and following `</div><br />` tags.

b To change the Attachments label, change the *label* attribute to `label="New Attachment Name."`

c To sort the file attachment list alphabetically, add the *sort_by_filename* attribute to the DataDisplay widget. Your code will look like:

```
<rn:widget path="output/DataDisplay"
name="Answer.FileAttachments"
left_justify="true"
label="#rn:msg:ATTACHMENTS_LBL#"
sort_by_filename="true"/>
```

d To remove the file size information, add the *display_file_size* attribute and set it to false. Your code will look like:

```
<rn:widget path="output/DataDisplay"
name="Answer.FileAttachments"
left_justify="true"
label="#rn:msg:ATTACHMENTS_LBL#"
display_file_size="false"/>
```

5 To edit the answer feedback section of the page, locate the following line of code.

```
<rn:widget path="feedback/BasicAnswerFeedback"
on_success_url="/app/answers/submit_feedback"/>
```

a To change the “Was this answer helpful?” question, add the *label_title* attribute to the BasicAnswerFeedback widget and set it to the value you want. Your code will look like this example.

```
<rn:widget path="feedback/BasicAnswerFeedback"
on_success_url="/app/answers/submit_feedback"
label_title="Let us know if this answered your question." />
```

b To add multiple feedback options beyond Yes and No, add the *options_count* attribute to the widget code, similar to the following.

```
<rn:widget path="feedback/BasicAnswerFeedback"
on_success_url="/app/answers/submit_feedback"
options_count="5"/>
```

c To edit the label on the Submit Feedback button, add the *label_submit_button* attribute to the widget so that your code resembles the following.

```
<rn:widget path="feedback/BasicAnswerFeedback"
on_success_url="/app/answers/submit_feedback"
label_submit_button="New Submit Button" />
```

d To remove answer feedback, delete the code you located in step 5.

6 To remove related answers (the answers that have been manually associated to the open answer by a staff member or automatically associated through other customer searches), delete the following line of code.

```
<rn:widget path="knowledgebase/RelatedAnswers" />
```

7 To change the maximum number of displayed answers from the default value of five, add the *limit* attribute. Your code will resemble the following.

```
<rn:widget path="knowledgebase/RelatedAnswers"
limit="3" />
```

8 Save *details.php*.

Answer feedback page

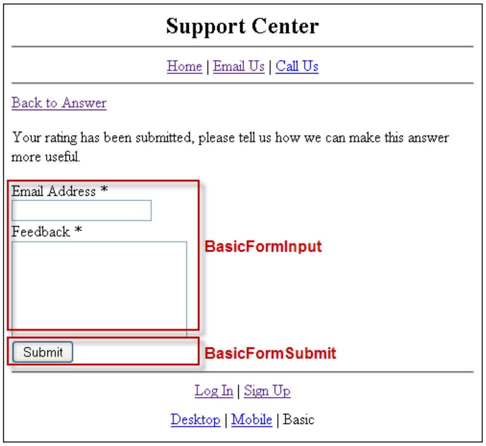
Customers can submit their feedback regarding an answer on the answer details page. The BasicAnswerFeedback widget asks if the answer was helpful. If the customer responds Yes and clicks the Submit Feedback button, a message appears at the top of the page to confirm that the feedback was submitted successfully.

If the customer replies No and clicks the Submit Feedback, the feedback is submitted and the answer feedback page opens. Customers are asked for an email address (unless they are already logged in) and for feedback that would make the answer more useful. Clicking the Submit button then results in the successful feedback confirmation message.

The widgets on the answer feedback page include the following.

- **BasicFormStatusDisplay**—Appears only if status and error messages are displayed.
- **BasicFormInput**—Lets customers enter their feedback and, if they are not logged in, their email address.
- **BasicFormSubmit**—Displays the Submit button.

Configuring the BasicAnswerFeedback widget was covered in step 5 of To edit the answer details page.

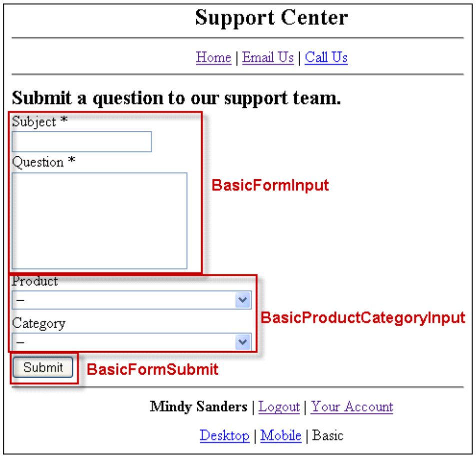


Email Us page

When your customers click the Email Us link, the page to submit a question opens. Logged-in customers enter the subject and text of their question, while customers who are not logged in also complete their email address.

All customers have the option to select a top-level **product** and **category** related to their question. You can also define a workflow that walks customers through the process of selecting specific sub-products and sub-categories before submitting a question. This can be helpful when your organization has large numbers of products and categories and you want to be sure their question gets directed to the appropriate support staff. Refer to Selecting multiple levels of products and categories.

Additionally, you can use **SmartAssistant** to suggest answers to your customers before they finish submitting their question. Customers who find answers to their question before submitting an incident have the satisfaction of an immediate solution. You have the benefit of assigning more complex questions to your agents because common questions are handled without agent intervention. Refer to Configuring SmartAssistant.



The following widgets appear on the page for submitting a question.

- **BasicFormStatusDisplay**—Appears only if status and error messages are displayed.
- **BasicFormInput**—Lets customers enter their email address, subject, and question.
- **BasicProductCategoryInput**—Lets customers select the associated product and category on the ask a question page.
- **BasicCustomAllInput**—Displays input fields for incident custom fields with end-user visibility.
- **BasicFormSubmit**—Displays the Submit button.

To edit the submit a question page

1 Open the *ask.php* file in the */views/pages/basic/* folder.

2 To delete the Subject field when customers are not logged in, delete the following line of code. (When you delete the Subject field on the customer portal page, the first 80 characters of the question field are used to populate the Subject field on the Service Console.)

```
<rn:widget path="input/BasicFormInput"
name="Incident.Subject"
required="true"
label_input="#rn:msg:SUBJECT_LBL#"/>
```

3 To delete the Subject field when customers are logged in, delete the following lines of code.

```
<rn:condition logged_in="true">
```

```
    <rn:widget path="input/BasicFormInput"
    name="Incident.Subject"
    required="true"
    label_input="#rn:msg:SUBJECT_LBL#"/>
</rn:condition>
```

4 To require the selection of a product or category, add the *required* attribute to the corresponding widget.

   a To require product selection, change the code to the following.

   ```
   <rn:widget path="input/BasicProductCategoryInput"
   name="Incident.Product" required="true"/>
   ```

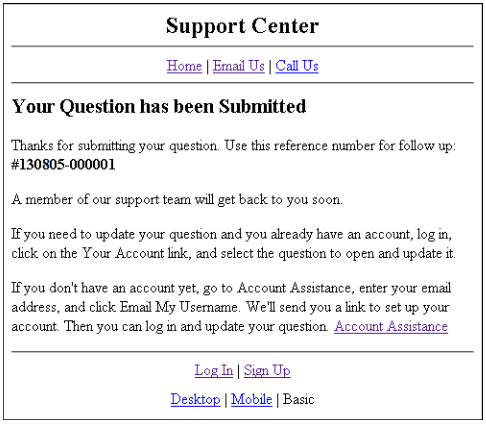
   b To require category selection, change the code to the following.

   ```
   <rn:widget path="input/BasicProductCategoryInput"
   name="Incident.Category" required="true"/>
   ```

5 Save *ask.php*.

Confirmation page

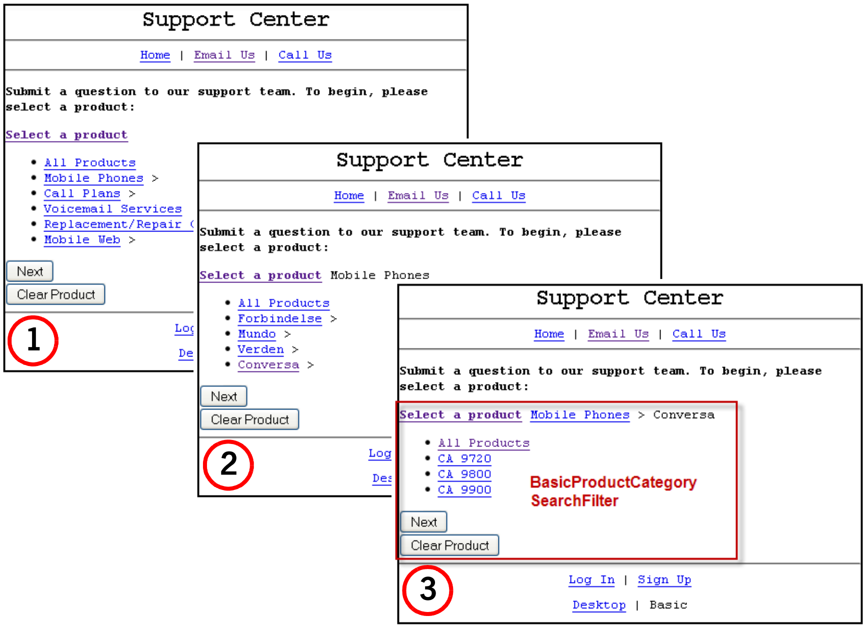
After customers submit their question, a confirmation page (*/views/pages/basic/ask_confirm.php*) opens to notify them of the incident reference number that was created by their question.



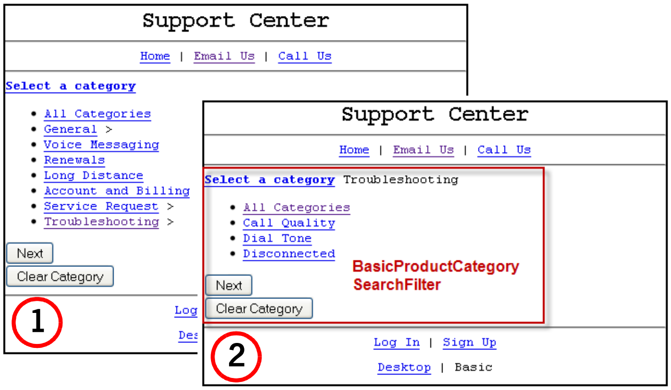
Selecting multiple levels of products and categories

While the reference implementation of the basic page set lets your customers select a top-level product and category when they submit their question, you may prefer to lead them through a sequence of product and category sub-levels to ensure that questions are sent to the appropriate support staff. A workflow based on product/category hierarchy also enforces **product-category linking** if your site supports that feature. (Refer to Product linking to learn about that feature.)

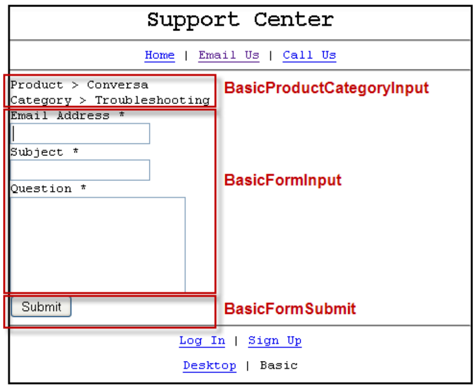
Here's what the workflow looks like: The first page that opens when the Email Us link is clicked asks customers to select a product. If the product has sub-products, they can select a sub-product and one of its sub-products as well. This workflow helps your support staff respond to customer questions more quickly and efficiently when they know the product and category before responding.



When there are no more sub-products or when customers click Next, they are asked to select a category and, if they choose, sub-categories.



When customers click Next on the category selection page, the question page opens to display the customer's product and category selections, the Subject and Question fields, and any custom incident fields in use on your site. If customers are not logged in, the Email Address field also appears.



The following procedure describes how to implement this workflow.

To create a workflow with multiple levels of product and category selections

1 Open the *ask.php* file in the */views/pages/basic/* folder.

2 Delete the following line of code.

```
<h1>#rn:msg:SUBMIT_QUESTION_OUR_SUPPORT_TEAM_CMD#</h1>
```

3 Add the following lines of code in place of the code you deleted in step 2.

```
<rn:condition url_parameter_check="prodSelected == null">
    <p><b>#rn:msg:SUBMIT_QUEST_SUPPORT_TEAM_BEG_PLS_MSG#</b></p>

    <rn:widget path="search/BasicProductCategorySearchFilter"
        report_page_url="/app/ask/prodSelected/1"
        clear_filters_page_url="/app/ask"
        label_search_button="#rn:msg:NEXT_LBL#"/>

<rn:condition_else/>

    <rn:condition url_parameter_check="catSelected == null">
        <rn:widget path="search/BasicProductCategorySearchFilter"
            report_page_url="/app/ask/prodSelected/1/catSelected/1"
            clear_filters_page_url="/app/ask"
            filter_type="categories"
            label_search_button="#rn:msg:NEXT_LBL#"
            label_clear_filters_button="#rn:msg:CLEAR_CATEGORY_CMD#"/
            >

    <rn:condition_else/>
```

4 Locate the following line of code.

```
<rn:form post_handler="postRequest/sendForm">
```

5 Add the following lines of code below the code you located in step 4.

```
    <rn:widget path="input/BasicProductCategoryInput"
    name="Incident.Product" read_only="true"
    label_input="#rn:msg:PRODUCT_LBL# &gt; "/>
    <rn:widget path="input/BasicProductCategoryInput"
    name="Incident.Category" read_only="true"
    label_input="#rn:msg:CATEGORY_LBL# &gt; "/>
```

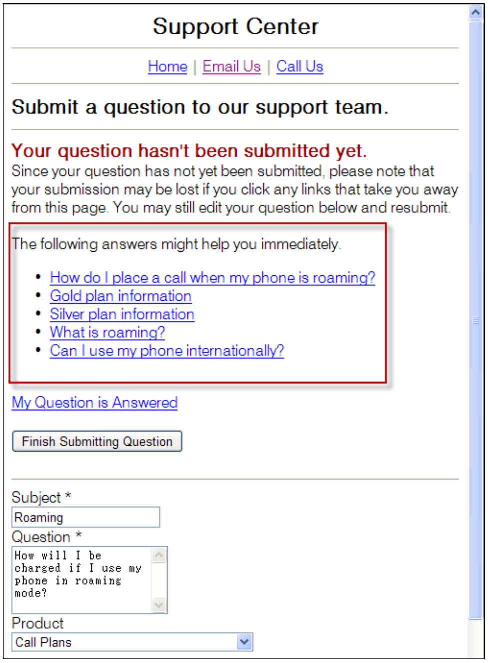
6 Add the following code as the last two lines of the file.

```
    </rn:condition>
</rn:condition>
```

7 Save *ask.php*.

Configuring SmartAssistant

By default, the BasicSmartAssistant widget is included on the Email Us page. SmartAssistant-suggested answers appear on the page containing the question form completed by the customer. If you already have SmartAssistant configured on the Service Console, it is also available on the basic page set. If you need to set up SmartAssistant, refer to Using SmartAssistant on the Ask a Question page. The following figure shows the BasicSmartAssistant widget.



The default Email Us page uses a condition tag to determine whether the answers are displayed when the customer clicks the Submit button, or whether the confirmation page appears immediately. The conditions on the default page are two answers viewed or one search conducted, which means that customers who have viewed at least two answers or conducted one search prior to submitting their question will not see SmartAssistant-suggested answers. You can change the conditions that allow display of the BasicSmartAssistant widget.

If you remove the condition tags around the widget, it will always propose answers to your customers before they can finish submitting their question, regardless of the number of answers they've viewed or searches they've conducted.

Note After the SmartAssistant response is displayed, customers can no longer change the product or category on their question.

To change the answers viewed or searches done condition

1 Open the *ask.php* file in the */views/pages/basic* folder.

2 Locate the following line of code.

```
<rn:condition answers_viewed="2" searches_done="1">
```

3 Edit the code to either delete or change the value of the *answers_viewed* or *searches_done* attributes. If, for example, you want to change the number of answers viewed and remove the requirement to perform a search, your code will resemble the following.

```
<rn:condition answers_viewed="3">
```

4 Save *ask.php*.

To remove conditions for the BasicSmartAssistant widget

1 Open the *ask.php* file in the */views/pages/basic* folder.

2 Locate the following lines of code.

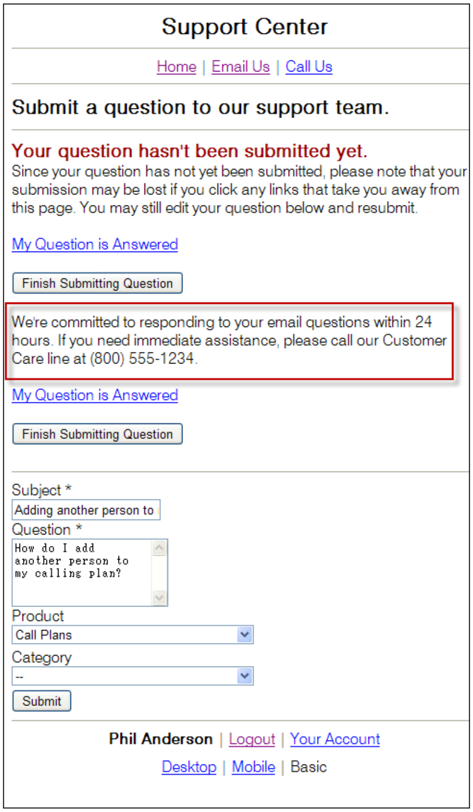
```
<rn:condition answers_viewed="2" searches_done="1">
<rn:condition_else/>
    <rn:widget path="input/BasicSmartAssistant"/>
</rn:condition>
```

3 Delete the two lines of code beginning with `<rn:condition` and the `</rn:condition>` line. All that should remain is the code that calls the SmartAssistantDialog widget.

4 Save *ask.php*.

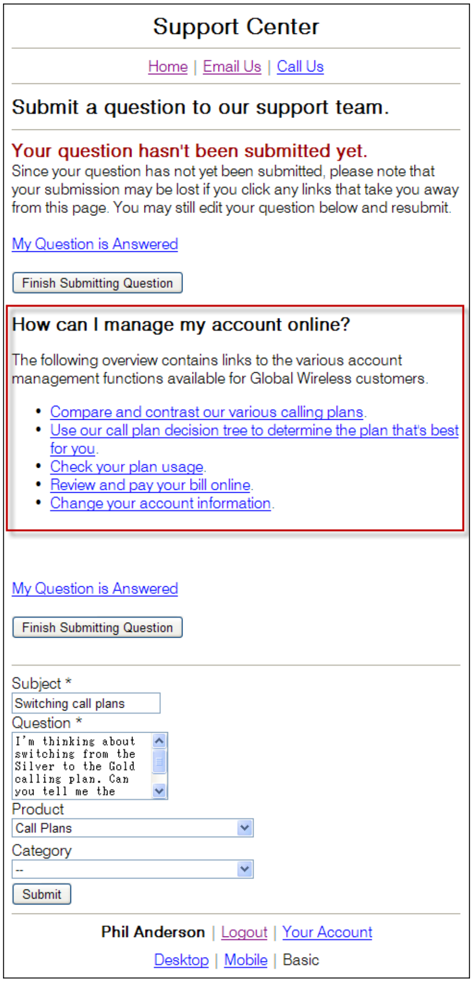
Appending standard text

You can also use a SmartAssistant rule to display a **standard text** message to your customers, either by itself or in conjunction with SmartAssistant-suggested answers, by setting the rule action to Append Thread > Append Response Template to Response Field. (Refer to Actions for incident rules.) The following figure shows an example of a standard text message display.



Appending an answer from the knowledge base

You may decide to create a rule that opens a specific answer from your knowledge base whenever the customer's product or category selection matches the rule condition. For example, you could display an answer with links to various account management features whenever customers select the Call Plans, Long Distance, or Account and Billing products or categories. To append an answer, set the rule action to Append Thread > Append Existing Solution (by Answer ID) to Response Field. (Refer to Actions for incident rules.) The results resemble the following figure.



Account Overview page

When customers are logged in, they can click the Your Account link in the page footer to open the Account Overview page. There they will see a list of their most recently submitted questions, including the subject, reference number, resolution, and date created. The page also displays links to all questions submitted by the customer, the page for updating account settings, and the change password page. The Account Overview page includes the BasicMultiline widget, which displays a list of up to four of the customer's most recently submitted questions.

To edit the Account Overview page

1 Open the *overview.php* file in the */views/pages/basic/account* folder.

2 To change the Account Overview heading, locate the `<h1>` heading line and replace the message base with your new heading. Your code will resemble the following.

```
<h1>Your New Heading</h1>
```

3 To change the Questions heading or Settings heading, locate the `<h2>` tags and replace the message bases with your new headings.

4 To change the maximum number of answers listed on the page from the default of four, locate the following code for the BasicMultiline widget and change the *per_page* attribute to the value you want.

```
<rn:widget path="reports/BasicMultiline"
report_id="196"
per_page="4"/>
```

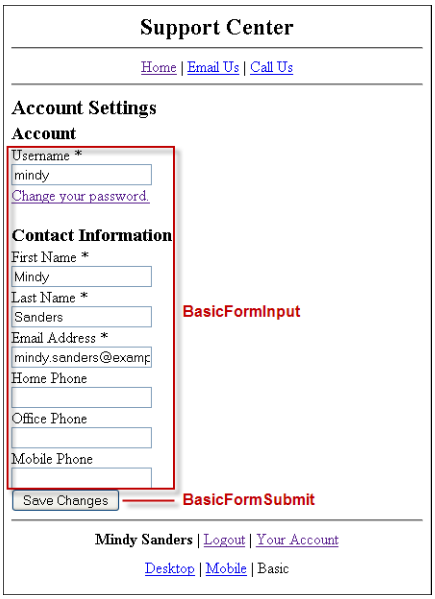
5 Save *overview.php*.

Account Settings page

Customers can update their account on the Account Settings page, accessed by clicking Your Account at the bottom of any page to open the Account Overview page and then clicking Update Your Account Settings.

The following widgets appear on the Account Settings page.

- **BasicFormStatusDisplay**—Appears only if status and error messages are displayed.
- **BasicFormInput**—Lets customers enter their user name, first name, last name, email address, street, city, state or province, postal code, country, and home, office, and mobile phone number fields. For information about the state/province field, refer to Defining the State/Province field.
- **BasicCustomAllInput**—Lets customers enter any contact custom fields with end-user visibility.
- **BasicFormSubmit**—Displays the Submit button.



To edit the Account Settings page

1 Open *profile.php* in the */views/pages/basic/account* folder.

2 To edit the Account Settings page title, locate the following code, remove the message base, and enter the new heading between the `<h1>` tags.

```
<h1>#rn:msg:ACCOUNT_SETTINGS_LBL#</h1>
```

3 To add input fields so customers can enter their address, add the following code wherever you want the fields to appear on the Account Settings page.

```
<rn:widget path="input/BasicFormInput"
name="Contact.Address.Street"
label_input="#rn:msg:STREET_LBL#"/>
<rn:widget path="input/BasicFormInput"
name="Contact.Address.City"
label_input="#rn:msg:CITY_LBL#"/>
<rn:widget path="input/BasicFormInput"
name="Contact.Address.Country"
label_input="#rn:msg:COUNTRY_LBL#"/>
<rn:widget path="input/BasicFormInput"
name="Contact.Address.StateOrProvince"
label_input="#rn:msg:STATE_PROV_LBL#"/>
<rn:widget path="input/BasicFormInput"
name="Contact.Address.PostalCode"
label_input="#rn:msg:POSTAL_CODE_LBL#" />
```

Note By default, the State/Province field does not appear until after the Country field has been submitted. Refer to Defining the State/Province field.

4 Save *profile.php*.

Defining the State/Province field

If you decide to add address fields on the Account Settings field as described in step 3 of To edit the Account Settings page, you'll need to understand the relationship between the State/Province field and the Country field. Additionally, phone number masks may be affected by the selected country.

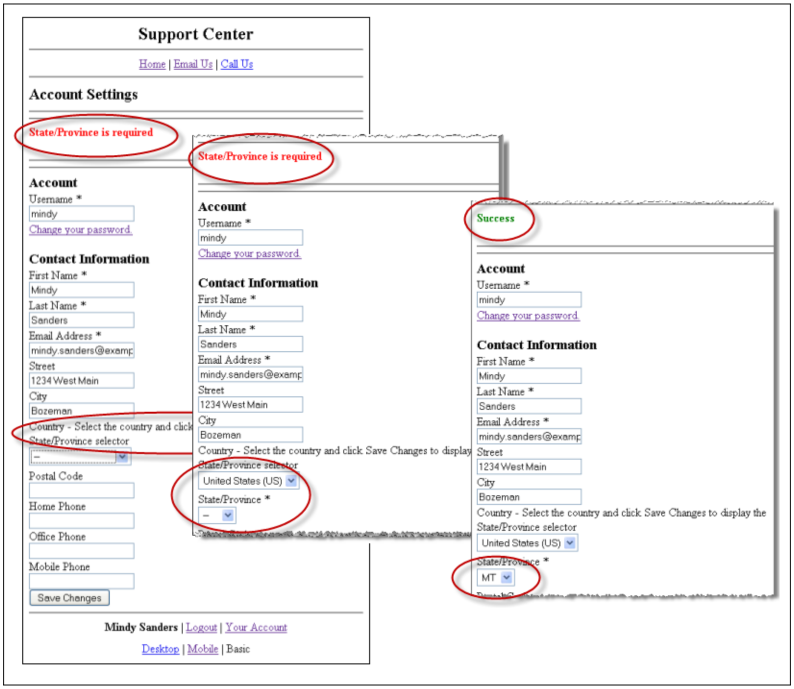
Note The same relationships exist on the Create an Account page.

By default, the State/Province drop-down menu is not displayed until a country is selected from the Country drop-down menu and the customer submits the change. At that point, the State/Province drop-down is available, but it's possible that customers will not notice it after submitting the rest of their address information. In that case, you could end up with a contact record in your knowledge base that includes all address information except the state or province.

To prevent this situation, you might add the *required* attribute to the BasicFormInput widget for the State/Province field so that customers must make a selection before the account settings are changed. However, the State/Province option is not available until they select the country information and click Submit. It's a good idea to add a hint on the page so that your code resembles the following.

```
<rn:widget path="input/BasicFormInput"
name="Contact.Address.Country"
label_input="#rn:msg:COUNTRY_LBL#"
hint="Select the country and click Save Changes to display the State/
Province selector."/>
<rn:widget path="input/BasicFormInput"
name="Contact.Address.StateOrProvince"
label_input="#rn:msg:STATE_PROV_LBL#"
required="true" />
```

The following figure illustrates the sequence when a customer enters street address information after editing the code. First, the customer completes the address information for the fields that appear on the page, but the State/Province selector is not yet available. When the customer clicks Save Changes, the page refreshes, the State/Province field appears, and a warning at the top of the page indicates that it's a required field. When the customer selects a state and clicks Save Change, the page refreshes and a Success message appears at the top of the page.



Using masks to format phone numbers

If you are using masks to ensure correct phone number formatting, you'll need to follow a similar procedure to make the country required. When the customer saves the changes, the mask requirement then applies to the page, and the customer will be required to use the mask formatting to enter the phone number. (Refer to Input masks.)

Questions list page

When customers click the See All Questions link on the Account Overview page, the questions list page opens. The page displays all questions submitted by the customer, including the subject, incident reference number, resolution, and date it was created. The page also offers a Search field and the ability to filter questions by product and category. The following widgets are used on the questions list page.

- **BasicProductCategorySearchFilter**—Lets customers filter their questions by product and category. The page contains two instances of this widget, one for products and one for categories.

- **BasicKeywordSearch**—Lets customers enter search terms to find the questions they are looking for.
- **BasicDisplaySearchFilters**—Displays any product and category filters selected by customers to filter their questions.
- **BasicResultInfo**—Displays the number of questions that match the search term and filters.
- **BasicMultiline**—Displays the list of questions in multiline report format.
- **BasicPaginator**—Lets customers move to a different page of questions when more than one page is required to display all returned results.

To edit the questions list page

1 Open the *list.php* file in the */views/pages/basic/account/questions* folder.

2 To remove the search field from the page, delete the following lines of code.

```
<h1 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_CMD#</h1>
<rn:widget path="search/BasicKeywordSearch" label_text=""/>
```

3 To remove search filters that restrict the list of incidents to a specific product and category, delete the following lines of code.

```
<div>
    <a href="/app/account/questions/list/selectFilter/product/
    #rn:url_param:c#/
    #rn:url_param:kw##rn:session#">#rn:msg:LIMIT_BY_PRODUCT_LBL#</
    a><br/>
    <a href="/app/account/questions/list/selectFilter/category/
    #rn:url_param:p#/
    #rn:url_param:kw##rn:session#">#rn:msg:LIMIT_BY_CATEGORY_LBL#</a>
</div>
<rn:widget path="search/BasicDisplaySearchFilters" />
```

4 To display more or fewer incidents, locate the code for the BasicMultiline widget and add the *per_page* attribute, setting its value to the maximum number of incidents to be displayed.

```
 <rn:widget path="reports/BasicMultiline"
per_page="3"/>
```

5 Save *list.php*.

Question details page

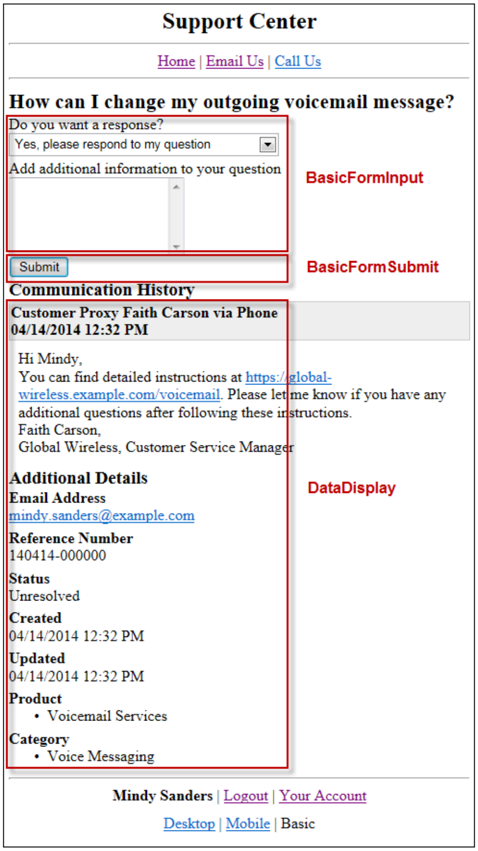
When customers click one of the questions they've submitted on either the questions list or the Account Overview page, the question details page opens. This page lets customers update their question, view the incident thread related to the question, and displays additional details about the incident that was created by the question.

Whenever customers respond to the "Do you want a response?" question with "Yes, please respond to my question," they must complete the Add Additional Information to Your Question field before submitting their request to prevent an error message from being displayed.

The following widgets are included on the question details page.

- **BasicFormStatusDisplay**—Appears only if status and error messages are displayed.

- **BasicFormInput**—Lets customers enter information in the question thread and request a response.
- **BasicFormSubmit**—Displays the Submit button.
- **DataDisplay**—Displays the previous incident thread information, the customer's email address, and information about the incident, including the reference number, status, dates it was created and last updated, its product and category, and any file attachments.
- **CustomAllDisplay**—Displays any incident custom fields with end-user visibility.



To edit the question details page

1 Open the *detail.php* file in the */views/pages/basic/account/questions* folder.

2 To change the details that are displayed on the page, locate the block of code for the DataDisplay widgets.

a To remove an incident field, locate the line of code that displays the field and delete it.

b To add an incident detail, add a line of code for the DataDisplay widget to the block of DataDisplay widgets already on the page. Refer to Business objects to find the names of available incident fields. For example, to add the closed time to an incident, add the following code.

```
<rn:widget path="output/DataDisplay"
name="Incident.ClosedTime"
label="Closed" />
```

3 To prevent customers from solving incidents, delete the following line of code.

```
<rn:widget path="input/BasicFormInput"
name="Incident.StatusWithType.Status"
label_input="#rn:msg:DO_YOU_WANT_A_RESPONSE_MSG#"/>
```

4 To prevent customers from updating closed incidents, locate the following line of code and change `"168"` to `"0"`.

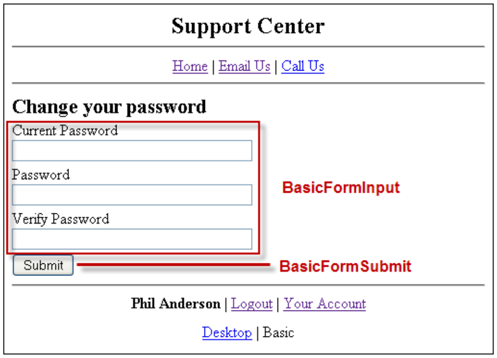
```
<rn:condition incident_reopen_deadline_hours="168">
```

5 Save *detail.php*.

Change Password page

The Change Password page opens when customers click Change Your Password on the Account Overview or Account Settings page. The widgets on this page include the following.

- **BasicFormInput**—Displays the Current Password, Password, and Verify Password fields.
- **BasicFormSubmit**—Displays the Submit button.



To edit the Change Your Password page

1 Open the *change_password.php* file in the */views/pages/basic/account* folder.

2 Locate the following line of code.

```
<rn:widget path="input/BasicFormInput"
name="Contact.NewPassword"
require_validation="true"
require_current_password="true"
label_input="#rn:msg:PASSWORD_LBL#"
label_validation="#rn:msg:VERIFY_PASSWD_LBL#" />
```

3 To enable auto-completion of the password, add `disable_password_autocomplete ="false"` to the code you located in step 2.

4 To remove the Current Password field so that customers need to enter only their new password, delete `require_current_password="true"` from the code you located in step 2.

5 To edit the heading, locate the following line of code and type the new heading between the <h1> tags.

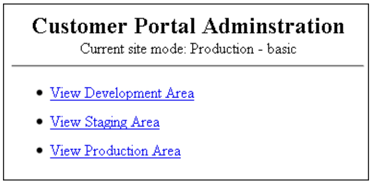
```
<h1>#rn:msg:CHANGE_YOUR_PASSWORD_CMD#</h1>
```

6 Save *change_password.php*.

Administration page

You can use the Customer Portal Administration site with the basic page set. The page lets you set the environment cookie to development, staging, or production.

Note If a staging area has not been created yet, the View Staging Area option does not appear.



Basic widgets

Because the basic page set prevents framework or widget JavaScript from being loaded on the page, the widgets used in the basic implementation also prevent JavaScript from being loaded. The basic template, *basic.php*, includes the meta tag `javascript_module="none"` instead of `javascript_module="standard"` or `javascript_module="mobile."` Most of the basic widgets have a standard widget counterpart from which they are extended.

Basic input widgets

All of the following basic input widgets are extended from standard widgets. Because the basic page set does not have JavaScript to preprocess data in form submissions as the standard page set does, the unique basic input widgets are necessary. Forms are submitted using the standard form submission features of HTML. The `<rn:form>` tag provides server-side validation of input fields and includes the capability to call a function to process the submitted data.

- BasicCustomAllInput
- BasicDateInput
- BasicFormInput
- BasicFormSubmit
- BasicPasswordInput

- BasicProductCategoryInput
- BasicSelectionInput
- BasicTextInput

The BasicFormStatusDisplay widget is used by the basic page set to display status and error messages as necessary when the input data is validated.

The following standard input widgets have no basic counterpart because the functionality produced by these widgets is not available on the basic pages.

- ChannelAllInput
- ContactNameInput
- EmailCheck
- FileAttachmentUpload
- SmartAssistantDialog

Basic login widgets

The following login widgets are included for the basic page set. Each of them has a standard widget counterpart.

- BasicEmailCredentials
- BasicLoginForm
- BasicLogoutLink
- BasicResetPassword

The LoginDialog widget does not have a basic counterpart.

Basic report widgets

The following report widgets are included for the basic page set. Each of them has a standard widget counterpart.

- BasicMultiline
- BasicPaginator
- BasicResultInfo

The Grid report widget does not have a basic counterpart.

Basic search widgets

The following widgets are included for the basic page set. Each of them has a standard widget counterpart.

- BasicDisplaySearchFilters
- BasicKeyword Search
- BasicProductCategorySearchFilter

Basic feedback widget

The BasicAnswerFeedback widget is used to collect customer feedback on individual answers.

CapabilityDetector widget

The CapabilityDetector widget is used on all page sets: standard, mobile, and basic. Refer to Detection of JavaScript capability.

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Customer Portal Administration

Creating pages and widgets is a significant part of your work on the Oracle RightNow Customer Portal Cloud Service (Customer Portal), but you'll also have administrative tasks, such as setting the environment, viewing logs, and defining **page set mapping**. You can perform all of these tasks on the Customer Portal Administration site, where you can also view reference information about widgets, **business objects**, and widget and page tags.

Opening the Customer Portal Administration page

If you have CP Promote and CP Stage permissions enabled in your **profile**, you can open the Customer Portal Administration site using any of the following methods. If you have only CP Edit permission enabled in your profile, you can open the administration site using either of the first two procedures, but not the third. (Refer to [Assigning permissions](#) if you need help setting permissions.)

Note If your user name contains multi-byte characters, you will not be able to log in to the administration site.

To open the Customer Portal Administration site from a URL

Type `https://<your_site>/ci/admin.` You will be asked for your Oracle Service Cloud user name and password.

To open the Customer Portal Administration site from the file menu

1 Log in to Oracle Service Cloud.

2 Click **File** and select Links.

3 Click Site Administration under Customer Portal. You will be asked for your Oracle Service Cloud user name and password.

4 Type your user name and password and click OK. The Customer Portal Administration site opens in a browser window.

To open the Customer Portal Administration site from the configuration list

1 Log in to Oracle Service Cloud.

2 Click the Configuration button on the **navigation pane**.

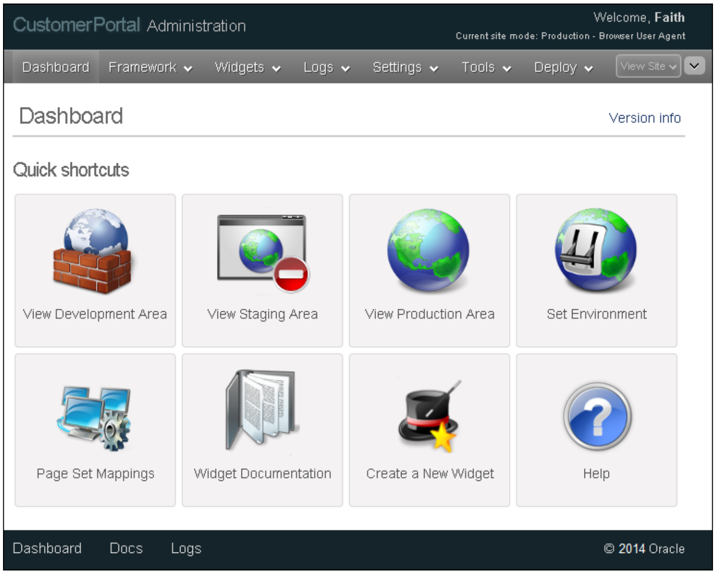
3 Double-click Customer Portal under Site Configuration. The Interfaces tree displays on the content pane.

4 Select the interface in the Interfaces tree.

5 Click Administration Interface on the ribbon. You will be asked for your Oracle Service Cloud user name and password.

6 Type your user name and password and click OK. The Customer Portal Administration site opens in a browser window.

Click to view



The Customer Portal Administration home page contains the following tabs across the top of the page.

- **Dashboard**—Clicking the Dashboard tab returns you to the home page of the Customer Portal Administration site. Click here.
- **Framework**—The Framework drop-down menu includes Framework Versions, Page Tags, Page Meta Tags, and Business Objects. If you have migrated to Customer Portal Framework Version 3.2 from Framework Version 2, the menu also includes the Old Framework Migration option. Clicking the tab opens a page with the same options. Click here.
- **Widgets**—The Widgets tab has a drop-down menu that lets you make the same selections that are on the page that opens when you click the tab: Browse Widgets, Widget Versions, Create a New Widget, Widget Info, and Syndicated Widgets. Click here.
- **Logs**—When you click the Logs drop-down menu or the tab to open the Logs Overview page, you can select WebDAV logs that show all transactions made to site files, debug logs that display problems that occur on the development pages when calling functions, or deployment logs that show a history of deploy operations. Click here.

- **Settings**—Clicking the Settings tab opens a drop-down menu that lets you go to the Page Set Mapping page where you can define specific page sets for different user agents (click here). You can also go to the Set Environment page (click here), preview the splash and error pages (click here), or go to Sandboxed Configurations, which displays the values of selected configuration settings for the development, staging, and production areas (click here).
- **Tools**—Clicking the Tools tab opens the Connect Object Explorer that helps you understand the Connect for PHP API or the Code Assistant that helps you migrate custom code.
- **Deploy**—Clicking the Deploy tab lets you stage, promote, and roll back your customer portal. Refer to Staging, Promoting, and Rolling back.

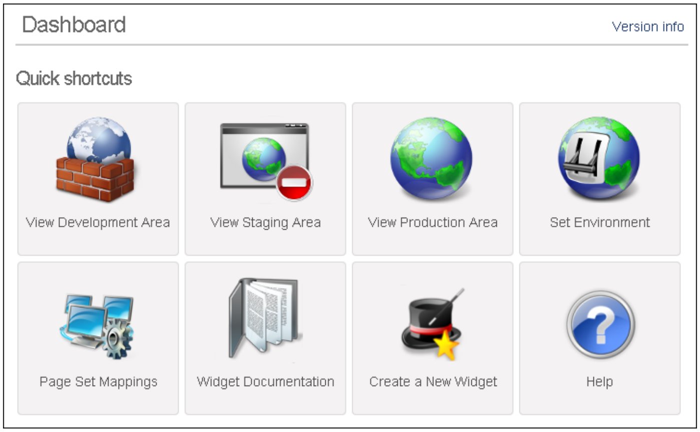
The tab bar on the Customer Portal Administration site also contains a View Site button and a Help button. You might want also want to view the About page.

Dashboard

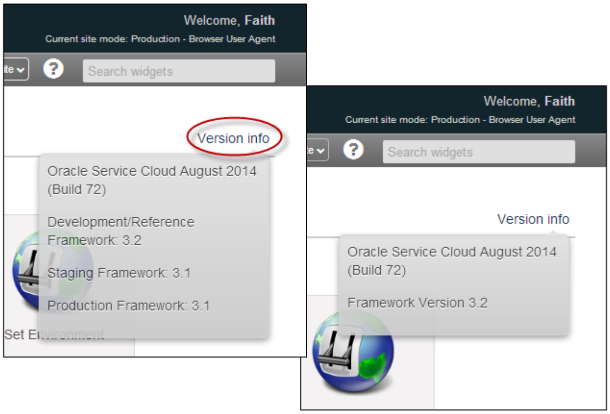
You can access the Customer Portal dashboard from any page of the administration site by clicking the Dashboard tab. The dashboard contains the following shortcuts.

- **View Development Area**—Click this shortcut to view your customer portal pages in development mode so you can evaluate your changes to files as you make them without needing to stage and promote the pages into production. Go here to set the site mode to development. To learn about the *development* folder file structure, click here.
- **View Staging Area**—Click this shortcut to preview your development pages after you have staged them but before you have promoted them to production. To learn about the staging process, click here.
- **View Production Area**—By default, the production area is displayed unless you select the development or staging area. When you are working on a development page, you may want to verify how the page looks and functions on your current production site. In that case, you can click View Production Area. Go here to set the site mode to production. To learn about the *production* folder, click here.
- **Set Environment**—The Set Environment shortcut lets you select the site mode (production, staging, development, or reference implementation) and the page set (standard, mobile, custom page set, or to be determined by the browser or user agent displaying the pages). Refer to Configuring the environment.
- **Page Set Mappings**—With page set mappings, you can define what page set should be displayed when accessed by specific browsers or user agents. This lets you optimize page sets for unique user agents. Refer to Configuring page set mapping.

- **Widget Documentation**—Click the Widget Documentation shortcut to open the Widgets page, which contains links to standard and custom widgets. Refer to Managing widgets.
- **Create a New Widget**—Click this shortcut to open the widget builder, where you can create a custom widget by extending an existing widget or building a new one from scratch. Refer to Widget builder.
- **Help**—Click the Help shortcut to open a page of links to additional resources. Refer to Help button.



In the upper right corner, the dashboard also contains a Version Info link. When you click the link, a window opens to show you what framework version is being used by the development, staging, production, and reference implementation areas. If all areas are using the same framework, the version is listed just once, as shown in the image on the lower right.



Configuring the environment

When you are working on your customer portal, you'll want to preview your pages without making them visible to your customers. Since the same URL (for example, http://<your_site>/app/answers/list) is used to point to pages on both the production and development areas, it is especially important that you display the development pages when you are trying to evaluate your changes. You can set your pages to development mode on the Customer Portal Administration site dashboard.

Important When you work on your development pages, your production site remains untouched until you first stage the development pages and then promote them to production. However, changes you make on the development area have the potential to affect your production data because the development site is connected to the production database. If this is a concern, you can request a **cloned** site by submitting an incident on our support site.

Even though the changes you make to files in the *development* folder affect only the development pages, it's possible to unintentionally make changes that also affect your production site. These include:

- **Editing files (except themes) in the *assets* folder**—The files in the *assets* folder (CSS files and images, as well as other files used on your customer portal) are shared by the development and production sites. If you edit a file used on your production pages, your edits may be visible to customers even before you stage and promote.

Tip You can reduce this risk by creating separate development and production subfolders in the *assets* folder. When making changes to pages and widgets, point to the assets in the development subfolder. When you are ready to stage and promote, you can copy the files to the production subfolder and change the references in your pages and widgets to that folder.

Themes, however, are handled differently and are used only by the development files. When you stage the development pages, the theme files are copied to a time-stamped folder in the staging directory and called by the staged pages from that folder. This lets you keep the themes you develop in an isolated sandbox until you promote the staged pages into production, when these files are copied into the *production* folder. For information about working with themes, click here.

- **Editing message bases, configuration settings, custom reports, and other configuration items**—You risk changing the look or functionality of your production customer portal if you edit message bases, configuration settings, custom reports, or other configuration items (such as products, categories, and custom fields) used by your production pages.

Learn how to set the environment here.

Setting the environment

The Set Environment page of the administration site lets you view different areas of your customer portal. When you select the Development site mode option, you can view the pages on your development site before you've staged and promoted those files into production. Besides Development, the other site mode menu options include:

- **Production**—Displays what your customers see.
- **Staging**—Displays the development pages after you've staged them, but before you have promoted them to production.
- **Reference Implementation**—Displays the Customer Portal pages before you have customized them.

By default, the site mode is set to Production.

Note To simulate an abuse scenario for testing purposes, select the Trigger Abuse Detection check box. The abuse mode applies only to your development pages. For more information, see Simulating abuse situations.

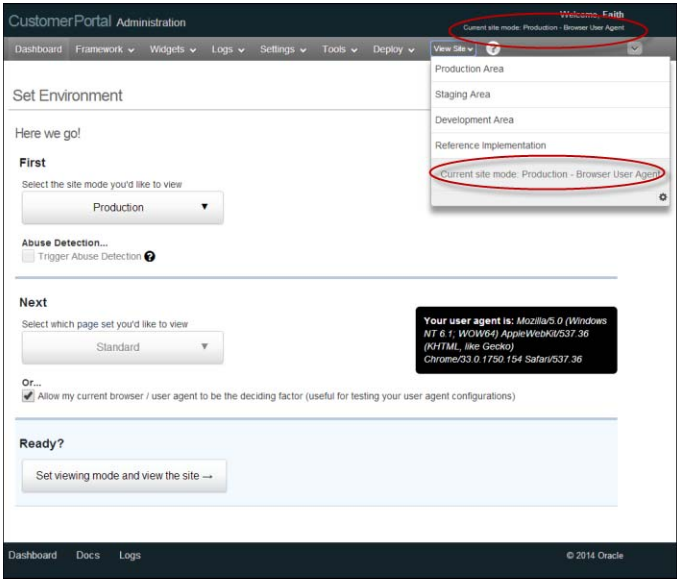
After you've selected the site mode you want to view, you can select the page set you want to display. The page set drop-down menu for selecting the standard, mobile, or basic pages is active only when the check box below the menu is cleared. By default, the check box is selected, which means that the page set is determined by the browser or user agent accessing the pages. As a result, the standard pages are displayed when customers access the customer portal from a desktop browser, the mobile pages are displayed when they access from a mobile device, and the basic pages are displayed when customers have a device with limited JavaScript capability. When this check box is selected, the user agent of your browser is shown on the page.

The default options on the menu include Standard, Mobile, and Basic. (The mobile and basic pages must be enabled before they appear in the menu. Click here to learn how to enable the mobile and basic pages.) Any other page sets you have added on the Page Set Mapping page also appear in the menu. (Refer to User agent mapping to learn how to add page sets.) Selecting Standard displays your standard (non-mobile and non-basic) pages. Selecting Mobile displays the pages associated with your mobile implementation, so you can view your mobile pages on your workstation without a mobile device. Similarly, selecting Basic displays the basic page set on your workstation.

Note To correctly display the mobile and basic page sets, use any browser except Internet Explorer.

- Set the site mode.
- Set the page set.

The current selections are identified at the top of the Set Environment page and on the View Site drop-down menu.



Setting the site mode

By default, the site mode is set to Production. If you want to view your development pages, the staging area, or the reference implementation instead, you must set the site mode for each user agent you access the site from. If, for example, you want to view your changes to the development pages in multiple browsers on your desktop, you must set the site mode to Development for each browser. Similarly, you must set the Development site mode on your mobile device or emulator to view your development pages instead of the default production pages.

You can set the site mode using several methods, as described in the following procedure.

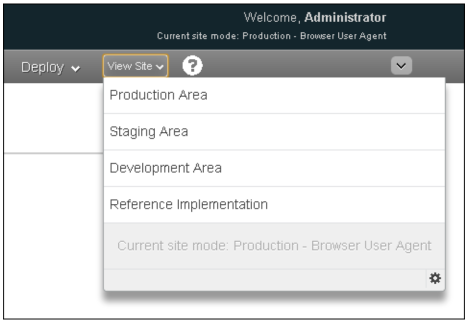
To set the site mode

1 Type `https://<your_site>/ci/admin.` The dashboard opens.

2 To set the development area mode, click the View Development Area shortcut on the dashboard. The Support Home page opens in development mode, indicated by the Customer Portal Development Area header at the top. (Refer to [Development header](#).)

Or

Click the View Site drop-down menu on the top right of the page and select Development Area.



Or

Click the Set Environment shortcut on the dashboard and select Development in the site mode drop-down menu. Then click Set Viewing Mode and View the Site.

a To simulate an abuse scenario on your development pages for testing purposes, select the Trigger Abuse Detection check box. For information, see Simulating abuse situations.

3 To set the staging area mode, click the View Staging Area shortcut on the dashboard. The Support Home page opens in staging mode.

Or

Click the View Site drop-down menu on the top right of the page and select Staging Area.

Or

Click the Set Environment shortcut on the dashboard and select Staging in the site mode drop-down menu. Then click Set Viewing Mode and View the Site.

4 To set the production area mode, click the View Production Area shortcut on the dashboard. The Support Home page opens in production mode.

Or

Click the View Site drop-down menu on the top right of the page and select Production Area.

Or

Click the Set Environment shortcut on the dashboard and select Production in the site mode drop-down menu. Then click Set Viewing Mode and View the Site.

5 To set the reference implementation site mode, click the View Site drop-down menu on the top right of the page and select Reference Implementation. The Support Home page opens in the reference implementation mode.

Or

Click the Set Environment shortcut on the dashboard and select Reference in the site mode drop-down menu. Then click Set Viewing Mode and View the Site.

Setting the page set

To set the page set

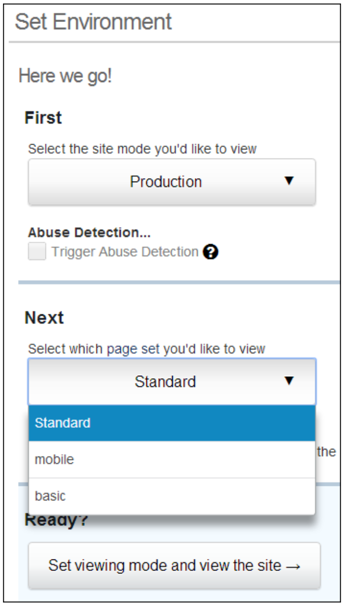
1 Type `https://<your_site>/ci/admin.` The dashboard opens.

2 Click the Set Environment shortcut.

3 Make a page set selection.

a To display the appropriate page set based on the user agent that is accessing the customer portal, select the check box (below the page set drop-down menu) that says “Allow my current browser/user agent to be the deciding factor.”

b To display the standard (non-mobile) page set, clear the check box and select Standard on the page set drop-down menu.



c To display the mobile pages, clear the check box and select Mobile. (The mobile pages must be enabled before the selection appears in the menu. [Click here to enable the mobile pages.](#))

d To display the basic page set, clear the check box and select Basic. (The basic page set must be enabled before the selection appears in the menu. Click here to enable the basic pages.)

e To display a custom page set, clear the check box and select the page set name in the menu. (To add a page set that will appear in this menu, refer to Adding page set mappings.)

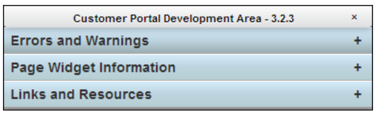
4 Click Set Viewing Mode and View the Site. The browser opens the Support Home page displaying the page set you selected.

Development header

When you view the development area, you'll see a Customer Portal Development Area header, including version number, on the page. The header provides useful information about errors and warnings, widget information, and additional links and resources.

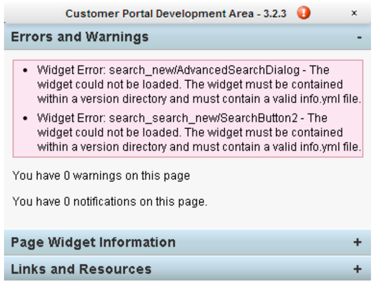
To close the header, click X. (If you want to display the header again, refresh the page.) To expand the header and display the following options, click the header. You can then expand and collapse each heading by clicking the associated plus (+) sign.

- Errors and warnings
- Page widget information
- Links and resources



Errors and warnings

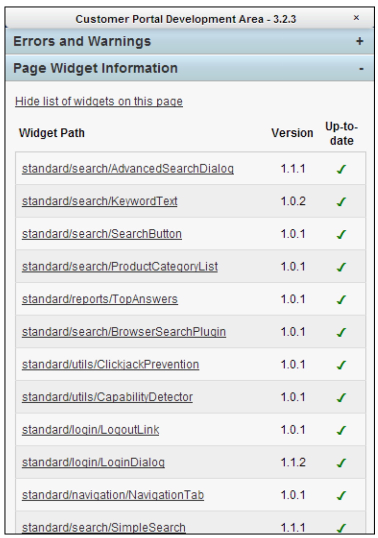
When you click the + sign on the Errors and Warnings heading of the development header, it expands to display the number of errors, warnings, and notifications for the page. If errors or warnings occur on the page, the development header displays an exclamation point that you can click to view the error or warning.



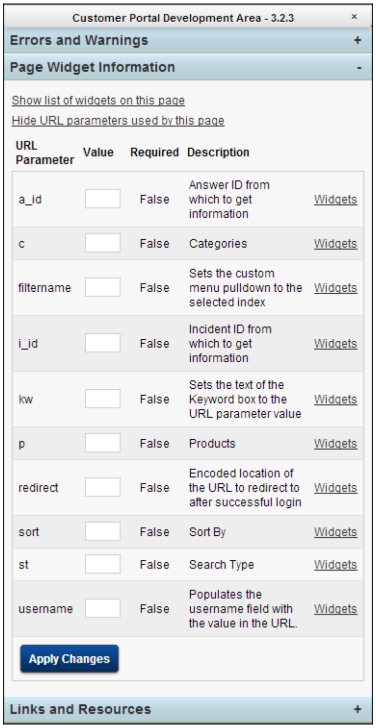
Page widget information

When you expand the Page Widget Information section of the development header, two links are displayed: one to show the list of widgets on the page and one to show URL parameters used by the page.

Clicking the first link displays a list of all widgets on the page, their version, and whether they are up-to-date. If the widget is compatible with the framework, a green check mark appears in the Up to Date column. If it is out-of-date, a red X appears in the column. Click any of the listed widgets to open the widget definition in a new window. When the list of widgets appears, the link changes to “Hide list of widgets on this page.”



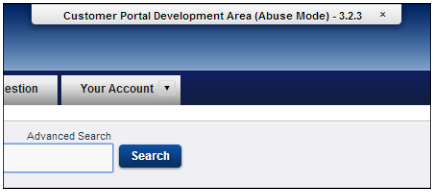
Clicking the second link displays the URL parameters used by the page, whether the parameter is required, and a description. You can click the Widgets link in the parameter's row to see a list of widgets that use the URL parameter. You can also change a parameter's value and click Apply Changes to preview the page with the value you changed.



Links and resources

The following links are available on the Links and Resources section of the development header.

- **Go to Production Area**—Click to open the equivalent page on the production site.
- **Go to Customer Portal administration page**—Click to open the Customer Portal Administration site.
- **Go to Reference Implementation**—Click to open the equivalent page on the reference implementation.
- **Toggle Abuse Detection**—Click to put your development site in an abuse simulation mode so you can test what happens under abuse conditions. The header indicates that your development site is now in abuse mode. See Simulating abuse situations.



- **Direct URL to this page in development mode**—Copy the URL in the field and paste it into a browser, email, or other document to provide a link to a development version of the page.
- **Go to Oracle Service Cloud Developer Community**—Click to open the Oracle Service Cloud Developer Community page where you can discuss the Customer Portal with other designers, developers, and **administrators**.

Configuring page set mapping

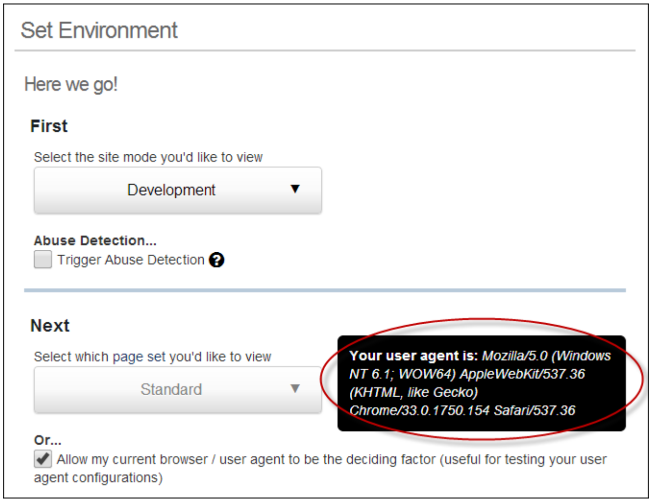
The Customer Portal Administration site lets you define page sets for user agent mapping. When you let the browser or user agent determine which page set is displayed (click here to see how), you can let your customers be automatically directed to the correct interface based on the browser they are using. If they're using a desktop or laptop computer, for example, you can direct them to your standard customer portal pages. But if they're using a mobile device, you probably want them to be directed to your mobile customer portal interface. And customers using devices that don't support JavaScript can still view your site with the basic page set. Page set mapping also lets you define unique page sets for various user agents.

Note Page set mappings affect only the development area until you stage and promote the customer portal. To make page set mappings active on your production site, you must stage and promote after saving your changes.

User agent mapping

When you click the Set Environment shortcut on the dashboard, the [Set Environment page] of the Customer Portal Administration site displays your user agent if the page set check box (Allow my current browser/user agent…) is selected.

Click to view



With the check box selected, the customer portal identifies customers' user agents so it can direct them to the appropriate page set. The default page sets are your standard customer portal pages and the mobile page set.

Important Oracle Service Cloud includes two default mappings to the mobile page set and one for the basic page set. These mappings are initially disabled, so you must enable at least one of the mobile page sets and the basic page set and then stage and promote your customer portal site before they are available to your customers. Until you do so, your customers will see your standard customer portal pages even when they are using a mobile or basic device. Additionally, these page sets will not appear in the page set menu on the Set Environment page.

Enable the default page set mappings or add page set mappings.

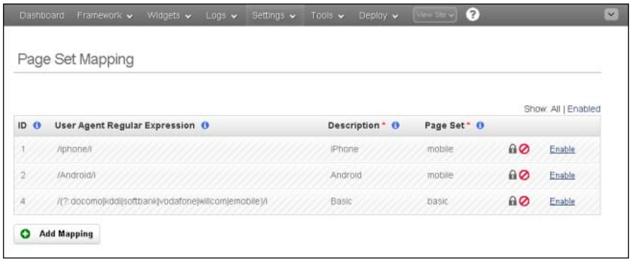
Enabling default page set mappings

You must enable the default page set mappings if you want your customers who use mobile and basic devices to be able to see those page sets. The default mappings cannot be edited.

To enable default page set mappings

1 In a web browser, type `https://<your_site>/ci/admin.` After you log in, the Customer Portal Dashboard displays.

2 Click the Page Set Mappings shortcut on the dashboard. The Page Set Mapping page displays.



3 To enable one of the mobile page sets, click Enable in the right column for one or more of the mobile devices (iPhone and Android). The link changes to Disable.

4 To enable the basic page set, click Enable in the right column for the basic page set. The link changes to Disable.

5 To add your own page set mappings, click here.

6 To make these pages available on your production site, log in to Oracle Service Cloud and stage and promote the customer portal.

Adding page set mappings

If you want to provide customer portal pages that display differently on different browsers, you can create unique pages sets and then map them to specific user agents. For example, you might want to create one mobile page set for viewing on iPhones and another for viewing on Androids. This lets you customize your pages for different mobile devices so your customers can have optimal experiences regardless of the device they use to access your support site.

To add page set mappings

1 In a web browser, type `https://<your_site>/ci/admin`.

2 Click the Page Set Mappings shortcut on the dashboard.

3 Click Add Mapping. A new row is added to the table.

4 Type a valid Perl-Compatible regular expression in the User Agent Regular Expression field or leave the field blank.

5 Type a description that can be used for reporting purposes in the Description field. This field is required.

6 Type a path in the Page Set field. The path identifies the page set in your customer portal file structure where customers will be directed. This field is required.

Note If you create a mapping to a page set folder that does not exist, you will not be allowed to save the mapping. If the folder is deleted after the mapping is created, customers who try to access it through a browser will see an error message about too many redirects. (The exact message is browser dependent.) The error occurs because failure to find the nonexistent folder results in a redirect to an error page in the same folder, which also cannot be found. The result is a recursive loop.

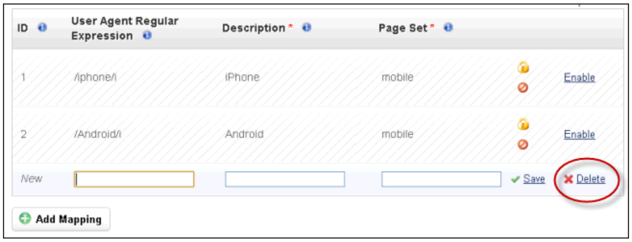
7 Click Save in the row you just added. An ID for the page set is assigned automatically.

8 Repeat steps 3 through 7 for each additional mapping you want to define.

9 To make the changes to your production site, stage and promote the customer portal.

Deleting and disabling mappings

You cannot delete the default mappings for the iPhone, Android, and basic page sets, but you can delete any page set mapping you have added if you have not yet saved it. To delete a mapping, click Delete in the row containing the mapping.



If you have staged and promoted the mappings you have added, you can no longer delete them, even by rolling back the site, but you can disable them by clicking Disable. You can also disable the default mappings. You must stage and promote the customer portal after you disable a mapping so the change will take effect on your production site.

Framework tab

When you type `https://<your_site>/ci/admin/docs/framework` into your browser or click the Framework tab from any page of the Customer Portal Administration site, the Framework page opens. The following options are available on the page and also from the drop-down menu that displays when you hover over the Framework tab.

- **Framework Versions**—Click this link to see the frameworks that are available and to set the framework version you want to use for your development pages. Refer to Framework versions.
- **Page Tags**—Click this link for a list of tags that control specific sections of the page or that hide or display content conditionally. Refer to Page tags.
- **Page Meta Tags**—Click this link to see the attributes that can be defined for each page. These include, among others, whether login or an SLA is required to view the page, the template used by the page, and the page title. Refer to Page meta tags.
- **Business Objects**—Click this link to display field information for adding answer, incident, and contact fields to input and output widgets and the Field page tag. The page displays the format to use for display and input widgets as well as the data type for each field. Refer to Business objects.

- **Old Framework Migration**—If you have migrated to Framework Version 3.2 from Framework Version 2, you can revert your development pages to the older framework. Your staging and production environments are not affected, and you can change back to Framework Version 3.2 later if you change your mind.

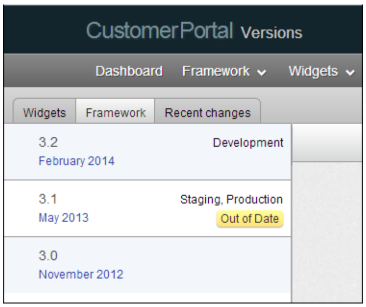
Note The Old Framework Migration option does not appear if your Customer Portal installation is new with Framework Version 3.2.

Framework versions

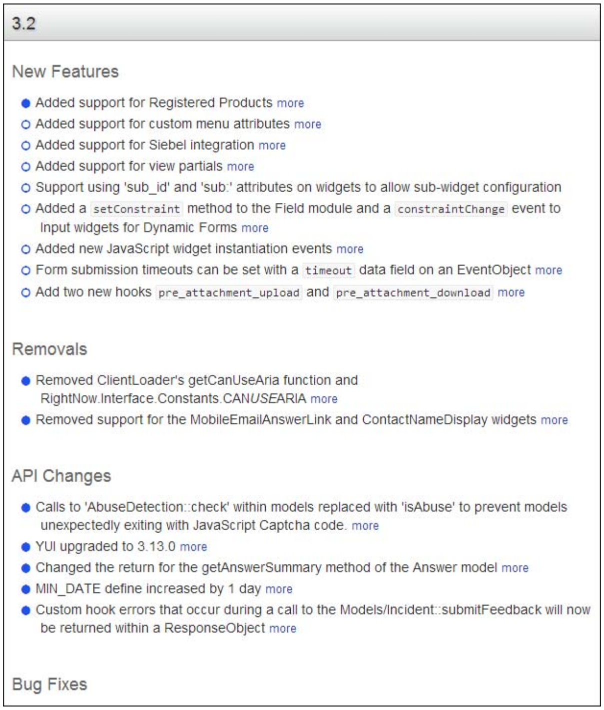
When you click the Framework tab and select Framework Versions, you'll see a list of the available Customer Portal frameworks in the left column. Because nano version changes indicate full backward compatibility, they are applied automatically. As a result, the page displays only minor and major versions.

For instance, Framework Version 3.1 was released in May 2013 as version 3.1.1, while the August 2013 version is 3.1.2. The nano level increment indicates full backward compatibility with Framework Version 3.1. If your customer portal uses version 3.1, your site will be migrated automatically to 3.1.2 when you upgrade to the August 2013 release. If your customer portal uses Framework Version 3.0, you can choose to keep using it upon upgrade until you decide to migrate to a later version to take advantage of increased functionality.

The list of frameworks in the left column shows the version being used by each of the three environments. In the figure below, for example, the development area is using version 3.2, but the staging and production areas use version 3.1 and have not yet been migrated to the newer version.



When you click a framework, the changes that are included in that version are defined.



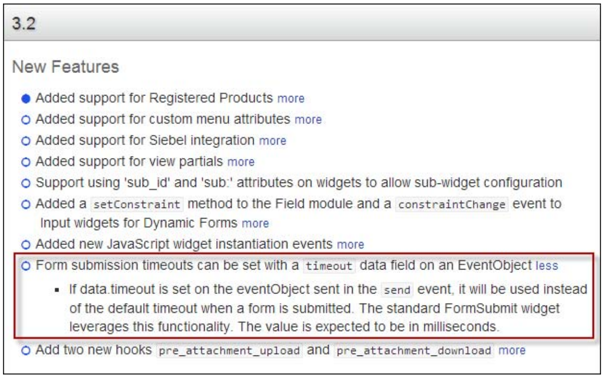
You can mouse over the bullet for each change to learn which of the following types of change it is.

- Likely to impact custom code (major version change)
- May impact custom code (minor version change)
- No impact to custom code (nano version change)

Additionally, the changes are divided into the following areas.

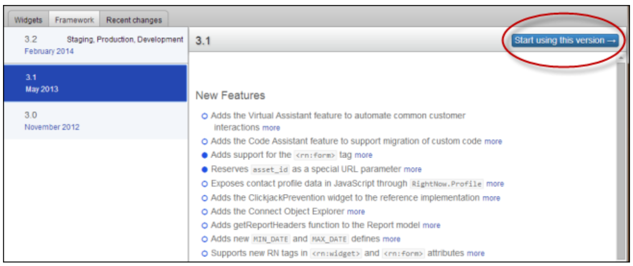
- New features
- Removal of functionality
- API changes
- Bug fixes

Click **more** at the end of each line for additional information about the change and what you might need to do to incorporate the change.

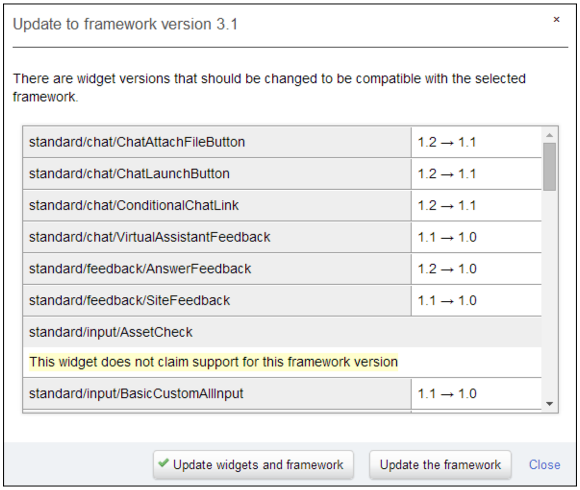


Reverting to an earlier framework

You can revert to an earlier framework version by selecting that version and clicking the Start Using This Version button. Whenever you revert to an earlier framework, you will likely encounter errors resulting from newer widgets being incompatible with the older framework, which will require additional work on your part to correct the pages that use the new widgets. We do not recommend you revert your customer portal, but we recognize there are times when you may need to do so.



When you click the button, you'll see a list of widgets that are not compatible with the framework version you select.

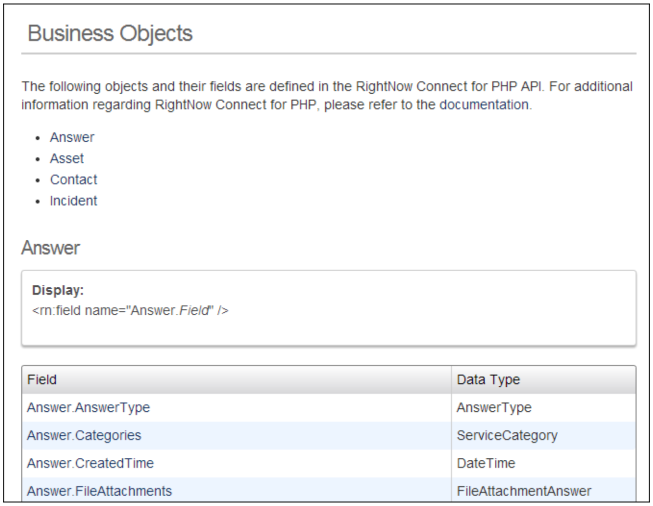


You have the option of updating both the framework and widgets or only the framework. If you click Update the Framework, the success message instructs you to manually update the outdated widgets to a version that is compatible with the framework. If you do not, errors will appear on your development pages, and you will experience errors when you try to stage and promote your site.

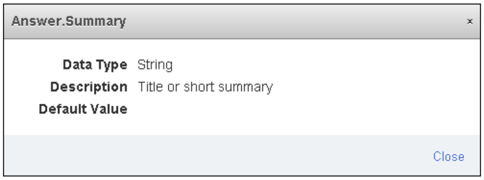
If you select Update Widgets and Framework, all of the widgets that require a version change to be compatible with the older framework are modified. Your site may still contain compatibility errors so be sure to check your development pages carefully before staging and promoting to prevent errors during the deploy process.

Business objects

When you are adding a field to the attributes of a Field page tag or the FormInput or DataDisplay widgets, you might not know its Connect PHP API field name. Click the Framework tab and select Business Objects to look up field and table names so you can include them in the widget code. The link displays fields in the *Answer, Asset, Contact,* and *Incident* tables. The page also provides examples to use for display and input.



If you want to see the description of an object, hover over its name. To view complete information about the object, click it to open a window that displays data type, description, and default value for answer business objects, as well as additional information for contact and incident objects. Click Close to close the window.



The following sections show you how to use business objects to add fields to different pages.

- Input and output widgets
- Outputting database fields (answer details page)
- To add contact fields to the Ask a Question page (Ask a Question page)
- Changing incident details (question details)
- Adding or removing contact fields (Account Settings page)
- Adding fields (Create an Account page)
- Displaying assets

Widgets tab

When you type https://<your_site>/ci/admin/docs/widgets into your browser or click the Widgets tab from any page of the Customer Portal Administration site, the Widgets page opens. The following options are available on the page and also from the drop-down menu that displays when you hover over the Widgets tab.

- **Browse Widgets**—Click this link to display links to the lists of standard and custom widgets, organized by folders. Refer to Navigating folders and searching for widgets.
- **Widget Versions**—When you click Widget Versions, you can select a widget to open detailed information for that widget, including a preview image, documentation, where the widget is used, and any version changes. You can also deactivate the widget on this page. Refer to Widget version management.
- **Create a New Widget**—Clicking this link opens the widget builder that lets you create a new widget, either from scratch or by extending an existing standard or custom widget. Refer to Widget builder.
- **Widget Info**—Specifies the details that should be included in a widget's *info.yml* file. Refer to YAML file.
- **Syndicated Widgets**—Click this link to display and configure the syndicated widgets, ConditionalChatLink, KnowledgeSyndication, PollingSyndication, ProactiveChat, and ProactiveSurveyLink. These widgets can access the Oracle knowledge base even though they are placed on web pages external to the customer portal. Refer to Syndicated widgets.

Error and splash page previews

When your customer portal is undergoing maintenance, you may want to display a page that lets your customers know that your site is currently unavailable. (Refer to To manually turn on the splash page.) You can view this splash page from the Customer Portal Administration site.

To view the splash page

1. In a web browser, type https://<your_site>/ci/admin.
2. Click the Settings tab drop-down menu and select Preview Error Pages.
3. Click */cp/customer/error/splash.html* to view your splash page.

You can also preview the error pages that are displayed. Click any of the following pages to view the displayed error page.

- */cp/customer/error/error404.html*
- */cp/customer/error/error413.html*
- */cp/customer/error/error500.html*

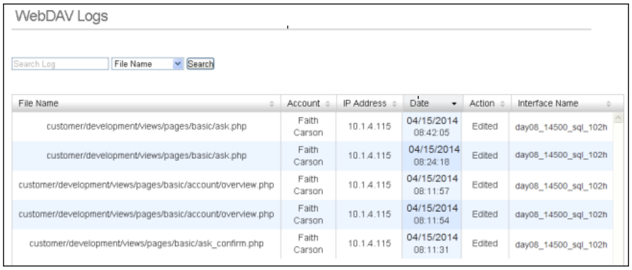
Logs tab

The Logs section of the Customer Portal Administration site lets you view logs for WebDAV, debugging, and **deployment**. The WebDav log shows a transaction history of all changes to files, including file name, staff account, IP address, date, action, and interface name for each change. The debug log shows log files that are generated during development using the log-Message ( ) function, and they contain the time, calling location, and message. The deployment log lists each log by its file name, date and time the log file was created, the type of action, and the staff member who performed the action. Click the log to see a history of the actions performed during the operation.

- Viewing WebDAV logs
- Viewing deployment logs

Viewing WebDAV logs

To view changes that have been made to the customer portal files, you can view WebDAV logs from the Customer Portal Administration page or from a URL. The log displays a list of file names, the staff account that took the action, the IP address from which the action was taken, the date and time, what action was taken, and the interface. By default, the log is sorted by date with the most recent action listed first, but you can sort the log by any of these columns. You can also search the log by each of the columns, for example, by account or page name.



To open WebDAV Logs

If you are logged in to the Customer Portal Administration site, click the Logs tab and select WebDAV Logs on the Logs Overview page.

Or

In a web browser, type https://<your_site>/ci/admin/logs/webdav.

Go to Viewing deployment logs or return to Logs tab.

Sandboxed configurations

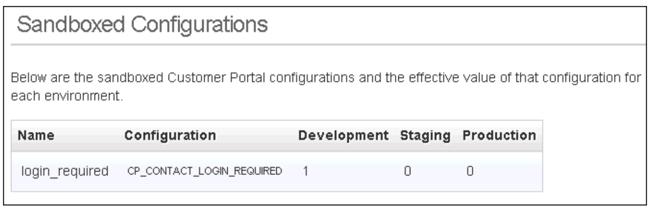
When a configuration setting can have a different value on your development site than on the staging and production sites (that is, you must stage and promote for the configuration setting to affect staging and production), the Sandboxed Configurations options lets you see how the value is set for each site. In Framework Version 3.2, CP_CONTACT_LOGIN_REQUIRED is the setting that can be different in the different areas.

When you change this kind of setting on the **administration interface**, the changes affect only the development and reference implementation pages of the customer portal, not the staging and production pages. When you stage the development pages, the changed configuration setting value is active in the staging environment. And when the staged pages are promoted, the change affects the production pages used by your customers.

To view sandboxed configuration settings

1 In a web browser, type https://<your_site>/ci/admin.

2 Click the Settings tab drop-down menu and select Sandboxed Configurations. The values for each setting in the development, staging, and production environments are listed.



Sandboxed Configurations

Below are the sandboxed Customer Portal configurations and the effective value of that configuration for each environment.

Name	Configuration	Development	Staging	Production
login_required	CP_CONTACT_LOGIN_REQUIRED	1	0	0

Connect Object Explorer

Customer Portal Framework Version 3.2 is based on the Connect for PHP API, a powerful tool for building custom functionality. The Connect Object Explorer uses a ROQL (RightNow Object Query Language) query interface to help you become familiar with Connect more quickly. You will learn more efficiently because you can explore Connect and the data it exposes from the Customer Portal Administration site instead of logging in to the administration interface in Oracle Service Cloud.

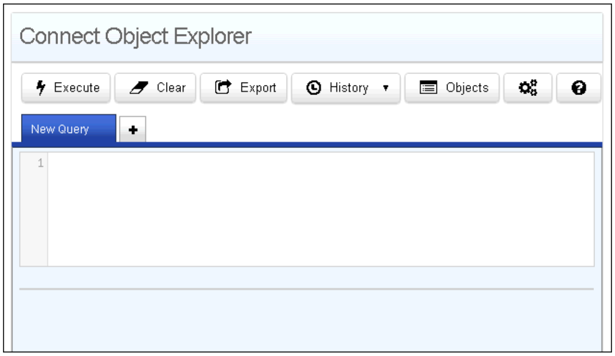
In addition to the ROQL query interface, the Connect Object Explorer also provides an object and field explorer to view Connect objects and metadata.

When you interact with the Connect Object Explorer, you gain detailed information about all Connect objects, which improves your efficiency and makes it easier to adopt Framework Version 3.2.

To use the Connect Object Explorer

1. Log in to your Customer Portal Administration site by typing `https://[your_site]/ci/admin`. You'll be prompted for your Oracle Service Cloud user name and password.

2. On the Tools tab drop-down menu, select Connect Object Explorer. The page opens.

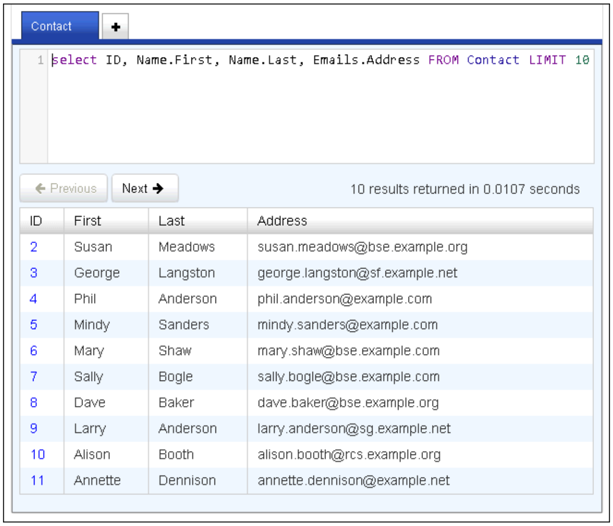


3. Enter a ROQL query in the New Query field. Your query might look like the following.

```
select ID, Name.First, Name.Last, Emails.Address FROM Contact LIMIT 10
```

Note The syntax for ROQL keywords and primary Connect objects is highlighted in the editor. Refer to Sample ROQL queries for examples of valid queries.

4 Click the Execute button on the far left of the toolbar to display the list of results.



5 To sort the results on any column, click the column heading to sort in ascending order. To sort in descending order, click the column heading again.

6 To see additional results, click the Previous or Next buttons on the left above the results.

7 To examine the metadata of a record, click its ID (or click the value in the first column if the first column is not ID). All of the properties of the object (except nested properties) are defined in a new window. When you are finished, click x in the upper right corner of the window or the Close link at the bottom right.


Meta data for **Contact** - ID 2

« Contact

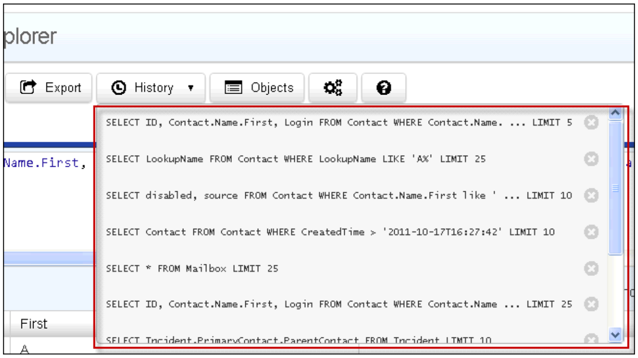
Field Name	Value	Field Type
type_name	RightNow\Connect\v1_2\Contact	
COM_type	Contact	
is_menu	false	
is_primary	true	
can_create	true	
can_get	true	
can_update	true	
can_destroy	true	
label	Contact	
description	Customers or end users of a site	
ID	2	long
LookupName	Susan Meadows	string
CreatedTime	1377117018	long
UpdatedTime	1377118929	long
Address		*Address*
- City		string
- Country		*Country*
- PostalCode		string
- StateOrProvince		*NamedIDLabel*
- Street		string
Banner		*Banner*

8 To conduct another query, click the + sign to add a new tab, and repeat steps 3 through 7.

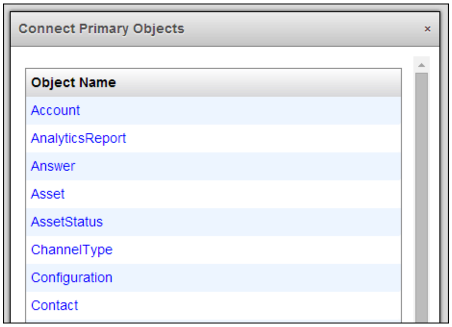
9 To export the data in a comma-separated values (CSV) file, click Export. An Excel spreadsheet file is generated.

10 To clear the query (and any results if the query was executed), click Clear.

11 To view the history of prior queries, click History.



12 To display a list of all Connect primary objects, click Objects.



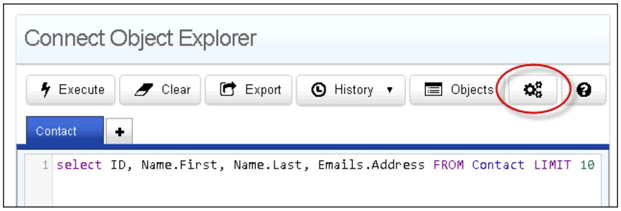
a To view metadata for an object, click it to display a table of field names, values, and field types.


Meta data for Answer

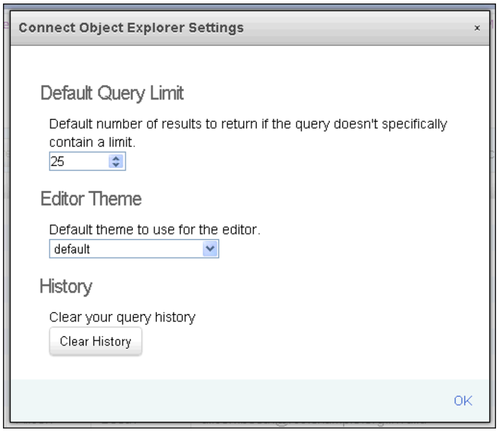
« Answer

Field Name	Value	Field Type
type_name	RightNow\Connect\v1_2\Answer	
COM_type	Answer	
is_menu	false	
is_primary	true	
can_create	true	
can_get	true	
can_update	true	
can_destroy	true	
label	Answer	
description	Customer questions and answers maintained in the Knowledge Base	
ID		long
LookupName		string
CreatedTime		long
UpdatedTime		long
AccessLevels		*AccessLevelArray*
AdminLastAccessTime		long
AnswerType		*AnswerType*
AssignedSibling		*Answer*

13 To adjust settings for the Connect Object Explorer, click the Settings button.



The Connect Object Explorer Settings window opens.



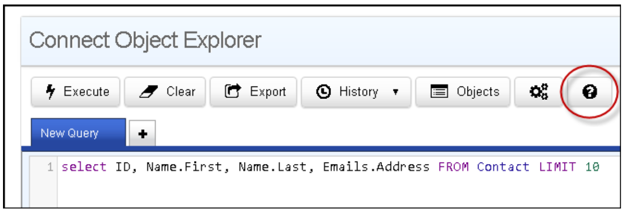
a To change the default number of results from 25, type a new number in the Default Query Limit field.

b To change the syntax highlighting theme used by the query editor, click the Editor Theme drop-down menu and select a new theme from the available options.

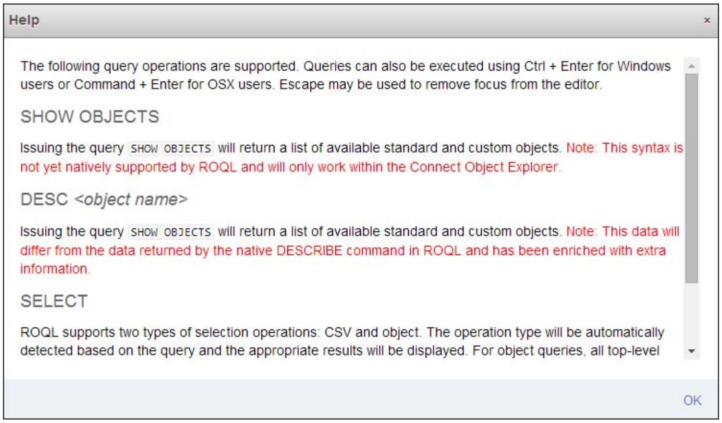
c To clear the query history, click Clear History.

d Click OK to save your changes and close the window.

14 To view the supported query options, click the Help button.



The Help window opens.



Sample ROQL queries

The following list contains sample queries to help you understand how to formulate your queries on the Connect Object Explorer. Standard object name mappings are used to automatically correct issues of character case and singular/plural form inconsistency until you become more familiar with Connect naming. For example, in the following list, all of the first four queries automatically appear as `DESC Incident` in the editor when they are executed.

Note The `desc`, `describe`, and `show` queries are not natively supported by ROQL and work only within the Connect Object Explorer.

The editor uses syntax highlighting of ROQL keywords and primary Connect objects, and you can change the theme by clicking the Settings button and making a selection on the Editor Theme drop-down menu.

- `desc Incident`
- `describe Incident`
- `describe incident`
- `desc incidents`
- `show objects`
- `Show Objects`
- `Show Tables`

- `SHOW TABLES`
- `SHOW OBJECTS`
- `SELECT * FROM Mailbox`
- `SELECT ID, LookupName FROM Account LIMIT 10`
- `SELECT Contact FROM Contact LIMIT 10`
- `SELECT Incident.PrimaryContact.ParentContact FROM Incident LIMIT 10`
- `SELECT Contact FROM Contact C WHERE C.Name.First like 'C%' LIMIT 10`
- `SELECT Contact FROM Contact WHERE CreatedTime > '2011-10-17T16:27:42' LIMIT 10`
- `SELECT disabled, source FROM Contact WHERE Contact.Name.First like 'C%' AND Contact.Address.City='Bozeman' LIMIT 10`
- `SELECT LookupName FROM Contact WHERE LookupName LIKE 'A%';`
- `SELECT ID, Contact.Name.First, Login FROM Contact WHERE Contact.Name.First IS NOT NULL ORDER BY Contact.Name.First ASC LIMIT 5`
- `SELECT ID, Contact.Name.First, Login FROM Contact WHERE Contact.Name.First IS NOT NULL`

Use the DESC or DESCRIBE statement to obtain field and relationship information about standard and custom objects defined in the Connect Common Object Model (CCOM). You must specify the object's name in the query, for example, `DESC Account`.

The SHOW OBJECTS statement lists both standard and custom objects defined in CCOM. The SHOW TABLES statement is an alias for SHOW OBJECTS.

The SELECT statement retrieves either rows or objects from one or more standard or custom objects defined in CCOM. The explorer automatically detects the query type and returns either CSV data or an object with fields you can explore.

Code Assistant tool

Migrating your customer portal to Framework Version 3 offers significant benefits and features. However, the process of migrating your customized code can be challenging, especially if you have extensive customizations. The Code Assistant simplifies the migration process between framework versions and provides specific guidance for updating your custom code. The tool offers the following help.

- Assistance for migrating Framework Version 2 widgets to Framework Version 3
- Help for converting from YUI 2 to YUI 3

- Removal of Intent Guide pages

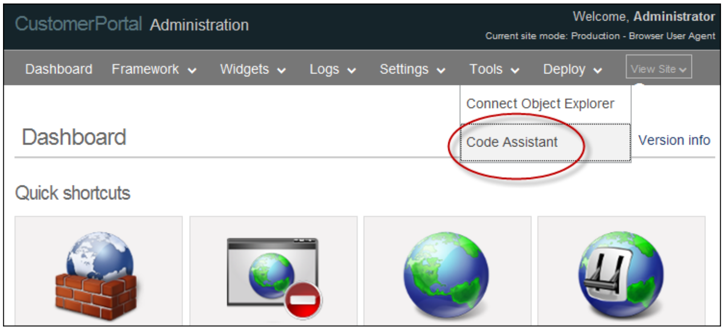
The widget migration wizard walks you through the custom code migration process, and the code suggestion feature offers suggestions for improving or migrating custom code that includes YUI 2. As a result, your framework migrations will be simpler and faster, and you'll be able to take advantage of the newest Customer Portal features sooner.

Important You must enable Framework Version 3 before using the Code Assistant.

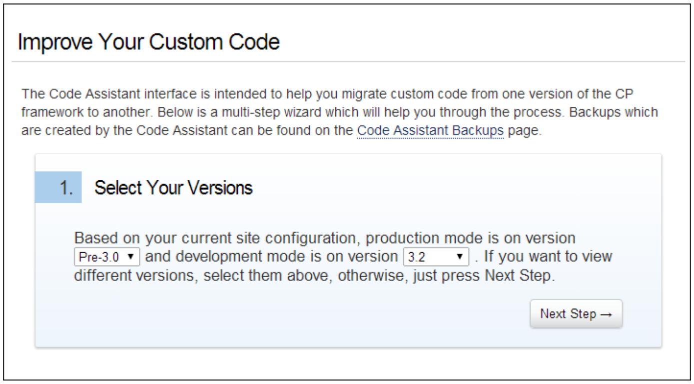
To use Code Assistant

1 Log in to your Customer Portal Administration site by typing `https://[your_site]/ci/admin`. You'll be prompted for your Oracle Service Cloud user name and password.

2 On the Tools tab drop-down menu, select Code Assistant.



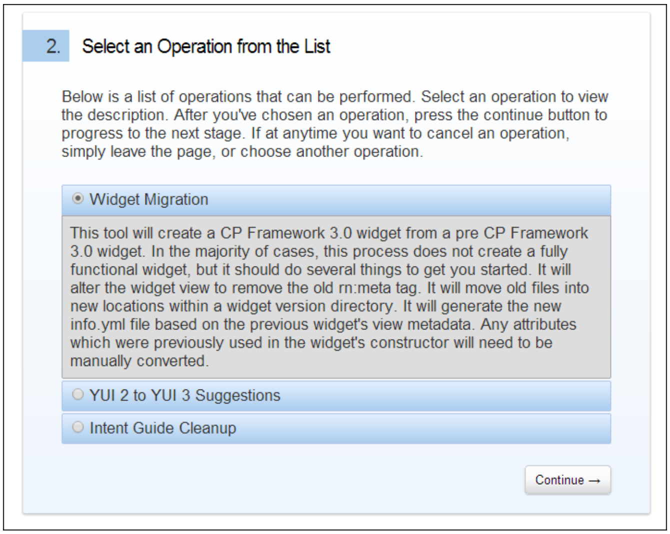
The page opens to display the Code Assistant, including information about your current production and development framework versions. Because you are migrating from one framework version to another, your development area will be using a more recent framework than your production area.



3 To migrate to a different framework version than 3.2 (if, for example, you want to use Framework Version 3.0 instead), select the version you want from the development mode drop-down menus.

Note We recommend you use the selected options to prevent potential coding errors.

4 Click Next Step to select a migration option.



5 The Widget Migration option is selected by default. To use the Code Assistant to help you migrate your widgets, click Continue and follow the steps described in To migrate your custom widgets to Framework Version 3 below.

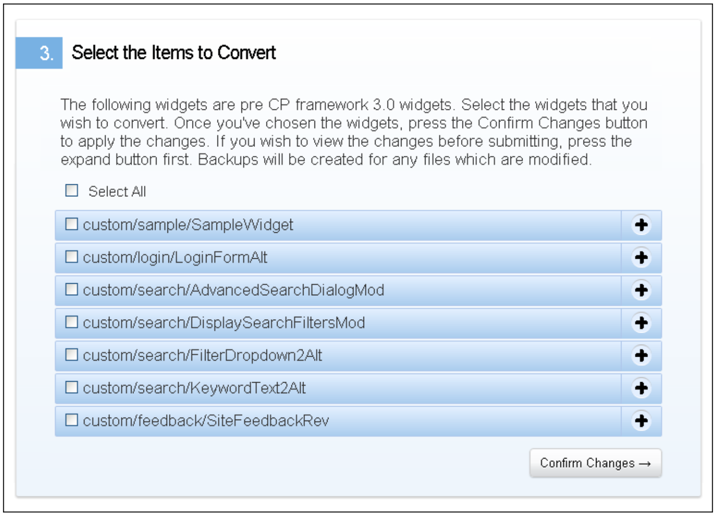
6 To update your custom code to YUI 3, see To update your YUI 2 code to YUI 3 below.

7 To remove Intent Guide pages (because Intent Guide is not supported in Framework Version 3.2), see To remove Intent Guide pages below.

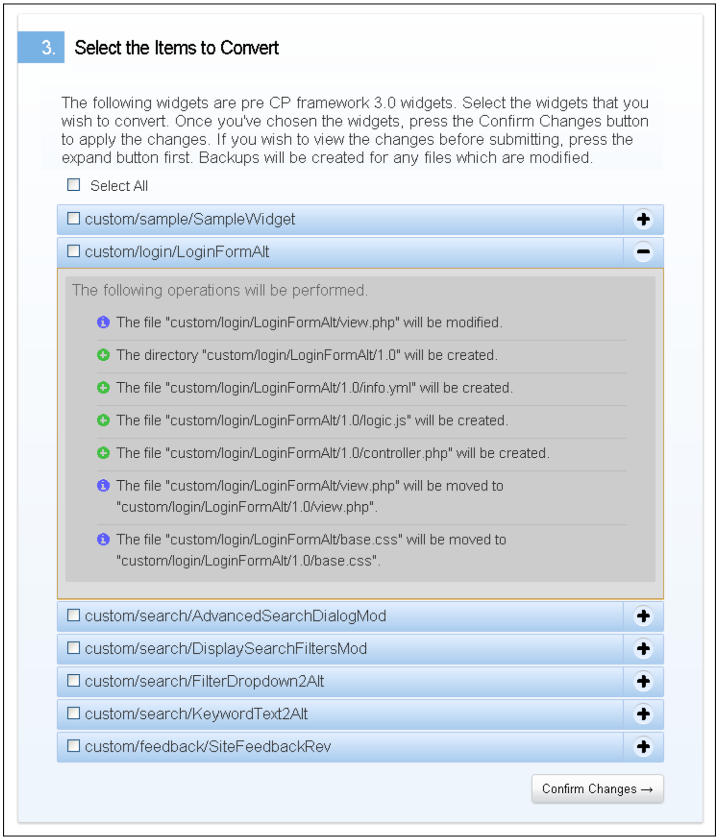
To migrate your custom widgets to Framework Version 3

Note Just as the widget builder creates a file structure and an information (YAML) file for your custom widgets, so does the Code Assistant. And just as you must edit the skeleton files that the widget builder generates, you must also edit the files generated by the Code Assistant in order to add the widget's attributes and make any other necessary changes.

1 If Widget Migration is not already selected on the Code Assistant page, select it and click Continue. A list of the custom widgets from your Framework Version 2 customer portal is displayed.



2 To review the changes the Code Assistant will make to an individual widget, click the + sign on the right side of the widget row. The row expands to identify the files that will be created, modified, and deleted.

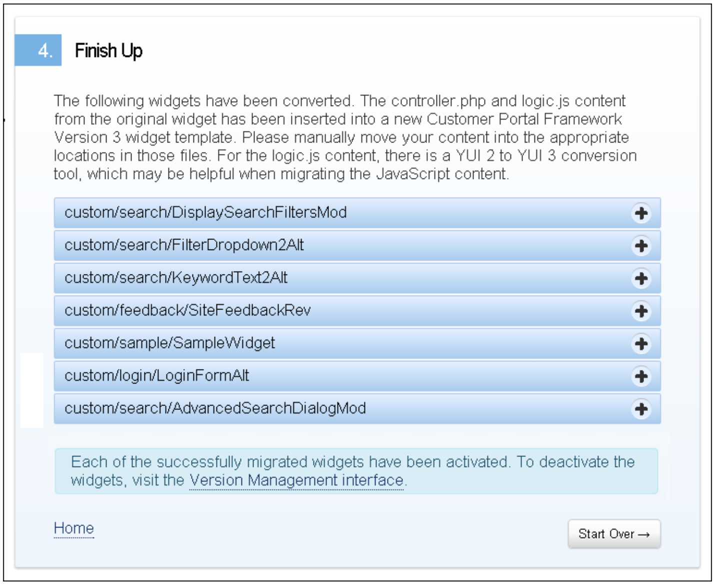


3 To select individual widgets for conversion, select the check box next to the widgets you want to migrate.

Or

To have Code Assistant migrate every listed widget, select the Select All check box at the top of the list.

4 Click Confirm Changes, and then click OK on the confirmation message.



5 To return to the Code Assistant starting page (where you select your production and development mode versions), click Start Over.

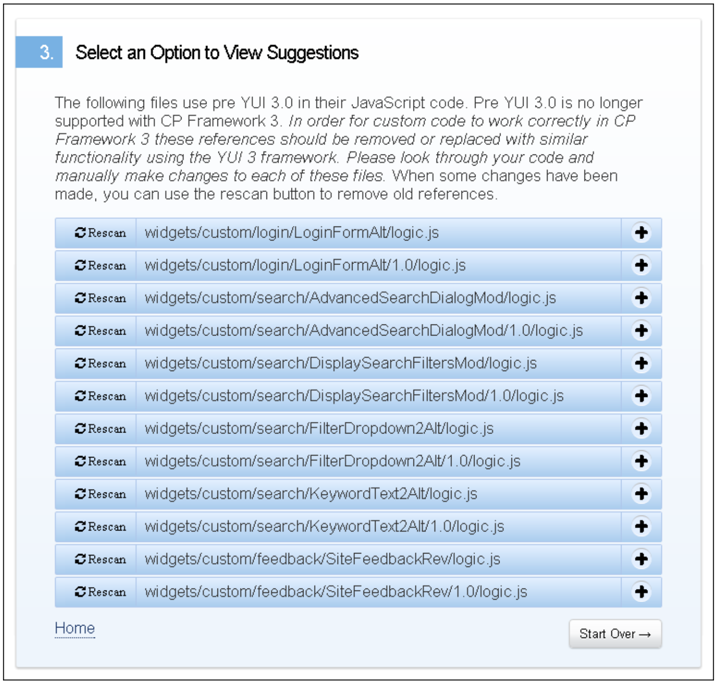
6 To return to the dashboard, click the Home link.

7 If a widget was successfully migrated, it will be activated automatically and you will be notified. If a widget could not be activated because additional code changes are required, the message will notify you about that.

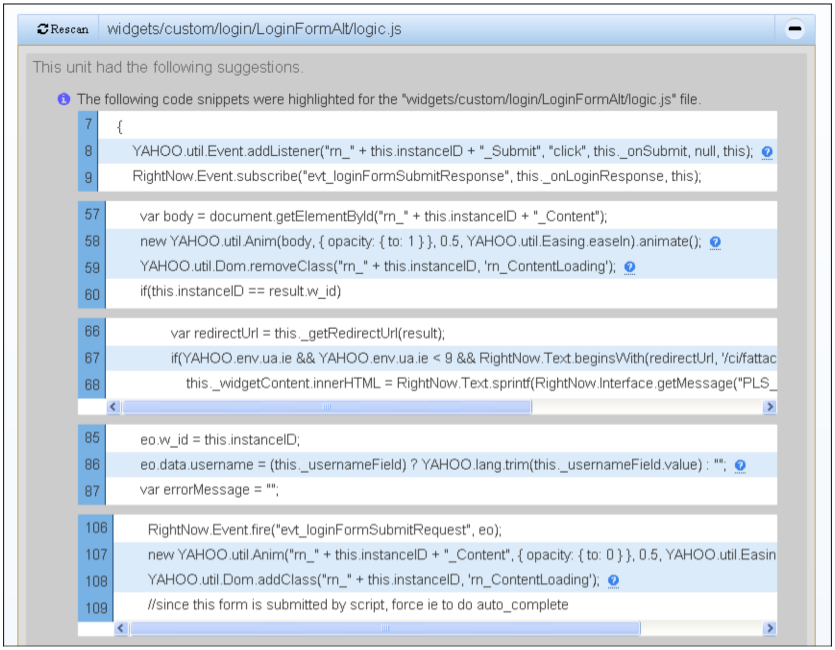
8 Edit the migrated widget files to include their Framework Version 2 features.

To update your YUI 2 code to YUI 3

1 On the Code Assistant page, select YUI 2 to YUI 3 Suggestions from the options and click Continue. The screen displays the list of files using YUI 2 that were migrated from your Framework Version 2 customer portal.



2 Click the + sign to the right of a file name to display the suggestions for editing the file's code to work with the YUI 3 framework.



3 Open the file that needs to be updated and follow the instructions from the Code Assistant for editing the file. The lines that need to be edited are noted. For each suggestion, hover over the question mark at the far right to see a summary of the change, for example, "YAHOO.util.Event's functionality was replaced with 'Y.Event'." Clicking the question mark takes you to the YUI library for the element, where you can find additional information.

4 Repeat steps 2 and 3 for each file that needs editing.

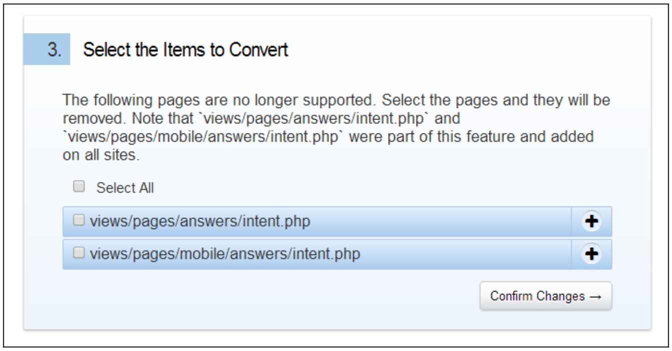
5 To review your work, click the Rescan button. Only the suggestions you have not yet incorporated will appear.

6 To return to the Code Assistant starting page (where you select your production and development mode versions), click Start Over.

7 To return to the dashboard, click the Home link.

To remove Intent Guide pages

1 On the Code Assistant page, select Intent Guide Cleanup from the options and click Continue. A list displays the Intent Guide pages, which are no longer supported.

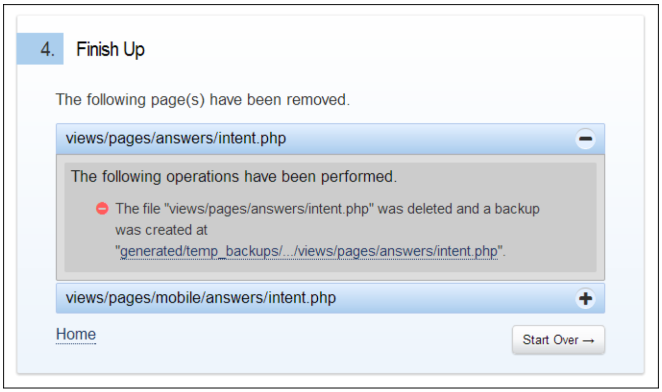


2 To select an individual page for deletion, select the check box next to the page.

3 To have Code Assistant delete both pages, select the Select All check box at the top of the list.

4 Click Confirm Changes, and then click OK on the confirmation message.

5 To see where a backup of a deleted page is located, click the + sign for the page.



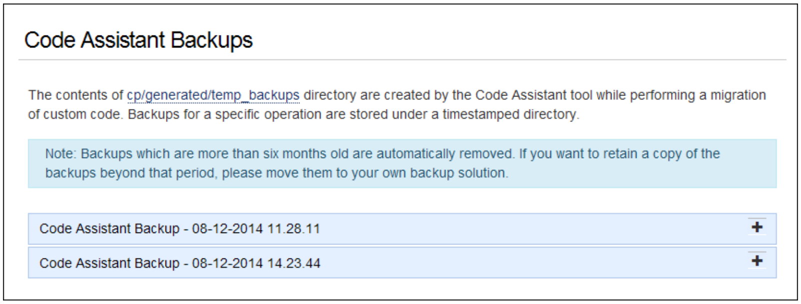
6 To return to the Code Assistant starting page (where you select your production and development mode versions), click Start Over.

7 To return to the dashboard, click the Home link.

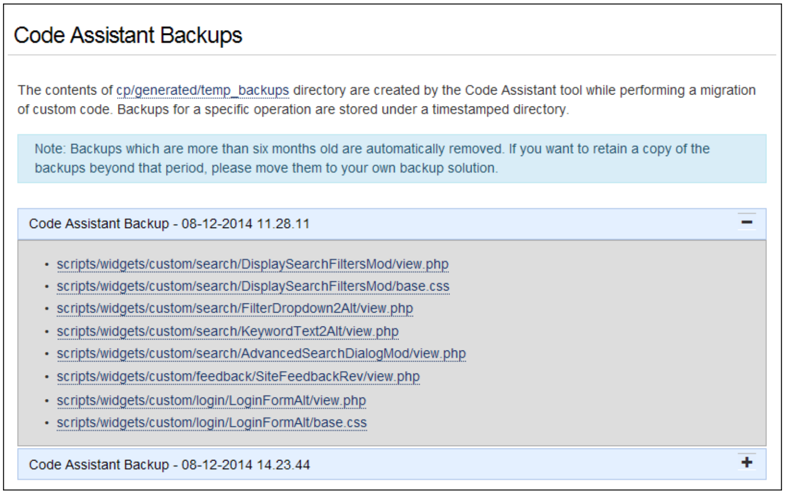
Backup directory

Whenever you let the Code Assistant modify your customer portal files, it creates backup files and stores them for up to six months. Each set of backup files is timestamped for ease of identification.

You can access the backup files through WebDAV at */cp/generated/temp_backups*. Or you can view them on the Customer Portal Administration site. Click Tools and select Code Assistant. The introductory paragraph contains a link to the Code Assistant Backups page. Clicking the link opens a page that resembles the following.



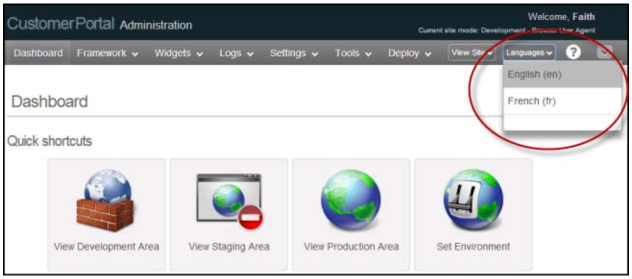
Clicking the + sign for a backup opens a list of all files in the backup directory, and clicking an individual file displays the code for that file.



Language selection

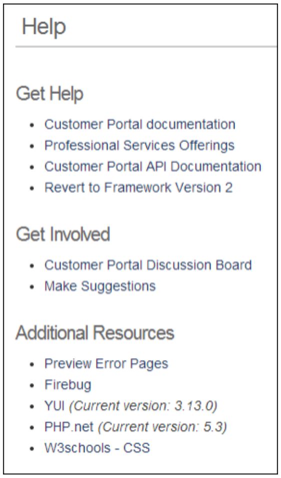
By default, the language on the Customer Portal Administration site is the same as the language for the interface. But that may not be useful to you if you are not fluent in every language your customer portal supports. Because you probably still want to display the administration site in your native language, the Language tab lets you select a language that persists across all administration pages for all interfaces.

The Language tab appears on the Customer Portal Administration site when your customer portal has more than one interface and at least two unique languages. The tab has a drop-down menu of the installed languages, which is dynamically generated by querying the SiteInterface object. When you select a language from the menu, a cookie is set and the language on the administration site uses the selected language regardless of the language of the interface.



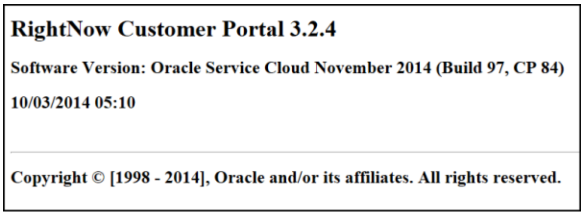
Help button

When you click the Help shortcut on the dashboard or the blue button on the right side of the tab bar, a screen containing links to various Customer Portal resources opens. The list includes links to all documentation, information about Oracle Service Cloud Professional Services, Customer Portal API documentation, the Customer Portal forum, a suggestions forum, the error page previews, and additional developer resources, including a link to revert to Framework Version 2 if your site was migrated from that version.



Viewing the About page

To view the version number and other information about the customer portal, go to http://<your_site>/ci/about.



Restoring the reference implementation

There may be times when you want to restore your development pages to the standard page set. For example, if you've modified your development pages for one interface but now want to create an entirely different interface (for another product or language, for instance), you might prefer to start from the **reference implementation**, especially if your first set of development pages is highly customized.

To restore development pages to the reference implementation

1 Open the */cp/core/framework* folder in WebDAV.

2 Copy the *views* subfolder and paste it to your desktop.

3 Copy the *views* folder from your desktop and paste it into the */cp/customer/development* folder, selecting Yes to All when you are asked to confirm the folder replacement.

4 If you have modified other files in different subfolders under */cp/customer/development*, copy and paste their */cp/core* equivalent to the appropriate *development* subfolder.

5 If you have modified CSS or image files in the *assets* folder, you may want to replace them with the equivalent files from the */cp/core/assets/default* folder.

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Staging and Promoting the Customer Portal

Now that your customer portal pages are just the way you want them and you've checked your development site one final time, it's time to stage and then promote these pages into production so your customers can begin using them.

One benefit of the staging area is the ability to selectively stage and promote pages, widgets, versions, and page set mappings without being required to implement all changes from the entire development site. When you stage your customer portal, your selections are copied to a staging area and compiled and optimized for performance. The staging environment looks exactly like your production environment will look when you promote the staged files. As a result, you have one more chance to check your site before making it available to your customers.

When your staging environment looks the way you want, you can promote your changes. This process copies the pages from the staging area to the production area, making them publicly visible. Your current production pages are backed up in case you need to restore them. If you change your mind after promoting your staged pages to the production site, you can revert to the most recent set of production pages with a click of a button.

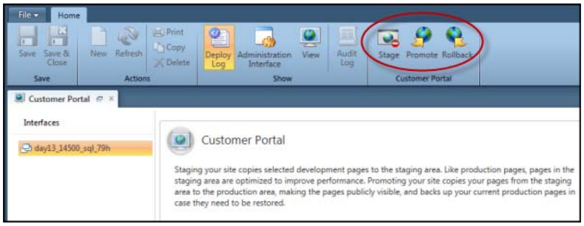
Staging

After you have edited the customer portal pages in the development area, you can stage them to see how your changes will appear on the production site. Because the staging area replicates the production site but keeps the pages from being visible to customers, you can continue to modify the development pages and then stage them without exposing the changes to your customers until you are satisfied with the results.

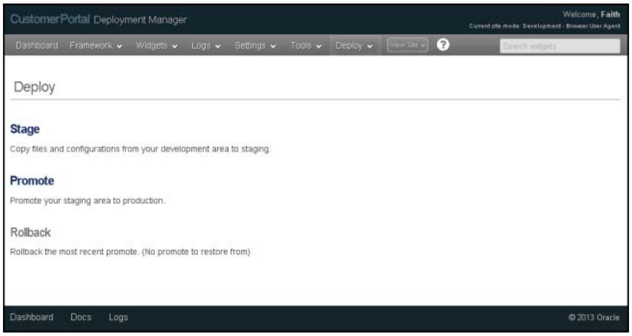
Note Before you can stage development pages, the **profile** assigned to you must have the CP Stage permission enabled. You or your **administrator** can enable this permission if necessary.

When you begin the staging process, the window displays all files that are different between the development area and the current staging area. You can select some or all of the edited files for staging. The pages in the *development* folder are then copied to a staging area and optimized for performance. This process checks for errors, reduces file size, and minimizes the number of disk access and HTTP requests required to load the pages.

After staging the files and reviewing them, you can promote the staged pages to the production area, where they are visible to your customers. You can stage, promote, and roll back your customer portal pages from the **administration interface**.



You can also stage, promote, and roll back from the **Customer Portal Administration site**.



Staging the customer portal pages

To stage your customer portal pages

1 Log in to Oracle Service Cloud.

Note Alternately, you can use the Customer Portal Administration site instead of the administration interface by typing https://<your_site>/ci/deploy/index (or http://<your_site>/ci/deploy/index if your site does not have SSL enabled). Resume this procedure at step 5.

2 Click the Configuration button on the **navigation pane**.

3 Double-click Customer Portal under Site Configuration.

4 Select the interface you want to stage from the Interfaces column.

5 On the administration interface, click the Stage button on the ribbon of the Customer Portal editor.

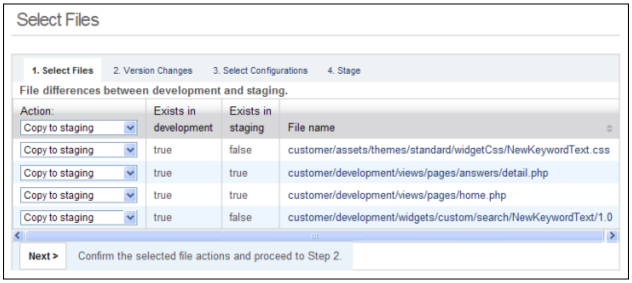
Or

On the Customer Portal Administration site, click Stage on the Deploy page.

The first window displays a list of files that have been changed in the development area since the last time files were staged. By default, all new and edited files are selected to be copied to the staging area, and any files you have removed from the development pages have the Remove From Staging action.

Note Although this procedure follows the steps presented on the buttons on the Select Files window, you can click **4 Stage** and immediately stage all file differences.

Important If you have created a new widget for your customer portal, you must be sure that Copy to Staging is selected for the widget on this first step of the staging process. Additionally, you must also select Yes to push all framework and widget version changes on the second page of the staging process, Version Changes. If you do not include pushing the version changes, your new widget will not be available on your staging site.



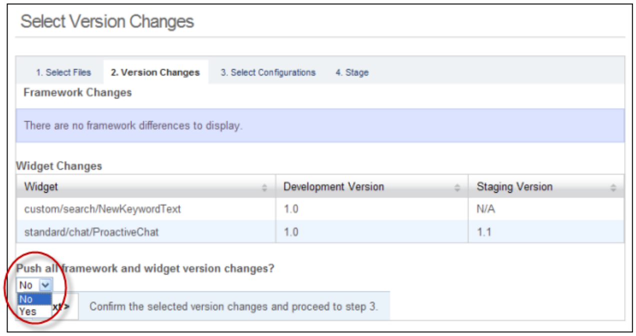
6 To prevent a file from being copied to the staging environment, click the Action drop-down menu in the row associated with the file and select No Action. This lets you maintain any changes you have made to the development page without having those changes appear in the staging environment (or the production pages when you promote the site).

7 To remove one or more files from the staging environment, click the Action drop-down menu in the row associated with the file and select Remove From Staging. The selected file will be removed from the staged pages and therefore will not be available to be copied to your production site.

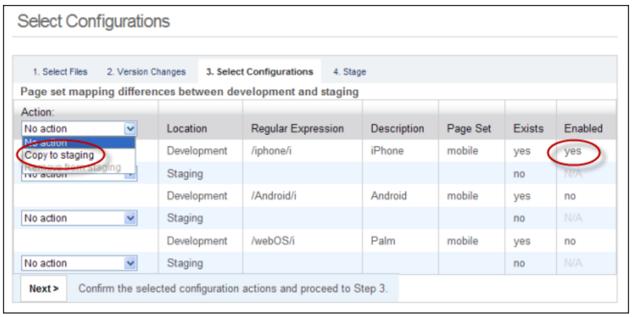
8 Click Next to continue. (Alternately, you can click **2 Version Changes** at the top of the page.) The window displays any version changes to the framework or widgets.

9 To push all framework and widget version changes, including the addition of new widgets, select Yes from the drop-down menu in the lower left corner of the page.

Important If you do not include pushing the version changes, any new widgets will not be available on your staging site.



10 Click Next to continue. (Alternately, you can click **3 Select Configurations** at the top of the page.) The window displays all user agent page set mappings for the interface and notes whether they are enabled or disabled. It also shows the differences in the page sets between the development and staging areas. By default, No Action is selected for the listed page sets, but if you have disabled a page set, the action will be Remove From Staging.

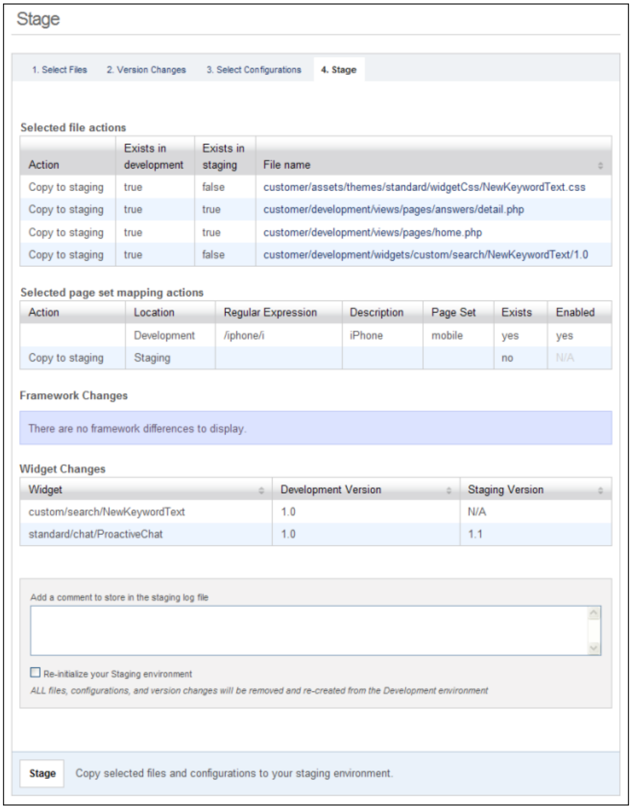


11 To copy a page set that you've enabled to the staging area, click the drop-down menu in the Actions column and select Copy To Staging.

Note If a page set has not been enabled, you will not be able to select Copy To Staging for that page set.

12 To remove a development page set from the staging area, click the drop-down menu in the Actions column and select Remove From Staging.

13 Click Next. (Alternately, you can click **4 Stage** at the top of the page.) The window summarizes your selections from the earlier pages of the staging process.



14 To store a comment in the staging log file, type a note in the field. You can enter up to 4,000 characters.

15 To re-initialize the staging environment, select the check box just above the Stage button.

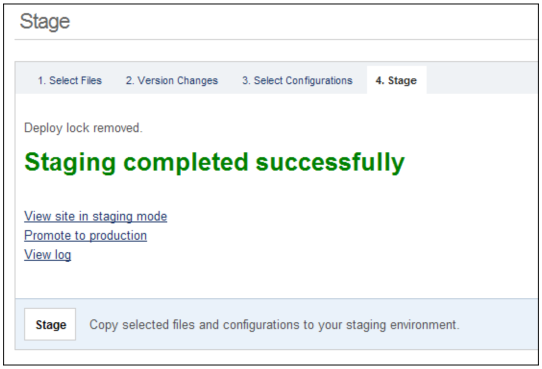
Important If you select this check box, you will lose any file and page set selections you have made during the staging process. Re-initializing means that all files in the staging area will be deleted and replaced with the complete set of development files. Additionally, all page set mappings, configuration settings, and version changes in the staging area will be deleted and replaced with their corresponding files or settings from the development area.

16 Click the Stage button. A message asks you to confirm that you want to copy the selected items to the staging area.

Note You will see a message if a deploy lock is in place. Clicking No cancels the staging operation and Yes will override the existing lock and continue with the staging operation. Use caution when clicking Yes because you may compromise another staff member's file promote if you start overwriting files in the staging area.

17 Click Stage to continue. When the process is complete, a window lets you know staging was successful. It also displays a link to view the log. If you staged the files from the Customer Portal Administration site, the window also contains links to the staging area, where you can view the pages, and a link to the Promote page.

Note If any widgets have been deleted (click here for information about deleting widgets), the message notifies you that the deleted widget has been deactivated in the staging environment. Also, if any of the widget versions are incompatible with the framework, a staging error occurs and identifies the incompatible widget.



Promoting

After you are satisfied with your staging area, you can promote the pages and files to production.

Note Before you can promote the staging area, the **profile** assigned to you must have the CP Promote permission enabled. You or your **administrator** can enable this permission if necessary.

Splash page for maintenance mode

The Customer Portal reference implementation includes a *splash.html* file in the */cp/customer/error* folder. The splash page is displayed to let your customers know that your site is undergoing maintenance.

To view the splash page

1 In a web browser, type `https://<your_site>/ci/admin`.

2 Click the Settings tab drop-down menu and select Preview Error Pages.

3 Click */cp/customer/error/splash.html* to view your splash page.

By default, your newly promoted production site is visible to customers immediately upon completion of the promote process. You might want a little more time to complete any manual tasks that may be required before making your changes public on the production site. If so, you can manually turn on the splash page.

Note Your development and staging pages, WebDAV access to your customer portal files, and the Customer Portal Administration site are unaffected by this configuration setting.

To manually turn on the splash page

1 Log in to Oracle Service Cloud.

2 Use the procedure described in [To locate and edit configuration settings]() to locate CP_-MAINTENANCE_MODE_ENABLED under RightNow User Interface > Customer Portal > General.

3 Click the drop-down menu in the Value field and select Yes.

4 Click the Save button on the ribbon. Visitors to your production site will continue to see the splash page until you reset CP_MAINTENANCE_MODE_ENABLED to No.

Promoting the customer portal pages

To promote your customer portal pages

1 Log in to Oracle Service Cloud.

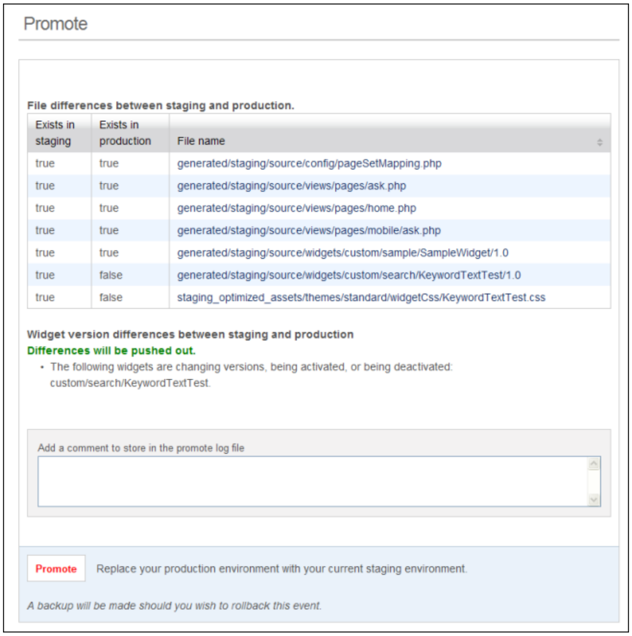
Note Alternately, you can use the **Customer Portal Administration site** instead of the **administration interface** by typing `https://<your_site>/ci/deploy/promote`. Resume this procedure at step 6.

2 Click the Configuration button on the navigation pane.

3 Double-click Customer Portal under Site Configuration.

4 Select the interface you want to promote from the Interfaces column.

5 Click the Promote button on the ribbon. The window shows you the list of edited files and configurations and notes whether the file or configuration exists in the staging and production areas.

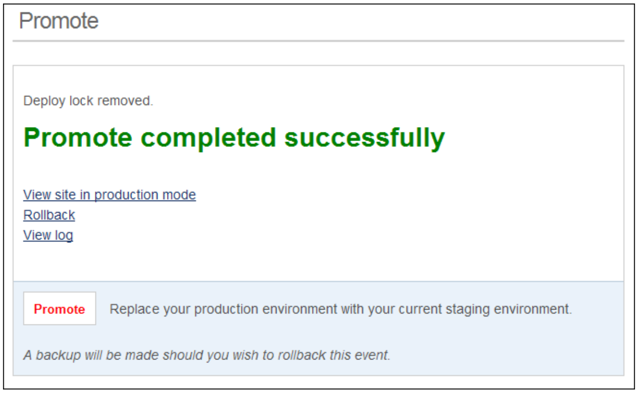


6 To store a comment in the log file, type a note in the field. You can enter up to 4,000 characters.

7 Click the Promote button at the bottom of the page. A message asks you to confirm that you want to replace your current production area with the files from the staging area.

Note You will see a message if a deploy lock is in place. Clicking No cancels the promote operation and Yes will override the existing lock and continue with the promote. Use caution when clicking Yes because you may overwrite another staff member's work.

8 Click Promote to continue. When the process is complete, a window lets you know the promote process was successful. It also displays a link to view the log. If you promoted the files from the Customer Portal Administration site, the window also contains a link to the production area, where you can view the promoted pages, and a link to the Rollback page.



Rolling back

If you promoted your staging area into production and then later realized you did not want to do that, you can use the Rollback feature to revert to the prior production pages. Your profile must contain the CP Promote permission before you can perform the rollback process. Rollback is disabled if the site has not yet been promoted, such as after an upgrade, or if the site has already been rolled back.

To roll back the most recent promote process

1 Log in to Oracle Service Cloud.

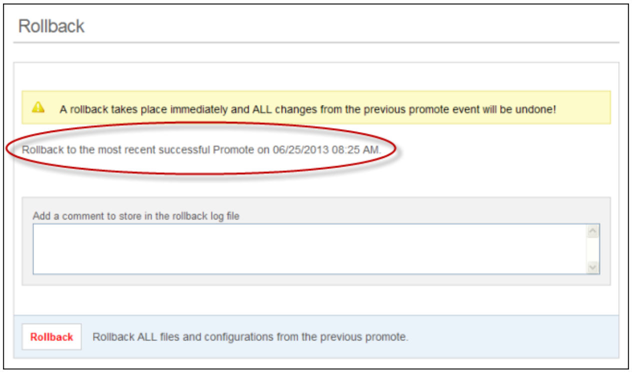
Note Alternately, you can use the **Customer Portal Administration site** instead of the **administration interface** by typing `https://<your_site>/ci/deploy/rollback`. Resume this procedure at step 6.

2 Click the Configuration button on the navigation pane.

3 Double-click Customer Portal under Site Configuration.

4 Select the interface you want to roll back from the Interfaces column.

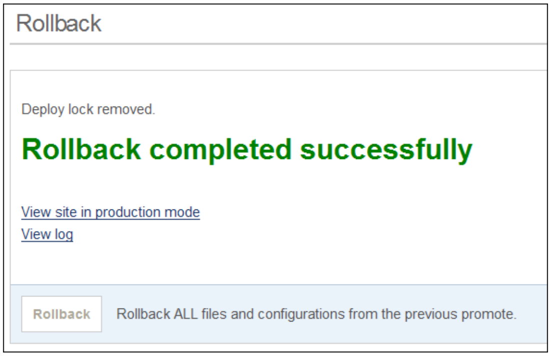
5 Click the Rollback button on the ribbon. The window lists the promote operation that will be rolled back. This will always be the most recent promote.



6 To store a comment in the log file, type a note in the field. You can enter up to 4,000 characters.

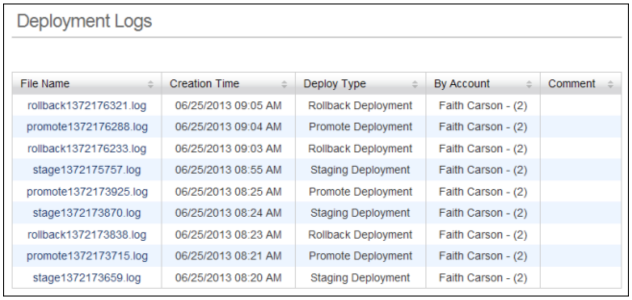
7 Click the Rollback button at the bottom of the window. A message asks you to confirm that you want to roll back the most recent promote operation.

8 Click Rollback to continue. When the process is complete, a window lets you know the rollback process was successful. It also displays a link to view the log. If you rolled back the files from the Customer Portal Administration site, the window also contains a link to the production area.



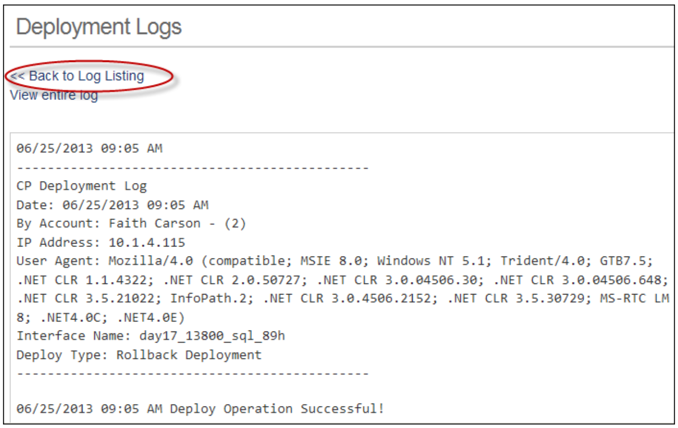
Viewing deployment logs

The Customer Portal editor on the **administration interface** includes a list of deployment logs sorted in descending order by date. It also lists the type of deployment and the staff member who initiated the deployment. Deploy types include Stage, Promote, and Rollback. Other deploy types include Service Packs and Upgrades. You can also view deployment logs from the **Customer Portal Administration site**.


Deployment Logs

File Name	Creation Time	Deploy Type	By Account	Comment
rollback1372176321.log	06/25/2013 09:05 AM	Rollback Deployment	Faith Carson - (2)	
promote1372176288.log	06/25/2013 09:04 AM	Promote Deployment	Faith Carson - (2)	
rollback1372176233.log	06/25/2013 09:03 AM	Rollback Deployment	Faith Carson - (2)	
stage1372175757.log	06/25/2013 08:55 AM	Staging Deployment	Faith Carson - (2)	
promote1372173925.log	06/25/2013 08:25 AM	Promote Deployment	Faith Carson - (2)	
stage1372173870.log	06/25/2013 08:24 AM	Staging Deployment	Faith Carson - (2)	
rollback1372173838.log	06/25/2013 08:23 AM	Rollback Deployment	Faith Carson - (2)	
promote1372173715.log	06/25/2013 08:21 AM	Promote Deployment	Faith Carson - (2)	
stage1372173659.log	06/25/2013 08:20 AM	Staging Deployment	Faith Carson - (2)	

Clicking the link for a log opens it for viewing. After you've viewed the log, click Back to Log Listing at the top of the log to return to the list of logs.


Deployment Logs

<< Back to Log Listing
View entire log

```
06/25/2013 09:05 AM
---------------------------------------------
CP Deployment Log
Date: 06/25/2013 09:05 AM
By Account: Faith Carson - (2)
IP Address: 10.1.4.115
User Agent: Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 5.1; Trident/4.0; GTB7.5;
.NET CLR 1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.04506.30; .NET CLR 3.0.04506.648;
.NET CLR 3.5.21022; InfoPath.2; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729; MS-RTC LM
8; .NET4.0C; .NET4.0E)
Interface Name: day17_13800_sql_89h
Deploy Type: Rollback Deployment
---------------------------------------------

06/25/2013 09:05 AM Deploy Operation Successful!
```

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Developer Overview

This overview is intended for web developers who need to produce custom code for the Oracle RightNow Customer Portal Cloud Service (Customer Portal).

The overview includes:

- A summary of the features of the Customer Portal framework, including its architecture, the APIs provided, and the tools used with the framework.
- A description of the components of the reference implementation of Customer Portal.
- Conceptual information, procedures, and examples for producing custom code, including the models, controllers, and widgets used in Customer Portal.

It is assumed that you have an understanding of web application development, PHP, software design and development methodologies, object-oriented programming, and also a basic understanding of WebDAV, HTML, CSS, and JavaScript.

Note The sample code in this document or accessed through this document is not certified or supported by Oracle. It is intended for educational or testing purposes only. Use of this sample code implies acceptance of the License Agreement.

Customer Portal framework overview

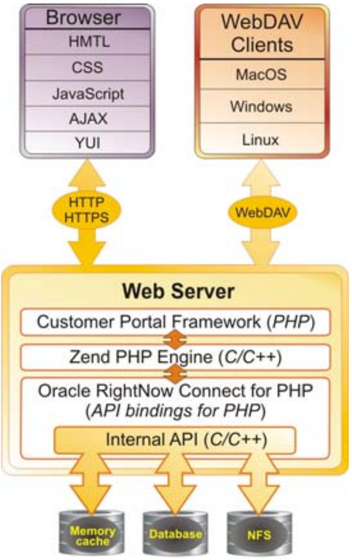
The Customer Portal is a web application framework based on the Model-View-Controller (MVC) design pattern. It includes:

- Client-side scripting framework—The Yahoo! User Interface Library (YUI) for JavaScript coding.
- Server-side libraries and frameworks—The libraries and APIs for PHP coding and for accessing the Oracle Service Cloud knowledge base.

The files that are developed with or associated with the Customer Portal framework include:

- **Pages**—The files containing the HTML code for the customer portal.
- **Templates**—The wrapper of HTML and CSS around the pages and widgets.
- **Assets**—CSS files, images, and themes.
- **Models**—PHP classes that include functions to access the knowledge base.
- **Controller**—PHP classes that handle requests from the client and coordinate access to the knowledge base and the display of data to the user.
- **Widgets**—Collections of files containing HTML, CSS, JavaScript, and PHP code that provides specific functionality. The page files contain the code to call widgets.
- **Hooks**—Custom code that allows you to extend Customer Portal functionality. You specify hooks that execute before and after important Customer Portal events.
- **Helpers**—PHP files containing utility functions.
- **Libraries**—PHP classes containing a set of utility functions.

Refer to The customer folder for information about where these different types of files are located.



The main directory of Customer Portal Framework Version 3.0 is named *cp*, and within this file system there are four sets of Customer Portal files.

- **Development files**—The files you work with when you want to make changes to the customer portal. They cannot be seen by your customers until you stage and promote them. Development files are contained in the */cp/customer* folder.
- **Staging files**—The files located in */cp/generated/staging*. When your development pages are ready, you can stage them. Staged files are compiled and optimized to look and perform as they will on the production site. They are not editable, nor are they visible to your customers.
- **Production files**—The files, located in */cp/generated/production*, that have been promoted from the staging site and are visible to your customers.
- **Reference implementation files**—The default, read-only files that make up the original Customer Portal reference implementation before you make any changes. The original pages are located in */cp/core/framework/views*, the reference assets are located in */cp/core/assets* and the standard widgets are located in */cp/core/widgets*. If you want to revert to an original file, you can copy it from the reference folder and paste it over the file you no longer need.

Refer to The customer folder for more information about the files you'll be working with.

The Customer Portal framework is supported by tools that help in your code development and file administration. See Tools for working with the Customer Portal framework. Additional documentation is provided in API reference documentation and on the Customer Portal Web Administration site, for example, under the Framework and Widgets menus. There is also a Customer Portal Discussion Forum.

API reference documentation

API reference information is not provided in this overview, but the purpose and use of each API is discussed. Material that is available elsewhere includes:

- Oracle RightNow Connect PHP API Cloud Service (Connect PHP API) reference documentation
- Customer Portal API Documentation for PHP and JavaScript
- YUI reference documentation
- PHP language reference documentation

Tools for working with the Customer Portal framework

The support tools and software for working with the framework include:

- **Version control system**—You can use any version control system, for example, Apache Subversion (SVN), Git, or Mercurial, to provide revision control for your custom code.
- **Code editor**—You can use any software development application, for example, Eclipse, Vim, or Adobe Dreamweaver, to develop your custom code.
- **A WebDAV client**—You need a client that supports WebDAV, the standard protocol for managing and updating files on a web server. A WebDAV client allows you to map the *cp* directory to a local drive letter. Although you can use any WebDAV client, the use of Cyberduck is recommended.
- **Customer Portal Web Administration site**—You can use this site to:
  - ▷ View the development, staging, and production areas.
  - ▷ View information about framework versions.
  - ▷ Review widget information and access the widget builder.
  - ▷ Review page tag and business object documentation.
  - ▷ Stage and promote your development pages.
  - ▷ Access further documentation, resources, and developer community pages.
  - ▷ View log files.
- **Widget builder**—You can use this tool, which is available from the Customer Portal Web Administration site, for developing custom widgets rapidly. You can create a completely new widget or extend the functionality of an existing widget.

Refer to System requirements for information about the operating systems and browsers supported by Oracle Service Cloud and the Customer Portal.

Model-View-Controller design pattern

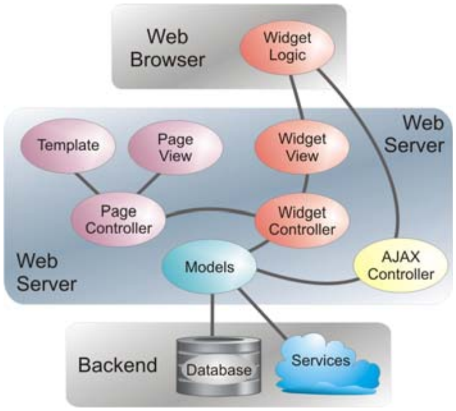
One of the most important aspects of the Customer Portal framework is the Model-View-Controller (MVC) design pattern, which allows the separation of logic and presentation so that each can vary independently. In other words, you can change the logic without affecting the presentation and vice versa.

The *model* represents your data structures. Typically, model classes contain functions that help you create, read, update and delete information in your database (in other words, perform CRUD operations).

The *view* is the information that is presented to a customer, usually a web page, although it can be a page fragment such as a header or a sidebar.

The *controller* is the intermediary between the model, the view, and any other resources needed to process the HTTP request and generate a web page. The controller is responsible for receiving the request, calling the appropriate models, and passing data to the view.

Widgets have their own view and controller files and can also make calls to models. For information, see Widgets and MVC.



Model

Models are PHP classes that are designed to work with information in your Oracle Service Cloud database. Models encapsulate database API calls. For example, the Answer model exposes a get() function that populates an Answer object, and the get() function of the Contact model populates a Contact object. These functions are available to any controllers that load the model.

Instead of making direct SQL calls to the database, custom models can make calls to Oracle RightNow Connect PHP API Cloud Service (Connect PHP API) and use the data objects from that API. Models can also use the Oracle RightNow Object Query Language (ROQL) to access the database.

Standard models call the native abuse detection methods. However, in some circumstances, such as when your custom code makes direct Connect PHP calls, or when it overrides standard controllers, your custom code must contain abuse detection calls. For information, refer to Abuse detection in custom code.

View

In Oracle Service Cloud, views are the page, template, and widget content combined with the CSS, images, and other assets that comprise the presentation part of the architecture.

Views are not called directly, but instead must be loaded by a controller. Any YUI components and other scripts are invoked from within the finalized view. The customer's experience is therefore controlled from the client side by HTML and JavaScript.

Controller

Controllers are PHP classes that are accessible through URI (Uniform Resource Identifier) requests. They call models, libraries, and helpers as required, and pass data to the view for display.

RightNow provides a set of application controllers that handle the URI requests. Examples include:

- *Page*—Processes the page requests and loads the appropriate page or template.
- *AjaxRequest*—Processes all of the AJAX requests made from client-side widget logic files.
- *Fattach*—Processes any file attachment requests.

The *index.php* file is called the front controller. It is distinct from the application controllers like *Page.php* and *AjaxRequest.php* and is specific to the Oracle web hosting environment.

The front controller receives the request URI, inspects the request, and then determines what modifications are necessary for the query string. The following table describes how the front controller handles various requests.

Table 385: How the Front Controller Handles Request URIs

When the request URI contains…	The front controller…
/app	Presets the Page controller and the render function (page/render).
/dav	Presets the WebDAV controller's index function (webdav/index).
/ci	Does not preset any controller or function. Instead, the next two URI segments specify what to load and execute. For example, when the front controller sees ci/ajaxRequest/sendForm, it loads the ajaxRequest controller and executes the sendForm() function. URIs containing /ci are used only for standard controllers.
/cc	Calls a custom controller. The format is: cc/class_name/function_name.

Widgets and MVC

It is useful to illustrate the MVC pattern through the sequence of events when a user interacts with a widget on a customer portal page.

When a user accesses a customer portal page, the view file for each widget presents the HTML for that widget, and the user can then interact with the widget. If the user clicks a button or link on the widget to submit the page to the server, the submission request goes to the controller. If part of the request requires data, the controller calls a model function to interact with the database and return the data to the controller. The controller then passes any updates back to the view, which refreshes the widget and displays it on the web page.

A model is not always necessary, because data from the database is not required for every widget.

Client-side scripting framework

The Customer Portal takes advantage of the YUI library, an open source JavaScript and CSS library for building richly interactive web applications using techniques such as DOM scripting, DHTML, and AJAX. Customer Portal Framework Version 3.2 uses YUI Version 3.13. For information about YUI 3, refer to the YUI Library.

Some YUI features used by Customer Portal include:

- Yahoo Global Object
- DOM collection
- Event utility
- Utilities, for example, the browser history manager
- Widgets such as auto complete and button control

The entire YUI library set is included with the Customer Portal. Although the reference implementation does not use the entire YUI framework, you can use these additional libraries for your customer portal implementation.

The Customer Portal Framework Version 3.2 has extended the YUI libraries for integration with the server-side scripting framework. This integration of technology makes it easy to create reusable functionality without having to handle variables and visit information. Typically, these libraries are associated with the specific widget functionality you are trying to create. Refer to the standard widgets located in */cp/core/widgets* in the reference implementation for examples of this integration.

For information about referencing the available objects and functions, refer to the Customer Portal Framework Version 3.2 JavaScript API reference documentation.

Server-side libraries and frameworks

On the server side, the following APIs and frameworks are available:

- **Connect PHP API**—Provides methods for interaction with the Connect Common Object Model (CCOM), and therefore entities in the database.
- **ROQL**—Allows the use of SQL-like calls to interact with entities in the database.

Connect PHP API

The Connect PHP API provides a set of classes that you can use to interact with the CCOM.

Queries in a custom model can use three built-in static methods.

- **The fetch() method**—Returns a single object based on its ID.
- **The first() method**—Returns the first record that matches a query string.
- **The find() method**—Returns an array of all matches for that string.

Refer to the [Oracle RightNow Connect PHP API Cloud Service Developer Guide.]()

The following is an example of a function in a model that includes calls to the Connect PHP API.

```
<?php

namespace RightNow\Models;

use RightNow\Utils\Url,
...
    RightNow\Connect\v1_2 as Connect,
...
public function get($contactID = null){
    static $contactCache = array();
    if($contactID === null){
        if(Framework::isLoggedIn()){
            $contactID = $this->CI->session-
            >getProfileData('contactID');
            }
        else{
            return $this->getResponseObject(null, null, "No contact
            ID specified and no contact is logged in.");
            }
        }
        if(!Framework::isValidID($contactID)){
```

```
            return $this->getResponseObject(null, null, "Invalid
            Contact ID: $contactID");
        }
        if($cachedContact = $contactCache[$contactID]){
             return $cachedContact;
        }
        try{
            $contact = Connect\Contact::fetch($contactID);
        }
        catch(Connect\ConnectAPIErrorBase $e){
            return $this->getResponseObject(null, null, $e-
            >getMessage());
        }
        $contactCache[$contactID] = $this-
        >getResponseObject($contact);
        return $contactCache[$contactID];
    }
```

Connect Common Object Model

The CCOM defines a set of objects representing entities in the Oracle Service Cloud knowledge base that can be displayed on the Customer Portal. CCOM includes the following types of objects:

- **Primary object**—Primary objects have a unique key and can be created, read, updated, or deleted directly. They can contain either data fields that hold primitive date types or sub-objects. Primary objects represent entities in the knowledge base such as answers, contacts, and incidents.
- **Sub-object**—Sub-objects may also contain primitive data types or other sub-objects. Sub-objects do not have a separate existence and are manipulated through their parent primary object. An example of a sub-object is PersonName, which is contained in the Contact primary object.
- **Array object**—An array object is a collection of sub-objects.

Use dot notation to identify objects in CCOM. For example, to access the first name of a contact, use `Contact.Name.First`.

For more information about CCOM, refer to the Oracle RightNow Connect PHP API Cloud Service Developer Guide.

Oracle RightNow Object Query Language

ROQL provides an alternative to the Connect PHP API for accessing data in the knowledge base. A ROQL query is similar to a SQL query, but there are some exceptions, including:

- FROM is followed by the singular name of a RightNow object.
- You can retrieve either a whole object or individual fields.
- Not all SQL functions are supported.
- Traditional joins and nested queries are not supported.

There are two types of ROQL query. Tabular queries are similar to SQL queries and return rows of comma-separated values.

```
function lookupByLastName($search_string)     {
initConnectAPI();
$query ="SELECT Contact.Name.Last, Contact.Name.First FROM
    Contact WHERE Contact.Name.Last = "'".$search_string."'";
$roql_result=RNCPHP\ROQL::query($query)->next();
$row = $roql_result->next();
$name = $row[firstname]." ".$row[lastname];
echo $name;
}
```

Object queries return complete objects rather than individual field names.

```
function lookupByLastName($search_string)     {
initConnectAPI();
$query ="SELECT Contact FROM Contact WHERE
    Contact.Name.Last =  "'".$search_string."'";
$roql_result=RNCPHP\ROQL::queryObject($query)->next();
while($contact = $roql_result->next())   {
    $rows[] = array("last" => $contact->Name->Last);
    }
     echo $rows;
}
```

See the Oracle RightNow Connect PHP API Cloud Service Developer Guide for more information about ROQL.

Namespacing

Namespaces prevent naming conflicts in Customer Portal reference implementation code and your custom code. The following sections discuss the namespaces that are used in PHP and JavaScript code and the use of widget namespaces in the reference implementation and in custom code.

PHP namespacing

The two core namespaces are `Rightnow` and `Custom`, and they are designated using a backslash (\) notation.

Customer Portal reference implementation code uses the `RightNow\*` namespaces, but custom code that you develop must use `Custom\*` namespaces.

Declaring and referencing namespaces

The following example comes from the */cp/core/framework/Models/Contact.php* file:

```
<?php /* Originating Release: August 2014 */
namespace RightNow\Models;
use RightNow\Utils\Url,
    RightNow\Utils\Framework,
    RightNow\Utils\Config,
    RightNow\Api,
    RightNow\Connect\v1_2 as Connect,
    RightNow\Internal\Sql\Contact as Sql,
    RightNow\Utils\Connect as ConnectUtil,
    RightNow\ActionCapture,
require_once(CORE_FILES . 'compatibility/Internal/Sql/Contact.php');
class Contact extends PrimaryObjectBase {
. . .
}
```

This example includes a namespace declaration (`namespace RightNow\Models`), which shows that the *Contact.php* file belongs in the `RightNow\Models` namespace. So to refer to the class file you must use `RightNow\Models\Contact.` In this case, the reference reflects the folder where the example is located. The example also includes a number of namespace aliases.

The following is an example of using the `Custom` namespace in */cp/customer/development/models/custom/Sample.php*:

```
<?php
namespace Custom\Models;

class Sample extends \RightNow\Models\Base
. . .
}
```

This example contains the namespace declaration, `namespace Custom\Models`, and a reference to the Base class in the `\RightNow\Models` namespace.

The following is an example of how you can use namespace aliases in your custom code.

```
use RightNow\Connect\v1_2 as Connect;
```

This offers a shorthand way of referencing namespaces within a file. In this case, you can use the alias Connect:

```
Connect\NamedIDLabel();
```

instead of the following when referencing the namespace:

```
RightNow\Connect\v1_2\NamedIDLabel();
```

Keep in mind the following requirements for PHP namespaces in your customer portal code.

- When you refer to global objects, such as classes, interfaces, functions, or constants, from within a namespaced class, you must prepend the object with a backslash as shown in the following example.
  ```
  throw new \Exception('Invalid state')
  ```
- When you refer to a namespace in a string, you must escape each backslash as shown in the following example.
  ```
  $controller="\\RightNow\\Controllers\\$library";
  ```
- You must place the `namespace` declaration at the top of the file before any other code, with the exception of a `declare` statement.

Primary namespaces

The table shows the primary PHP namespaces and how they relate to the Customer Portal file system.

Table 386: Primary Customer Portal Namespaces in PHP

Namespace	Directory
RightNow\Controllers	/cp/core/framework/Controllers
RightNow\Hooks	/cp/core/framework/Hooks
RightNow\Libraries	/cp/core/framework/Libraries
RightNow\Libraries\Widget	/cp/core/framework/Libraries/Widget
RightNow\Models	/cp/core/framework/Models
RightNow\Utils	/cp/core/framework/Utils
RightNow\Widgets	/cp/core/widgets/standard

Table 386: Primary Customer Portal Namespaces in PHP (Continued)

Namespace	Directory
Custom\Models	/cp/customer/development/models
Custom\Widgets	/cp/customer/development/widgets/custom

Widget namespaces

Standard widgets are in the `RightNow\Widgets` namespace, as shown in this example from the DateInput widget's *controller.php* file in the */cp/core/widgets/standard/input/DateInput* folder:

```
<?php /* Originating Release: August 2014 */
namespace RightNow\Widgets;
use RightNow\Utils\Config,
    RightNow\Connect\v1_2 as Connect;
class DateInput extends \RightNow\Libraries\Widget\Input {
. . .
}
```

Custom widget namespaces must start with `Custom\Widgets`, and the remaining namespace segments must reflect the name of the parent directory of the directory that contains the widget files.

Library namespaces

Custom libraries are in the `Custom\Libraries` namespace as shown in this example from the library *Sample.php* in */cp/customer/development/libraries*:

```
<?php
namespace Custom\Libraries;
class Sample
{
. . .
}
```

Custom libraries are not required to extend from anything. Also they are not allowed to be in a subfolder, which means the namespace does not have to match the file system path required for custom widgets and models. All libraries appear under the `Custom\Libraries` namespace. Additionally, namespace requirements apply only when using the framework functions (for example, using `$this->load->library('Sample')`) to load and instantiate the library. If you include the library manually using include/require, the Customer Portal cannot enforce the naming conventions.

JavaScript namespacing

All JavaScript code must be namespaced. There must not be any JavaScript variables or functions that are not contained within a namespace.

JavaScript namespaces are designated with dot notation, for example, `RightNow.Widgets` and `Custom.Widgets.` Customer Portal reference implementation code uses the `RightNow.*` namespaces, but the custom code you develop must use `Custom.*` namespaces.

Note If a namespace segment contains only two characters, both need to be capitalized, for example, `Custom.UI`. If the namespace segment has three or more characters, Pascalcase must be used, for example, `Custom.Urnl`).

Widget namespaces

Standard widgets are in the `RightNow.Widgets` namespace, as shown in this example from the DateInput widget's *logic.js* file in */cp/core/widgets/standard/input/DateInput*:

```
/* Originating Release: August 2014 */
RightNow.Widgets.DateInput = RightNow.Field.extend({
    overrides: {
        constructor: function() {
            this.parent();
            . . .
            }
        . . .
});
```

In the example, the namespace for the DateInput widget is declared as `RightNow.Widgets.DateInput`, and it extends from `RightNow.Field.`

Custom widget namespaces must use `Custom.Widgets` as the first two namespace segments, and the remaining segment must reflect the widget's subfolder. For example, a custom widget in */cp/customer/development/widgets/custom/input* must declare its namespace as `Custom.Widgets.input.`

Function namespaces in the reference implementation

There are a number of JavaScript namespaces for common functions in the reference implementation, including:

- **RightNow.Ajax**—Functions that pertain to AJAX requests or AJAX request handling.

- **RightNow.Event**—Event logic for Customer Portal, including the functions used to create, fire, and subscribe to events, as well as process this information.
- **RightNow.Interface**—Message base and configuration base values that are transferred into JavaScript and message base and configuration base functions.
- **RightNow.JSON**—Functions to encode and decode JSON.
- **Rightnow.Profile**—Variables for the logged-in user's profile and functions that deal with the profile.
- **RightNow.Text**—Functions that apply to string manipulation. This also contains an Encoding subclass that is used for encoding and decoding.
- **RightNow.UI**—Functions that interact with the DOM. This class also contains a Dialog subclass that is used for any dialog functions and a Form subclass for form submission functions and variables.
- **RightNow.Url**—Functions that pertain to URL retrieval, addition, modification, deletion, and redirection.
- **RightNow.Widgets**—All widget JavaScript instances on the page and functions to interact with these instances.

Note These are internal namespaces and must not contain custom code. Refer to the Customer Portal Framework Version 3.2 JavaScript API reference documentation.

Access to customer profile data

You can access a customer's profile information using JavaScript so you don't need to gather that information in a widget *controller.php* file and pass it to JavaScript manually. The available profile data includes whether the customer is logged in, email, first name, last name, full name, contact ID, and previously seen email. The following widgets should use RightNow.Profile in the *logic.js file* for their profile data:

- chat/ChatLaunchButton/controller.php
- notifications/AnswerNotificationIcon/controller.php
- social/CommunityPostDisplay/controller.php

The following methods are available:

- RightNow.Profile.isLoggedIn()
- RightNow.Profile.previouslySeeEmail()
- RightNow.Profile.firstName()
- RightNow.Profile.lastName()

- RightNow.Profile.fullName()
- RightNow.Profile.contactID()
- RightNow.Profile.emailAddress()

Note This API does not automatically add the Japanese name suffix label when retrieving the fullName property. If you need this label, you can manually append the call to:

```
RightNow.Interface.getMessage("NAME_SUFFIX_LBL"):
```

Basic development

The elements of your customer portal that can be customized without PHP or JavaScript coding are not included in this developer overview section. Instead they are described in the primary customer portal documentation and include the following basic procedures.

- **Editing themes**—You can edit themes to change the look and feel of your pages. For example, you can edit a *site.css* file to change the background color or the color of controls and text. Refer to Defining themes.
- **Editing templates**—You can edit templates to change page layout, for example, to configure sidebars, headers, and footers, and change labels on navigation tabs. Refer to Configuring the template.
- **Editing pages**—You can control page functionality using page tags and page meta tags. Page tags control specific sections of the page, for example, to let you display or hide page content based on specific conditions. Page meta tags control page options, such as which template is used and whether customers need to be logged in to access the page. Refer to Page tags and Page meta tags.
- **Customizing widgets**—You can add attributes and edit attribute values used in the widget tags on pages to customize the behavior of the widget. The widget's look and feel is customizable by simply editing its presentation CSS file. Refer to Widget attributes.

Refer to the Customer Portal documentation beginning at Getting Started with the Customer Portal for details of procedures and supporting conceptual information.

Site CSS and styling rules

Each theme contains a single *site.css* file that provides all of the basic styling rules for the site. This file contains generic element rules and rules for page layout classes. No widget class or element CSS selectors are contained within this file.

However, any style setting in a theme at the site level can be overridden by code in the template, which affects all pages using that template. On an individual page, style attributes can be added to tags to override settings in the template or theme. In addition, widgets have individual styles settings of their own. Refer to Widget CSS.

Overview of creating customer portal custom code

You can customize the code for your customer portal by:

- Creating custom widgets
- Creating custom models
- Creating custom controllers
- Adding hooks
- Creating custom libraries
- Creating custom helpers
- Loading JavaScript content on every page
- Customizing the error pages

Of course, simple customization may be all that is required. You can perform various types of customization without having to write custom PHP or JavaScript code, as described in Basic development.

Before you start coding, you should plan your customization. Refer to Getting started with custom code for information about why you would perform the various types of code customization.

Samples for various type of customization are provided in Code samples.

When you develop code, be aware that Abuse detection in custom code may be required. There is also a list of Disabled and banned PHP functions.

Getting started with custom code

This section helps you get started with developing custom code. It provides an overview of the types of development you can do, explains why you might need to perform particular customizations, and provides references to further information. It also describes creating a custom model and controller as well as additional customizations you can implement.

Creating a custom widget

To plan for and create a custom widget, follow these steps.

1. Determine whether there is an existing standard or custom widget that provides similar functionality to what you want, and make a note of its name and location. Refer to Standard widgets for information about the available widgets.
   - If there is an existing widget with similar functionality, you can extend it. Work through the Deciding What You Need for a Custom Widget That Extends an Existing Widget table to determine the components and functionality you require for the widget and supporting code.
   - If there is no suitable existing widget, work through the Deciding What You Need for a Brand New Custom Widget table to determine the components and functionality you require for the brand new widget.
2. Use the widget builder to create your widget. This creates all the widget files, which include skeleton code you can use as a starting point for customization. Refer to Widget builder.
3. Add the custom code you require to the files produced by the widget builder. Refer to Creating custom widgets.
4. Customize the CSS file as required.
5. Create any additional code you require to support your custom widget. For example, you may have determined that you need a new custom model, or a custom controller, or that you need to add some hooks.

Note Remember that you can change the look and feel of a widget simply by modifying the CSS, and this may be all the customization you require.

Extending an existing widget

Use the following table to determine which components and functionality you require for a custom widget that extends from another (parent) widget.

Table 387: Deciding What You Need for a Custom Widget That Extends an Existing Widget

Planning decision	Why you might need this...	Refer to...
Does your custom widget need its own controller or can it use the parent's controller?	You might want to override functions from the parent widget, or you might need to add new functions.	Extending a widget's controller
If your widget has its own controller, does it need its own AJAX handling capability, or can it use that of the parent widget?	If you need to get data from the server and the parent widget does not get the data you require, you can add AJAX handling to your custom widget. However, if you have multiple widgets making the same AJAX request, you should use the AJAX handling capabilities of a custom controller.	Making AJAX requests to the server Creating custom controllers
Does your custom widget need its own view or can it use the parent's view?	You might want to customize the view by adding additional HTML within <rn:block> elements in the *view.php* or *view.ejs* file generated by the widget builder.	Extending a widget's view
If the new widget has its own view, will the parent widget's view be extended or overridden? Overriding means that the view *and* JavaScript of the parent are ignored and those of the new widget are used instead.	You might want to override if you need a view and logic file that are very different from those of the parent widget. If the parent widget's view is extended, the new custom widget is automatically updated when nano changes are made to the parent widget. This is the recommended option. If the parent widget's view is overridden, you must manually update the custom widget to take advantage of any future changes to the parent widget.	Overriding the view and JavaScript

Table 387: Deciding What You Need for a Custom Widget That Extends an Existing Widget

Planning decision	Why you might need this…	Refer to…
Do you want to include the parent's CSS in your custom widget's CSS file.	If the parent's CSS is included, your custom widget automatically inherits all of the default styling. However, you can still specify style changes that apply only to the new widget without affecting the parent widget.	Extending a widget's CSS
Does your custom widget need its own JavaScript (*logic.js* file) or can it just use the parent's JavaScript?	You might want to override properties and functions from the parent widget, or you might need to add new functions. You might want to subscribe to form field events, report events, or other events. Remember that if you override the parent's view, the parent's JavaScript is overridden as well.	Extending a widget's logic file Subscribing to form field events Subscribing to report events
Which YUI modules do you need for the widget?	A number of default YUI modules are loaded automatically, but you may want to specify additional modules.	Using YUI components
Do you need JavaScript templates (in a *view.ejs* file)?	You might use EJS templates if you need to dynamically render views. You can customize the view by adding additional code within <rn:block> elements in the new widget's *view.ejs* file.	Using JavaScript templates
Do you need to add additional attributes or remove attributes? What are the names, types, and default values of any additional attributes, and are they required?	Attributes are inherited from the parent widget, but you may want to add additional attributes or remove inherited attributes. You may also want to override attributes to set different default values. For example, some widgets have a *source_id* attribute and you can change its default value to specify a different search source. If your widget is to have its own AJAX handling capability, you need an AJAX endpoint attribute, and this is added by the widget builder.	Widget info files Defining attributes Using additional search sources with report widgets

Table 387: Deciding What You Need for a Custom Widget That Extends an Existing Widget

Planning decision	Why you might need this…	Refer to…
What is the description of the widget?	You add a description of the widget's purpose when you use widget builder and this is added to the *info.yml* file for the widget.	Widget info files Adding a description and URL parameters
Do you need to specify any additional URL parameters?	URL parameters are inherited from the parent widget, but you may want to add additional parameters. You must supply a name, description, and example for each parameter when using the widget builder.	Adding a description and URL parameters
Which JavaScript modules will your widget use?	Your widget may have a dependency for standard or mobile JavaScript libraries.	Specifying framework dependency
Will your custom widget contain other widgets?	Your widget may need to contain other widgets within its view, as long as there is PHP logic within the view. **Note:** You must add this information manually to the *info.yml* file.	Listing the included widgets
Where will you add your custom widget, that is, on which pages and where on the page?	You must determine which pages require the new widget, and where exactly the widget is added on the page. There may be constraints on where you can add the widget. For example, a widget that extends RightNow.Field must be placed inside an HTML <form> element on the page that includes the widget.	
Do you need to develop a new custom model?	You might need to create a custom model if you require data from the server that you cannot obtain from existing model function calls. This may be necessary, for example, if you are adding new custom objects. Consider whether adding a hook to an existing custom model would be sufficient for your needs.	Creating custom models Creating a custom model

Table 387: Deciding What You Need for a Custom Widget That Extends an Existing Widget

Planning decision	Why you might need this…	Refer to…
Do you need to add any hooks?	You can use hooks, for example, to modify data, perform custom validation, and return customized error messages to display to the user.	Adding hooks
Do you need to develop a new custom controller?	You might need to create a custom controller if you have multiple widgets making the same AJAX request. You might also need a custom controller if you are creating a new custom model.	Creating custom controllers Creating a custom controller

Creating a brand new widget

Use the following table to determine which components and functionality you require for a new custom widget that does not extend from another widget.

Note You need at least one of the controller, view, and logic components in a widget.

Table 388: Deciding What You Need for a Brand New Custom Widget

Planning decision	Why you might need this…	Refer to…
Does your custom widget need a controller?	You will need a controller: • If you need to get data from the database and pass it back to the view. • If you want the widget to do its own AJAX handling, as the controller contains the AJAX endpoint.	Widgets and MVC
If your new widget has a controller, does it need its own AJAX handling capability?	You might need AJAX handling if you want to customize date sent in the request or received in the response from the server.	Making AJAX requests to the server

Table 388: Deciding What You Need for a Brand New Custom Widget (Continued)

Planning decision	**Why you might need this…**	**Refer to…**
Does your custom widget need a view?	You will usually require a view, as the view provides the HTML for the widget and displays content including data from the server. In some cases, however, widgets can display all their content within a dialog that does not appear when the widget is loaded. In this case, the view is dynamically added purely through JavaScript.	Widgets and MVC
Does your custom widget need JavaScript (*logic.js* file)?	You will need JavaScript if: • You need to include display logic. • You need to subscribe to and fire events, for example, form field events and report events. • Your widget is doing its own AJAX handling, as AJAX requests are made from the JavaScript.	Widgets and MVC Subscribing to form field events Subscribing to report events Making AJAX requests to the server
Which YUI modules do you need for the widget?	A number of default YUI modules are loaded automatically, but you may want to specify additional modules.	Using YUI components
Do you need JavaScript templates (in a *view.ejs* file)?	You might use EJS templates if you need to dynamically render views.	Using JavaScript templates
Do you need a base CSS file for the widget.	You need a base CSS file if you require CSS rules to structure the widget or so that it functions correctly. A base CSS file and presentation CSS file are created automatically when you use the widget builder, but neither of these files are required.	Base CSS
Do you need a presentation CSS file for the widget?	You need a presentation CSS file if you want to add specific styling rules for the widget that are not covered within the site CSS file.	Site CSS and styling rules Presentation CSS

Table 388: Deciding What You Need for a Brand New Custom Widget (Continued)

Planning decision	**Why you might need this…**	**Refer to…**
Which attributes do you need to specify for your widget? What are the names, types, and default values, and are they required?	If your widget is to have its own AJAX handling capability, you need an AJAX endpoint attribute, and this is added by the widget builder.	Widget info files Defining attributes
What is the description of the widget?	You add a description of the widget's purpose when you use widget builder. This description is added to the *info.yml* file for the widget.	Widget info files Adding a description and URL parameters
Do you need to specify any URL parameters?	Your new widget may require URL parameters. If so, you must supply a name, description, and example for each parameter when using the widget builder.	Adding a description and URL parameters
Which JavaScript modules will your widget use?	Your widget may have a dependency for standard or mobile JavaScript libraries, or it may have no JavaScript requirements.	Specifying framework dependency
Will your custom widget contain other widgets?	Your widget may need to contain other widgets within its view, as long as there is PHP logic within the view. **Note:** You must add this information manually to the *info.yml* file.	Listing the included widgets
Where will you add your custom widget, that is, on which pages and where on the page?	You must determine which pages require the widget, and where exactly the widget is added on the page. There may be constraints on where you can add the widget. For example, a widget that extends RightNow.Field must be placed inside an HTML <form> element on the page that contains the widget.	

Table 388: Deciding What You Need for a Brand New Custom Widget (Continued)

Planning decision	Why you might need this…	Refer to…
Do you need to develop a new custom model?	You might need to create a custom model if you require data from the server that you cannot obtain from existing model function calls. This may be necessary, for example, if you are adding new custom objects. Consider whether adding a hook to an existing custom model would be sufficient for your needs.	Creating custom models Creating a custom model
Do you need to add any hooks?	You can use hooks, for example, to modify data, perform custom validation, and return customized error messages to display to the user.	Adding hooks
Do you need to develop a new custom controller?	You might need a custom controller if you have multiple widgets making the same AJAX request. You might also need a custom controller if you are creating a new custom model.	Creating custom controllers Creating a custom controller

Creating a custom model

You can customize a standard model's functionality by creating a custom model that extends from a standard model. Refer to Extending from a standard model.

Customizing a model can be useful for modifying the behavior of all the widgets that make calls to that particular model.

You may find that adding a hook is sufficient for your customization purposes. Hooks provide custom code associated with particular events that allow you to extend Customer Portal functionality by calling a function in a custom model. You can use hooks, for example, to modify data, perform custom validation, and return customized error messages to display to the user. Refer to Adding hooks.

You might create a brand new custom model if you need to access custom data, for example, a custom object or data that is not kept in the knowledge base. In this case, the custom model extends directly from the Base model. Refer to Extending from the Base model.

Creating a custom controller

You can create custom controllers that extend from the \RightNow\Controllers\Base class. You cannot extend from any other controller class.

Custom controllers are mostly required to create a new AJAX endpoint, either to pre-process data before it goes to a standard model, or to allow the sending of the data to a custom model.

Performing other customizations

In addition to creating custom widgets, custom models, and custom controllers, there are some other types of customization available for the Customer Portal:

- **Custom libraries**—If you use the same custom code in multiple places, you may want to avoid duplication of the code in a number of models or controllers and therefore use custom libraries to organize the code. Refer to Creating custom libraries.
- **Custom helpers**—Although it is unlikely that you will use custom helpers, you can add them to the folder */cp/customer/development/helpers*. Refer to Creating custom helpers.
- **The autoload.js file**—You can put common functions and event declarations in this file so they get loaded on every page. Refer to Loading JavaScript content on every page.
- **Error pages**—You can customize error pages that are displayed when your site is undergoing an upgrade. Refer to Customizing the error pages.

Abuse detection in custom code

The code in your custom models or custom controllers may be susceptible to abuse, such as SQL injections and other attacks under certain circumstances. Standard models and standard controllers call the native abuse detection methods, so if you use standard controllers with standard models, you do not need to customize your code with abuse detection calls. However, if your custom code performs any direct API calls for database updates or back-end actions, for example, to create or update incidents or contacts, log in a user, or perform answer retrieval, it must contain abuse detection code. Customer portal code generally calls check() in most places, including from controllers. However, custom models should call the \RightNow\Libraries\AbuseDetection::isAbuse() function instead of check() to prevent the model from exiting with JavaScript code for invoking a CAPTCHA. The isAbuse() function returns a ResponseObject error that can be handled appropriately.

In models, use isAbuse() to prevent the model call from exiting with JavaScript code. From other sources, including controllers, use check() to ensure that the CAPTCHA is invoked. If your custom models are being called only from custom controllers, the check() needs to be called once in the request, so it can reside only in the controller.

```
if (AbuseDetection::isAbuse($formToken)) {
    return false;
}

OR

if (!AbuseDetection::isAbuse($formToken)) {
    // Code to create an incident
}
```

If abuse is detected, a CAPTCHA screen is displayed for the user to fill out. Failing to call the check() function can result in Connect PHP calls throwing an exception.

Security configuration is an important part of your Oracle Service Cloud application and we realize that your organization may have unique security needs. For an in-depth discussion about security practices in Oracle Service Cloud and how to protect your data, see Security Practices.

Simulating abuse situations

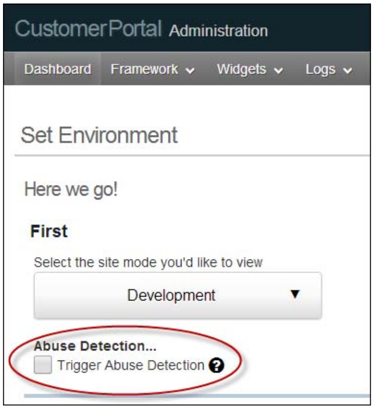
The Customer Portal uses web form security on the FormSubmit widget to automatically require human validation through the use of a CAPTCHA when abuse is suspected, for example, when a standard action is performed repeatedly in a short amount of time, such as when a spammer automatically submits repeated incidents. See Web form security. If your custom code performs database calls, you must call the \RightNow\Libraries\AbuseDetection::isAbuse( ) function to detect abuse.

An abuse scenario is hard to create deliberately for testing purposes, so the Customer Portal includes a cookie that makes your site behave as if it is under abuse when the cookie is set. It works only in development mode for testing purposes, so it does not affect customers on your production site.

To set the abuse detection cookie from the Customer Portal Administration site

1. Go to your Customer Portal Administration site at https://<your_site>/ci/admin.
2. Click the Set Environment shortcut.

3 Select the Trigger Abuse Detection check box.

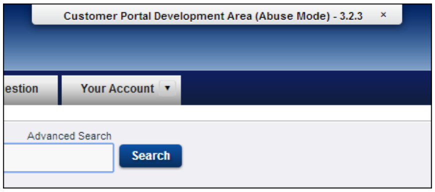


To set the abuse detection cookie from the development header

1 On your development site, click the header to display the main headings.

2 Click Links and Resources to expand the list of options.

3 Click Toggle Abuse Detection. The header indicates that your development site is now in abuse mode.



4 To turn off abuse detection, click the development header, expand Links and Resources, and click Toggle Abuse Detection again.

Other security features

In addition to the abuse detection cookie, the following security enhancements are included in Customer Portal Framework Version 3.2.

- **PTA encryption**—The encryption scheme for pass-through authentication supports the use of a salt and IV (initialization vector), which allow more secure encryption of PTA strings. Two configuration settings let you specify the salt or IV values to use during decryption: PTA_ENCRYPTION_SALT and PTA_ENCRYPTION_IV.
- **File attachment whitelisting**—The Customer Portal hooks *pre_attachment_upload* and *pre_attachment_download* let you indicate the mime types you want to support and allowing you to prevent automatic execution of certain types of downloaded files.
- **HTTP Strict Transport Security (HSTS) support**—If your customer portal uses SSL only (that is, if SEC_END_USER_HTTPS is enabled), your customers will always access the site using HTTPS even if they type `http` in the browser address bar. This security feature is supported in Google Chrome, Mozilla Firefox 4, and the NoScript Firefox extension.

Disabled and banned PHP functions

You cannot use the following functions because they are disabled for custom code in the Customer Portal framework. If you include calls to these functions in custom code, fatal errors are generated:

- chgrp()
- chmod()
- chown()

- dl()
- exec()
- ini_set()
- lchgrp()
- lchown()
- link()
- passthru()
- proc_open()
- shell_exec()
- symlink()
- system()
- yaml_emit()
- yaml_emit_file()
- yaml_parse()
- yaml_parse_file()
- yaml_parse_url()

The following functions are not disabled, but you must not use them in custom code:

- **htmlenties()**—Do not use this function because it is not UTF-8 safe. Use the htmlspecialchars() function instead.
- **delete()**—Do not use this function because it is deprecated. Use the unlink() or unset() functions instead.
- **Any of the** alias functions described within the PHP documentation. Always use the master function because use of alias functions is discouraged.

Creating custom widgets

You can create custom widgets either by extending an existing standard or custom widget, or by writing a new widget.

You can use the widget builder to create the files you require for a new or extending widget, and then add code as required to complete your custom widgets. Refer to Widget builder.

A custom widget can contain the files described in the following table:

Table 389: Widget Files

File	Purpose
info.yml	Provides information about a widget, its attributes, and its dependencies. Refer to Widget info files.
controller.php	Contains code to coordinate the widget, including calls to models to access the database and code to pass data to the view. A custom widget can have its own controller or simply use the controller of its parent widget. A custom widget controller can include its own AJAX request handling capability or inherit the capability from its parent widget. Refer to Extending a widget's controller.
view.php	Contains the HTML required to display the widget. A custom widget can have its own view, or simply use the view of its parent widget. Refer to Extending a widget's view.
view.ejs	Contains JavaScript templates used by the widget to render dynamic views. Refer to Using JavaScript templates.
logic.js	Contains display logic, event-handling, and other logic. A custom widget can have its own logic file, or simply use the logic file of its parent widget. A custom widget logic file can override properties and functions of its parent widget. Refer to Extending a widget's logic file.
base.css	Contains base CSS to structure the widget. Refer to Extending a widget's CSS.
WidgetName.css	Contains presentation CSS, which controls the appearance of the widget. Refer to Extending a widget's CSS.
preview/ preview.png	Displays an example of what the widget will look like when you add it to a page.

While a new custom widget is not required to have its own controller, view, and logic components, your custom widgets will need at least one of these components.

Widget info files

Every widget must have an *info.yml* file, written in the YAML format, in its directory. This file specifies all of the widget's important details, for example, its version, its attributes, and other widgets that it extends.

When you use the widget builder to create a new widget, an *info.yml* file for the new widget is automatically created. You may need to edit this file as you make further customizations to the widget.

The *info.yml* file has the following functionality. Required entries are identified.

Defining the version

The `version:` entry in the *info.yml* file is required and contains a string consisting of the major and minor version number of the widget. For example:

```
version: "1.0"
```

Refer to Widget version management.

Specifying framework dependency

The `requires:` section in the *info.yml* file lists the Customer Portal framework and technology dependencies for the widget:

- **framework**—The Customer Portal framework versions applicable for the widget, given as major and minor version numbers. Standard widgets have a nano version, but that level is not required for custom widgets. For information about versioning, refer to Framework versioning and Widget version management.

Note The framework information is applicable only for standard widgets. The *info.yml* file for custom widgets do not specify a framework dependency unless you add it manually.

- **jsModule**—The JavaScript modules that the widget uses. You are required to select an option for this section. Valid options include:
  - ▷ **standard**—The widget uses the default set of YUI and Oracle Service Cloud libraries.
  - ▷ **mobile**—The widget uses the default set of YUI and Oracle Service Cloud libraries that are optimized for usage on a mobile device.
  - ▷ **none**—The widget relies on none of the default YUI and Oracle Service Cloud libraries.
- **yui**—The YUI modules that the widget uses. By default, a number of modules are included on every page and do not need to be specified.
  - ▷ anim-base
  - ▷ anim-easing
  - ▷ escape

- ▷ event-base
- ▷ history
- ▷ node-core
- ▷ node-event-delegate
- ▷ node-screen
- ▷ node-style

The following example shows a `requires:` section.

```
requires:
    framework: "3.0"
    jsModule: [standard, mobile]
    yui: [panel, autocomplete, autocomplete-highlighters]
```

You can also list the YUI requirements for a particular jsModule entry.

```
    yui:
        standard: [overlay]
```

Refer to Using YUI components.

Defining attributes

The `attributes:` section in the *info.yml* file lists attributes for the widget. Attributes inherited from a parent widget are included in the *info.yml* file only if they have been modified.

- **name**—The name of the attribute, which is required.
- **description**—A description of the attribute.
- **type**—The data type of the attribute. The following options are available:
  - ▷ string—Alphanumeric string.
  - ▷ boolean—True or false option.
  - ▷ int—Integer value.
  - ▷ option—List of menu options.
  - ▷ ajax—Path to a controller endpoint (for example, */cc/myCustomController/action*)
  - ▷ filepath—Path to an asset.
- **default**—The default value for the attribute, if you don't specify a value for the widget in page code. The default values for each data type are:
  - ▷ string—An empty string " ".
  - ▷ boolean—False.
  - ▷ int—Null.

  - ▷ option—After you enter the menu options, you can select one of the options as the default value, or you can leave it null.
  - ▷ ajax—Null.
  - ▷ filepath—Null.
- **required**—If selected, the attribute must have a non-null value when the widget is used on a page.
- **options**—A list of option names. Applies only to attributes with the option data type.
- **min**—The minimum value. Applies only for attributes with the integer data type.
- **max**—The maximum value. Applies only for attributes with the integer data type.

The following example shows an `attributes:` section.

```
attributes:
    label_heading:
        name: Heading label
        description: Label for the heading
        type: string
        default: Welcome back!
    display_option:
        name: Display option
        description: How to display the widget
        options: [subtle, bold, obnoxious]
        default: subtle
```

Attributes can be accessed anywhere in the *controller.php* and *view.php* files as:

```
$this->data['attrs']['attr_name']
```

or in the *logic.js* file as:

```
this.data.attrs.attr_name
```

In each case, *attr_name* is the name of the attribute as specified in the *info.yml* file.

Identifying the parent widget

The `extends:` section in the *info.yml* file specifies the parent widget of the custom widget.

- **widget**—The directory path of a widget to extend. Must begin with `standard/` or `custom/`.
- **components**—The list of widget components to extend. Options include the following:
  - ▷ **php**—The widget controller.
  - ▷ **view**—The widget view file.

  - ▷ **js**—The widget logic file.
  - ▷ **css**—The widget CSS file.
- **overrideViewAndLogic**—The value `true` or `false`. Specify `true` to completely override the specified widget's own view and JavaScript. The js and view components must not be specified in this case.

The following example shows an `extends:` section.

```
extends:
    widget: "standard/utils/SocialBookmarkLink"
    components: [php, css]
    overrideViewAndLogic: true
```

For more information, refer to:

- [Extending a widget's view]
- [Extending a widget's controller]
- [Extending a widget's logic file]
- [Extending a widget's CSS]

Adding a description and URL parameters

The `info:` section in the *info.yml* file contains an associative array containing information about the widget:

- **description**—An explanation of the widget's purpose.
- **urlParameters**—An associative array consisting of URL parameter keys that the widget reads from; each key is the name of the URL parameter.
  - ▷ **name**—The human-readable name of the parameter.
  - ▷ **description**—A description of the parameter's purpose.
  - ▷ **example**—An example of the parameter's key and value.

The following example shows an `info:` section.

```
info:
    description: This widget provides a Contact Us form for users to
    submit complaints and feature requests.
    urlParameters:
        a_id:
            name: Answer ID
            description: ID of the answer to display
            example: a_id/123
```

Listing the included widgets

The `contains:` section in the *info.yml* file is an optional section used when the widget contains one or more other widgets within its view.

- **widget**—The relative path to the contained widget.
- **versions**—The versions of the contained widget that are compatible with the containing widget. If more than one version is specified, the value must be a comma-separated list. Specifying versions is optional.

The following example shows a `contains:` section.

```
contains:
    - widget: standard/input/SelectionInput
        versions: ["1.0"]
    - widget: standard/input/DateInput
        versions: ["1.0"]
    - widget: standard/input/TextInput
        versions: ["1.0", "1.1"]
```

You must add this section manually because the widget builder does not generate it. The view must contain PHP logic in order for a widget to contain other widgets.

Widget CSS

There are two types of cascading style sheet (CSS) files for widgets:

- A base CSS file, which controls the widget's functionality
- A presentation CSS file, which controls the appearance of a widget

These files allow you to control the appearance of one widget without impacting the appearance of any other widgets.

All widget styling must exist in one of the CSS files because widget code cannot contain any inline CSS rules.

Best practices for widget CSS files include using as few classes as possible, using the top-level widget CSS class attribute to style elements within the widget, and creating styling rules only if a site CSS rule must be overridden.

Base CSS

If a widget requires CSS rules to function correctly, it must have a *base.css* file located in the widget folder along with the *view.php*, *controller. php* and *logic.js files*.

All of the CSS rules in the *base.css* file should start with the class name in the top-level `<div>` element in the view.

The *base.css* file should contain rules that structure the widget or make it function correctly, with very few or no styling rules in the file. The file should not include generic functionality rules. This makes it easier and more manageable for multiple developers to edit the presentation CSS and keep *base.css* changes to a minimum.

If no CSS is necessary to ensure that a widget works, the *base.css* file can be omitted.

Presentation CSS

If a widget requires specific styling rules that are not included in the site CSS file, it uses a presentation CSS file to define these rules. The file must be located in the */cp/customer/assets/themes/standard/widgetCss* folder, and must have the same name as the widget (for example, *SampleReport.css*).

Similar to the widget's base CSS, all rules in the presentation CSS file should start with the class name in the top-level `<div>` element in the view.

```
<div id="rn_<?=$this->instanceID;?>" class="rn_DisplayChartReport">
    <div class="rn_ChartHeaderText">
```

So, in the presentation CSS file:

```
.rn_DisplayChartReport .rn_ChartHeaderText {
    font-weight: bold;
}
```

The file should contain no generic styling rules, so that widget CSS rules are not likely to impact styling of elements outside of the widget.

Extending existing widgets

A widget can extend an existing standard or custom widget. A widget can have only one parent widget.

Instead of copying standard or custom widget code, which is a tedious and error-prone process, use the widget builder to create a custom widget that extends from another widget. You specify the components (controller, view, JavaScript, and CSS) to extend, and you can also specify the following:

- For the controller, you can specify whether it does any AJAX handling.
- For the view, you can specify whether the parent widget's view is to be extended or overridden, and whether the parent widget's CSS is to be included.
- For the JavaScript, you can specify the YUI modules you want to have loaded on any page that contains the widget and then passed to the widget's constructor.

- For the JavaScript, you can specify whether you require a template, which allows you to dynamically render content within the parent's JavaScript view file.
- You can specify any new attributes for the widget and change the values of any attributes inherited from the parent widget.
- You can specify additional information including a description, the URL parameters for the widget, and the JavaScript compatibility information.

The widget builder generates custom code with defaults and placeholders that you can then tailor to your requirements.

Note Remember that you may be able to modify standard widgets by simply editing their attributes in page code.

The following procedure summarizes how to extend a widget using the widget builder. Refer to Widget builder for more details.

To extend an existing widget

1. In the widget builder, select **Extend the functionality of an existing widget**.
2. Specify the name of the new widget and the widget it is extending from.
3. Specify the widget components to be used.
4. If the widget has its own controller, specify whether it will do any AJAX handling.
5. If the widget has its own view, specify whether the parent widget's view is to be extended or overridden and whether the parent widget's CSS is to be included.
6. If the widget has its own JavaScript, specify the YUI modules to be used with the widget.
7. If the widget has its own JavaScript, specify whether templates are required.
8. Add any new attributes that are required in addition to the attributes inherited from the parent widget.
9. Add additional details as required, including a description of the widget, any URL parameters, and JavaScript framework compatibility. If the parent widget of your new widget contains URL parameters, they are listed as inherited parameters for the new widget.

Files are generated for the new custom widget. You can then add code to the files as required.

The following sections discuss how you can extend each of the components in a custom widget.

- Extending a widget's view
- Extending a widget's controller
- Extending a widget's logic file
- Extending a widget's CSS

Customizing the YAML file

When you extend a widget using the widget builder, an *info.yml* file is created. You then need to customize the file according to your requirements. For example, you might want to edit the `attributes:` section to remove or modify attribute values, or you might need to add a `contains:` section. Refer to Widget info files.

Extending a widget's view

A widget's view file may contain `<rn:block>` elements as shown in this example.

```
<rn:block id="postFeedbackInput"/>
```

Every `<rn:block>` element within a widget has a unique ID that describes its context. These blocks are customization hook points for extending the widget.

When a widget extends another widget, the parent widget's *view.php* file is used for rendering. If the new widget has a *view.php* file of its own, then the blocks that are defined in the new view are added to the parent widget's view.

For example if the parent *view.php* file contains:

```
<rn:block id="main"/>
<div><?= $this->data['js']['moreresults'] ?></div>
```

and the extending view contains:

```
<rn:block id="ParentWidgetName-main">
    <span><?= $this->data['js']['results'] ?></span>
</rn:block>
```

the resulting view is:

```
<span><?= $this->data['js']['results'] ?></span>
<div><?= $this->data['js']['moreresults'] ?></div>
```

If the extending widget does not have a *view.php* file, then the parent widget's *view.php* file is used.

In a similar way, blocks of content within the parent JavaScript view file (*view.ejs*) can be modified.

Refer to the following sections for code samples of extending a widget's view.

- Editing the view.php and view.ejs files

- The ExtendedAnswerFeedback sample widget

Overriding the view and JavaScript

In most cases, extending the parent widget's view and customizing the new widget's view with the `<rn:block>` element is sufficient, and this is the recommended best practice. However, if a custom widget extends a widget's controller, but has a completely different view and corresponding logic file, you can specify the `overrideViewAndLogic` value in the custom widget's *info.yml* file. This is also an option in the widget builder. The parent widget's *view.php* and *logic.js* files are then ignored, and instead these files from the custom widget are used. Specifying an override of just the view or just the logic file is not supported, because the DOM and JavaScript are tightly coupled.

In the following example from the `extends` section of an *info.yml* file, the php component of the DataDisplay widget is being used, but view and logic files will be referenced solely from the extending widget.

```
extends:
    widget: standard/output/DataDisplay
    components: php
    overrideViewAndLogic: true
```

Note that when `overrideViewAndLogic` is specified, the component values `view` and `js` must not be present in the `components:` key in *info.yml*, otherwise an error is thrown when attempting to use the widget. For information about the `components:` key, see Identifying the parent widget.

Extending a widget's controller

A custom widget that extends another widget can have its own *controller.php* file that extends the other widget's controller, or it may simply use the parent widget's controller, which will be loaded and ready to use. If the new widget does not have its own controller, its view and logic files will use the default properties and data defined in the parent's controller.

The new widget can override methods (other than private methods) from the parent widget. When you use the widget builder to create a widget that extends from another widget, the *controller.php* file that is generated lists the methods that can be overridden.

An example of a new *controller.php* file is as follows.

```
<?php
namespace Custom\Widgets\sample;

class MySocialBookmarkLink extends
\RightNow\Widgets\SocialBookmarkLink {
    function __construct($attrs) {
```

```
            parent::__construct($attrs);
        }
        function getData() {
            // Add preprocessing code here...
            parent::getData();
            // Add postprocessing code here...
        }
    }
```

As shown in the example, custom widgets must use the Custom\Widgets*widgetParentFolder* namespace, for example, Custom\Widgets\sample or Custom\Widgets\feedback.

The widget's class name must be the same as the widget's folder name.

Widgets extending standard widgets must have a constructor and must call the parent's constructor. The custom extender can add, modify, or remove data before or after the parent widget controller's getData() method is called. However, widget controllers are not required to call the parent's getData() methods.

The widget automatically inherits any AJAX-handling functionality of its parent. However, the extending widget can also have its own AJAX handler. Refer to Handling AJAX requests in the widget controller.

Refer to the following for examples of extending a widget's controller.

- The AdditionalResults sample widget
- The ExtendedAnswerFeedback sample widget

Extending a widget's logic file

A custom widget that extends another widget can have its own *logic.js* file that extends from the parent widget's logic file, or it can use the parent widget's logic file, which will be loaded and ready to use.

If the new custom widget has its own *logic.js* file, the code must indicate that it is extending from another widget, for example:

```
RightNow.namespace('Custom.Widgets.MySocialBookmarkLink');
Custom.Widgets.MySocialBookmarkLink =
    RightNow.Widgets.SocialBookmarkLink.extend({
```

Refer to the following for examples of extending a widget's logic file.

- The AdditionalResults sample widget
- The ExtendedAnswerFeedback sample widget

The constructor function in logic.js files

This section discusses using the constructor function to extend *logic.js* files. As an example, consider the SocialBookmarkLink widget, which extends from RightNow.Widgets.

```
})
RightNow.Widgets.SocialBookmarkLink = RightNow.Widgets.extend({
    constructor: function() {
        // Do things on page load here (constructor)
    },
    sbl: function() {
    }
});
```

The first function defined in the object passed to RightNow.Widgets.extend() is named constructor. This function is run immediately when the widget is instantiated (during onDomReady event). Three parameters are passed to the constructor method.

- The `data` parameter:
  - ▷ `attrs`—Widget attributes.
  - ▷ `js`—Members set in the widget's controller.
  - ▷ `info`—Name and path, for example.
- The `instanceID` parameter.
- The `Y` parameter, which is an instance of YUI. Refer to Using YUI components.

Before the constructor is called, several helpful actions are performed. The RightNow.Widget that all widgets extend from has already called a base function that's called before the extending widget's constructor is called.

This base function performs the following actions:

```
function helper(data, instanceID, Y) {
    this.data = data;
    this.instanceID = instanceID;
    this.Y = Y;
    this.baseDomID = "rn_" + this.instanceID;
    this.baseSelector = "#" + this.baseDomID;
    this.getStatic = function(){ return
    _getObject(this.data.info.class_name);};
}?
```

This means that every widget that extends from RightNow.Widget does not need to set instance variables to what was passed in, because that action has already been performed. All standard RightNow widgets use `rn_ + widgetInstanceID` as a convention for IDs in

HTML elements, therefore setting the baseDomID and baseSelector provides helpful instance variables so that you do not need to duplicate `rn_ + this.instanceID + _SomethingElse` multiple times in widget JavaScript code.

You can define all other widget methods or instance variables within the object passed to RightNow.Widgets.extend() using the standard key: value paradigm. When code is executing inside a widget method, it can reference other methods and instance variables as it normally does (for example, `this.someOtherMethod`, `this.instanceID`.)

Static properties

As shown in the previous section, RightNow.Widgets.extend() accepts two parameters, the constructor function and an optional second parameter, which also must be an object. However, with this second parameter, all key-value properties declared are added as static properties of the widget. For example:

```
RightNow.Widgets.SocialBookmarkLink = RightNow.Widgets.extend({
    constructor: function(data, instanceID, Y) {

    },
    sbl: function() {
    }
}, /** End of the first parameter **/
{
    aStaticProperty: "sbl",
    aStaticFunction: function() { … }
});
RightNow.Widgets.SocialBookmarkLink.aStaticProperty; // "sbl"
RightNow.Widgets.SocialBookmarkLink.aStaticFunction();
```

All static properties are then available on the widget's static class, `RightNow.Widgets.WidgetName.`

If a widget extends another widget then any static properties defined for the parent can be overridden by the child.

Overriding parent properties in logic.js files

An extending widget automatically gains access to all of its parent's properties and methods, and the extending widget can change the behavior of any of these methods.

In the object passed to *parent*.extend() there is a special key, `overrides,` which allows the overriding of properties and methods defined in the parent.

```
parent.extend({
    overrides: {
```

```
            constructor: function(){...},
            aMethod: function(){...},
            aProperty: 23
        },
        anotherMethod: function(){...}
    })
```

Any property defined in the object denoted by the `overrides` key overrides the property of the same name in the parent.

Every function defined inside `overrides` that has a parent function of the same name automatically gets a this.parent() member that allows the function to call the parent function that it is overriding.

Every property that is defined inside `overrides` is essentially "flattened out", meaning that other widget methods still reference them normally using this.*propertyName*. So from the example above, aMethod is able to call anotherMethod as expected using `this.anotherMethod()`, and anotherMethod is able to call aMethod as expected using `this.aMethod()`.

As an example, in the parent:

```
    RightNow.Widgets.SocialBookmarkLink = RightNow.Widgets.extend({
        constructor: function() { ... },
        _onClick: function() { ... },
    });
```

And in the extending widget:

```
    Custom.Widgets.Bookmark =
    RightNow.Widgets.SocialBookmarkLink.extend({
        overrides: {
            constructor: function() {
                this.parent(); // Calls constructor above
            // Do something else...
                this.showDialog();
            },
            _onClick: function() {
                this.parent(); // Calls _onClick above
                // Do something else...
                this.hideDialog();
            }
        },
        showDialog: function() {
            // Do something...
```

```
            this._onClick();
        },
        hideDialog: function() {
            // Do something...
        }
    });
```

If a property is defined within `overrides` that does not have the same name as any parent property, then the property simply exists as any other widget property.

```
    parent.extend({
        overrides: {
            constructor: function() {...}
            // overrides parent's constructor
            doesntExistOnParent: true
        },
        heyNow: function() {
            this.doesntExistOnParent; // true
        }
    });
```

If a property with the same name as a parent property is specified outside of the overrides structure, the property is still accessible to the rest of the widget itself, as normal, but the property does *not* override the parent property of the same name.

```
    parent = RightNow.Widget.Extend({
        constructor: function() {
            ...
            something.on('click', this.onClick, this);
        },
        onClick: function() {
            alert('parent');
        }
    });
    child = parent.extend({
        overrides: {
            constructor() {
            ...
            this.parent();
            this.onClick(); // 'child' alerts
            }
        },
        onClick: function() {
```

```
            typeof this.parent === 'undefined'; // true
            alert('child');
        }
    });
```

In the example, the extending widget accesses its own onClick() method normally, but when the domElement subscribed to in the parent is clicked, the parent's onClick method is still called, because it was not overridden by the extending widget.

Again, to override and call into a parent method, the overriding method must be contained within the `overrides` structure.

```
    child = parent.extend({
        overrides: {
            constructor() {
            ...
            this.parent();
            this.onClick(); // 'child' alert is followed by a 'parent'
            alert

            }
        },
        onClick: function() {
            typeof this.parent === 'function'; // true
            alert('child');
            this.parent();

        }
    });
```

Using YUI components

As mentioned in The constructor function in logic.js files, an instance of YUI is passed as the third parameter to the constructor function in *logic.js* files, and widgets can use this YUI instance to interact with YUI.

```
    this.Y.one(this.baseSelector);
    (this.Y.UA.ie > 9);
```

YUI 3 is intended to be used in discrete, compartmentalized, modularized components within applications. This is exactly how widgets can be described, so YUI is ideal to use with them.

Including the YUI 3 script tag on a page creates a minimal YUI() function that returns an object with a few functions and properties. YUI 3 expects callers to list out any sub-module dependencies that you intend to use with your code. The code that uses the sub-modules is a callback function that YUI executes when it has created a new YUI instance with all of those modules as part of that instance. It provides that instance as the first parameter to the callback function.

By default, each YUI instance has several components available as first-level modules, including:

- DOM
- Node
- Anim
- Event
- History
- IO

Widgets declare any YUI module dependencies by listing the modules in the Specifying framework dependency of their *info.yml* file.

```
...
requires:
    ...
    yui: [slider, autocomplete, autocomplete-highlighters]
...
```

Any standard YUI 3 modules are accessible to widgets that declare such module dependencies.

```
RightNow.Widgets.sbl = RightNow.Widgets.extend({
    constructor: function(data, instanceID, Y) {
        Y.Slider(); Y.Plugin.Autocomplete;
    }

});
```

In some cases, a widget might be used in both mobile and desktop environments, but for each of those environments there might be different requirements. Also, as additional JavaScript on a page incurs a greater performance impact on a mobile device, you may decide not to include certain components for mobile (as long as the widget code appropriately handles the omission of certain YUI components). In this case, in the *info.yml* file you can specify YUI requirements for each jsModule entry.

```
...
requires:
    yui:
        standard: [panel, autocomplete]
```

```
            mobile: [overlay]
    ...
```

In this example, if the widget is used on a page where `standard` is the jsModule value (the default), the widget instance receives a YUI instance including the Panel and Autocomplete YUI components. If the same widget is used on a page where `mobile` is the jsModule value, then it receives a YUI instance including just the Overlay component. This allows you to use the same widget for both environments without having to build an almost identical mobile widget. However, requiring very different YUI components for standard and mobile environments is not recommended because it can lead to convoluted code and bugs.

A more common scenario is to simply omit certain requirements for a mobile environment from the *info.yml* file.

```
    ...
    requires:
        yui:
            standard: [overlay]
    ...
```

In this case, rather than the widget checking for a particular browser user-agent, it can then simply not provide a feature or provide the feature in a different way. For example in the widget's *logic.js*:

```
    if (this.Y.Overlay) {
        // Do something with an overlay
    }
    else {
        // Do something without an overlay
    }
```

Extending a widget's CSS

If there is a *base.css* file within a widget's directory, then it is used. If there is a presentation CSS file with the same name as the widget directory under */cp/customer/assets/themes/standard/widgetCss,* then it is used.

If a widget extends another widget and you want the CSS for the parent widget to also be included, you can specify it as another component in the *info.yml* file.

```
    extends:
        widget: "standard/utils/SocialBookmarkLink"
        versions: "3.1"
        components: ["php", "css"]
```

The resulting CSS included on the page is ordered with the parent CSS first, followed by the extending child CSS.

```
<style>
    /* Parent base.css */
    /* Parent presentation CSS (SocialBookmarkLink.css) */
    /* MyWidget base.css */
    /* MyWidget presentation CSS (MyWidget.css) */
</style>
```

When a widget extends another widget, the names of both widgets are used for the top-most containing element's class name. In this example, MyWidget extends from the SocialBookMarkLink widget.

```
<div class="rn_SocialBookmarkLink rn_MyWidget" id="...">
    Widget contents
</div>
```

If the parent's CSS is included, the widget automatically inherits all of the default styling. However, you can specify style changes that apply only to the new extending widget without affecting the standard widget.

```
.rn_SocialBookmarkLink {
    /* Styles written here will affect the standard SocialBookmarkLink
    widget as well as any widgets that extend from it*/
}

.rn_SocialBookmarkLink.rn_MyWidget {
    /* Styles written here only affect the extending widget */
}
```

For more information, see Base CSS and Presentation CSS.

Refer to the following for code samples of extending a widget's CSS.

- The AdditionalResults sample widget
- The ExtendedAnswerFeedback sample widget

Creating a new widget from scratch

Instead of copying standard or custom widget code, which is a tedious and error-prone process, use the widget builder to create new widgets. You specify the components (controller, view, JavaScript) that the new widget has. A new widget must have at least one of the components.

- For the controller, you can specify whether it does any AJAX handling.

- For the JavaScript, you can specify the YUI modules you want to have loaded on the page that contains the widget and then passed to the widget's constructor.
- For the JavaScript, you can specify whether you require a template, in other words, a *view.ejs* file.
- You can specify the attributes required for the new widget.
- You can also specify additional information including a description, the URL parameters for the widget, and the JavaScript compatibility information.

The widget builder generates custom code with defaults and placeholders that you can then tailor to your requirements. The widget's *view.php* file contains the following top level div tag to simplify your coding work:

```
<div id="rn_<?= $this->instanceID ?>" class="<?= $this->classList ?>">

</div>
```

The following procedure summarizes how to create a new widget using the widget builder. Refer to Widget builder for more details.

To create a new widget

1 In the widget builder, select **Create a brand new widget from scratch**.

2 Specify the widget components that will be used.

3 If the widget has a controller, specify whether it will do any AJAX handling.

4 If the widget has its own JavaScript, specify the YUI modules to be used with the widget.

5 If the widget has JavaScript, specify whether templates are required.

6 Add attributes as required.

7 Add additional details as required, including a description of the widget, any URL parameters, and JavaScript framework compatibility information.

Files are generated for the new custom widget. You can then add code to the files as required.

Refer to The DisplayChartReport sample widget for an example of a new widget created from scratch.

Making AJAX requests to the server

Widgets can make their own AJAX requests to the server, which works as follows.

- You specify the location of a handler for an AJAX request (the endpoint URL) through a widget attribute.
- Before a widget makes a request, the *logic.js* file fires an event, and subscribers to the event can customize the data to be sent in the request.
- The widget's *logic.js* file makes the AJAX request and calls a handler method in the widget's controller, passing the necessary data for the request.
- The handler method in the controller can access any parameters passed in the request and calls model functions as required to return the output and results.
- The widget's *logic.js* file has a callback method for the response from the server.
- After a widget receives a response, the *logic.js* file fires an event, and subscribers to the event can customize behavior, for example, to modify any of the data in the response.

Firing an event before submitting the request

Before a widget makes an AJAX request, it fires an event. Subscribers to that event can:

- Add, remove, or modify any data to be sent in the request.
- Cancel the AJAX request.

The following code from a *logic.js* file shows an example of such an event.

```
var eventObject = new RightNow.Event.EventObject(this, {data: {
    w_id: this.data.info.w_id,
    a_id: this.data.js.answerID,
    rate: this._rate,
    email: this.data.js.email || this._emailField.value,
    message: this._feedbackField.value,
    threshold: this.data.attrs.dialog_threshold,
    options_count: this.data.attrs.options_count,
    submitfeedback: true,
    handler: this.data.ajaxHandlers.submit_rating_ajax
}});
if(RightNow.Event.fire("evt_answerFeedbackRequest", eventObject)){
RightNow.Ajax.makeRequest(this.data.attrs.submit_feedback_ajax,
eventObject.data, {successHandler: this._onResponseReceived, scope:
this, data: eventObject, json: true});
}
```

In this example, all of the data sent to the server is passed in the evt_answerFeedbackRequest event. Subscribers to that event can modify any of that data. If a subscriber returns false, then the event is cancelled and the line containing RightNow.Ajax.makeRequest is never reached.

Making AJAX requests in the widget JavaScript

Using the AnswerFeedback widget as an example, when customers rate an answer, the AnswerFeedback widget's *logic.js* file calls one of its JavaScript functions.

```
/**
* Submit data to the server.
*/
_submitFeedback: function() {
    var eventObject = new RightNow.Event.EventObject(this, {data: {
        w_id: this.data.info.w_id,
        a_id: this.data.js.answerID,
        rate: this._rate,
        email: this.data.js.email || this._emailField.value,
        message: this._feedbackField.value,
        threshold: this.data.attrs.dialog_threshold,
        options_count: this.data.attrs.options_count,
        submitfeedback: true,
        }});
        if(RightNow.Event.fire("evt_answerFeedbackRequest",
        eventObject)){

RightNow.Ajax.makeRequest(this.data.attrs.submit_feedback_ajax,
eventObject.data, {successHandler: this._onResponseReceived, scope:
this, data: eventObject, json: true});
    }
},
```

In addition to the normal POST variables, there is also the instance number of the current widget (`w_id`).

The endpoint for the request (the value for the *submit_feedback_ajax* attribute) is specified by `this.data.attrs.submit_feedback_ajax`. When the widget controller calls `$this->setAjaxHandlers`, the attribute value is changed to *attribute* value + *widget path* + *name of handler method*. So, for our example.

```
this.data.attrs.submit_feedback_ajax == "/ci/ajax/widget/standard/
feedback/AnswerFeedback/submitAnswerFeedback"
```

And therefore the request ultimately made is:

```
POST /ci/ajax/widget/standard/feedback/AnswerFeedback/
submitAnswerFeedback
Data:
w_id=12&a_id=57&rate=4&email=red@dog.com&threshold=2&options_count=4&
submitfeedback=true
```

The widget path and handler name are appended onto the path on any value specified for AJAX-type attributes. So, if the widget's AJAX endpoint is changed, for example:

```
<rn:widget path="feedback/AnswerFeedback" submit_feedback_ajax="/cc/
feedback">
```

The URL for the request that's made is:

```
POST /cc/feedback/standard/feedback/AnswerFeedback/
submitAnswerFeedback
```

As already discussed, before the AJAX request is actually made, a synchronous event is fired, along with the actual contents of everything to be sent to the server. This means that any subscriber to the event is able to modify what is sent to the server.

The widget specifies its own callback function for the server response. In the example, _onResponseReceived() specifies that the results are to be JSON-parsed before the callback method is called.

Everything needed to route the AJAX request to the specific widget instance is in the AJAX request:

- The path to the widget (added implicitly by the framework).
- The name of the widget's AJAX handling method (added implicitly by the framework).
- The Instance ID of the widget.
- The page containing the widget (captured as the http_referer in the request).

With this information, the proper widget method can be called and instance-specific attributes can also be called, all as part of handling the AJAX request.

There are a number of ways to customize the AJAX request.

- **Changing the endpoint of the request**—You can change the attribute value in the widget declaration on the containing page.
- **Changing how the request data is handled on the server**—You can extend the widget controller and either change the ajaxHandlers member to a uniquely named method, or modify the incoming and outgoing data by implementing and wrapping the same method as the parent.
- **Modifying the data sent in the AJAX request**—You can subscribe to the event that is fired before the AJAX request is sent and modify the event object data. Refer to Firing an event before submitting the request

Handling AJAX requests in the widget controller

Any widget can define an AJAX request handler method within its controller file. All standard widgets behave in this manner. This can be illustrated using the standard widget AnswerFeedback as an example. AnswerFeedback performs two AJAX requests: one to record the answer rating that the user has given, and one to submit the user's feedback message.

AnswerFeedback has an attribute for each AJAX request, and each attribute specifies the location of the handler function for the AJAX request (the endpoint). Each instance of a widget can specify a unique AJAX endpoint, if required. However, the attributes have a default path for the endpoint (*/ci/ajax/widget*), as shown in this excerpt from the *info.yml* file.

```
submit_rating_ajax:
    name: Submit Rating AJAX
    type: ajax
    description: Endpoint to make the answer rating AJAX request to
    default: /ci/ajax/widget
submit_feedback_ajax:
    name: Submit Feedback AJAX
    type: ajax
    description: Endpoint to make the answer feedback AJAX request to
    default: /ci/ajax/widget
```

The default endpoint, *ci/ajax/widget*, means that the handler function in the widget's controller is used for the AJAX request.

The following illustrates the *controller.php* of AnswerFeedback.

```
namespace RightNow\Widgets;

class AnswerFeedback extends \RightNow\Libraries\Widget\Base {
    function __construct($attrs) {
        parent::__construct($attrs);

            $this->setAjaxHandlers(array(
                'submit_rating_ajax' => 'submitAnswerRating',
                'submit_feedback_ajax' => array(
                    'handler' => 'submitAnswerFeedback',
                    'clickstream' => 'submitFeedback',
                )
            ));
    }
    function getData() {
        ...
```

```
        }
        static function submitAnswerRating($postData) {
            // record clickstreams interaction
            // echo out response
        }
        function submitAnswerFeedback($postData) {
            // pass thru to incident model
            // echo out response
        }
    }
```

The widget has a setAjaxHandlers() method inherited from the widget Base class. The keys in the array passed to setAjaxHandlers() are the names of the attributes relevant to the AJAX requests, which are used within the widget's JavaScript to make the request.

The values in the array are either:

- The string name of the widget's method that will handle the AJAX request (submitAnswerRating() in the example), or,
- An array with key values of:
  - **handler**—The string name of the widget's method that will handle the AJAX request (submitAnswerFeedback() in the example).
  - **clickstream**—The clickstream action to insert when this AJAX request occurs and the handler is called.

AJAX handling methods receive a single parameter that is an associative array of the GET/POST variables. The methods can pull out parameters and route them through to models and then output the results.

The AJAX handling methods can be static or non-static. If an AJAX handling method is static, it cannot access any instance properties of the widget, The method is in turn called as part of the AJAX request, therefore the widget is not instantiated and the method is called statically. For example:

```
AnswerFeedback::submitAnswerRating($_POST);
```

If an AJAX handling method is non-static, then as the widget method is called on the AJAX request, the method is able to access widget attributes that are specific to that instance of the widget.

Refer to The AdditionalResults sample widget for an example of a sample widget that does its own AJAX handling.

Firing an event after getting a response

After a widget receives a response from the server, it immediately fires an event. Subscribers to that event can:

- Modify any of the data in the response.
- Perform any additional functionality, integration, or business logic based on the response.
- Cancel the event (so that the source widget ignores the server response).

The following code shows an example of such an event.

```
_onResponseReceived: function(response, originalEventObj){
    if(RightNow.Event.fire("evt_answerFeedbackResponse", {data:
    originalEventObj, response: response})) {
    // handle the server response

    }
}
```

Using JavaScript templates

You can use embedded JavaScript (EJS) in template files to dynamically render views. The following is an example of code from a *view.ejs* file.

```
<rn:block id="preList"/>
<ul id="<%= listID %>">
<% for (var i = 0; i < links.length; i++) { %>
    <rn:block id="listItem">
        <li><a href="<%= links[i].href %>"/><%= links[i].label %></
        a></li>
    </rn:block>
<% } %>
</ul>
<rn:block id="postList"/>
```

The highlighted code shows the JavaScript that is dynamically rendered when the widget logic file loads the *view.ejs* file and the view is rendered.

Essentially JavaScript views allow separation of code and HTML for cleaner, dynamic widgets, and this can be particularly important when you have a lot of HTML in the widget.

EJS is well suited for AJAX handlers in widgets. For example, if you have a widget that uses AJAX to fetch data from the server, it can use EJS to dynamically update the UI on the page with the returned data.

As another example of how you can leverage EJS, you can put the following in a *view.ejs* file (or assign it to a variable in JavaScript):

```
<h1><%= text %></h1>,
```

You then use this code in the *logic.js* file to render the view:

```
// using inline template or JS variable
this.Y.one('#myTitle').set('innerHTML', new EJS({text:
RightNow.Widget[this.data.info.class_name].templates.view}).render(re
sponse);
```

Form widgets

Form widgets are those standard input widgets (for example, CustomAllInput, FormInput, and TextInput) or custom widgets that extend from RightNow.Field that allow your customers to enter and update form information that gets stored in incidents and contact records. Refer to Input widgets.

The RightNow.Field widget helper provides several useful functions that make processing form requests easier. For example, the this.parentForm() function allows your custom code to subscribe to form field events, to perform validation of form input, check whether the form should be submitted, and perform error handling as required.

Subscribing to form field events

All standard input widgets extend from RightNow.Field, and as your custom widgets can extend from those standard widgets, they have access to the this.parentForm() function. Your custom widgets can therefore subscribe to a form's events.

The events for this.parentForm() are:

- **submit**—Fired when the submit button on the form is clicked. Subscribing code must perform validation during this event.
  - ▷ If a widget fails validation, it must report the error in the common error <div> element (whose id value is provided in the EventObject passed to submit event subscribers). It must also return false from the subscriber to the submit event (this notifies the parent form that validation failed and the form must therefore not be submitted).
  - ▷ If a widget passes validation, it must return a valid EventObject whose data is the value to be submitted to the server.
- **send**—Fired just before the form data is sent to the server. If a subscriber needs to cancel the event (and prevent the form from being sent to the server), false must be returned.

- **response**—Fired as soon as a response is received from the server.

The following example from a *logic.js* file shows how events can be subscribed to.

```
RightNow.Widgets.sbl = RightNow.Field.extend({
overrides: {

    constructor: function() {
        this.parent();
        ...

        this.parentForm().on("submit", this.validate, this)
        .on("send", this.seeIfFormShouldBeSubmitted, this)
        .on("response", this.lookAtResponse, this);
},
...
```

A widget that extends RightNow.Field must be placed inside an HTML `<form>` element on a containing page, otherwise a JavaScript error is thrown. There is no parent form, therefore placing an input field outside of a form is invalid HTML.

Form widgets must contain only one FormSubmit widget inside the form. This is because the FormSubmit widget extends from RightNow.Form, which is what sets the this.parentForm() for each Form widget.

Native form submissions

There are cases when you may want a form to be submitted natively (using either a POST or GET request) rather than submitted through an AJAX request.

If a declared HTML `<form>` element on a page has *action* and *method* attributes defined, and if the FormSubmit widget does not have the *on_success_url* attribute defined (by default, it is not set), then the form's *action* and *method* attributes are honored. When the form passes validation (that is, all submit subscribers return successful EventObjects), the form is submitted natively.

```
<form action="/cc/myCustomSubmit" method="post">
    <rn:widget path="input/TextInput" name="Incident.Subject"/>
    ...
    <rn:widget path="input/FormSubmit"/>
</form>
```

Search widgets

Search widgets are those standard report-filtering or report-displaying widgets and custom widgets that extend from RightNow.SearchFilter or RightNow.ResultsDisplay. Search widgets allow your customers to filter reports generated from their searches or display those reports.

RightNow.SearchFilter and RightNow.ResultsDisplay provide access to the this.search-Source() function, which allows your custom code to subscribe to search events.

Subscribing to report events

All of the following standard report-filtering widgets extend from RightNow.SearchFilter.

- KeywordText
- SearchButton
- SortList
- Paginator
- SearchTypeList
- OrgList
- ProductCategorySearchFilter
- DisplaySearchFilters

The following standard report-displaying widgets extend from RightNow.ResultsDisplay.

- Multiline
- MobileMultiline
- Grid
- CombinedSearchResults
- CommunitySearchResults

Widgets, including your custom widgets, that extend SearchFilter or ResultsDisplay inherit this.searchSource(), which is the interface to subscribe to events for searching. The following describes the events.

- **search**—Fired when the search button is clicked (fired by the SearchButton widget: `this.searchSource().fire("search", eo))`.
  - ▷ All subscribers must return an event object with the filters property properly set to the current state of the filter.
- **send**—Fired just before performing the search (making the AJAX request or doing the page flip search).
  - ▷ If a subscriber returns false, then any other subscribers are still notified about the event, but the search is cancelled when the event completes.

- **response**—Fired when a response is returned from the server. The event object contains the server's response.
- **reset**—Fired to indicate that certain filters (that subscribe to this event) must reset their states to their initial state.
- **keywordChanged**—Fired to indicate that the keyword changed.
- **appendFilter**—Fired when the event-firing code adds a filter to the group of the filters sent to the server.
- **setInitialfilters**—Fired from ResultsDisplay widgets when the page is loaded. The event object sent contains an allFilters-keyed object containing the initial state of all of the search filters on the page.

How filter widgets respond to multiple reports

A single keyword field can be used for multiple reports on the same page. For report-filtering widgets, the *report_id* attribute accepts a comma-separated string of report IDs. These report IDs are the ones that the search filter is applied to when a search is triggered.

```
<rn:widget path="search/KeywordText" report_id="176,197"/>
<rn:widget path="search/SearchButton" report_id="176,197"/>
<rn:widget path="reports/Multiline" report_id="176"/>
<rn:widget path="reports/Multiline" report_id="197"/>
```

So in the above example, the SearchButton widget triggers a search on reports 176 and 197. The KeywordText widget responds to that search event by passing back the user-entered search term. A search is then completed for both reports 176 and 197 using the same keyword.

Report-displaying widgets are limited to a single *report_id* value.

Using the inherited searchSource() function, widgets with multiple report IDs can respond to search events either for individually reports or multiple reports. For example, for a widget with `report_id="176,197"`:

```
...
/* When a search is triggered for either report 176 or report 197 then
myHandlerFunction is called */
this.searchSource().on("search", this.myHandlerFunction, this);
...
/* When a response comes back for report 176 then myResponder is
called */
this.searchSource(176).on("response", this.myResponder, this);
...
/* When a response comes back for report 197 then myOtherResponder is
called */
```

```
this.searchSource(197).on("response", this.myOtherResponder, this);
```

Using additional search sources with report widgets

You can include additional search sources in report events, allowing you to add to report results.

Search filter and report widgets have a *source_id* attribute. An example of a default value for the *source_id* attribute is `social` for the CommunitySearchResults widget.

Setting *source_id* to this value means that the widget's filter values are applied to searches for social.

```
<rn:widget path="search/KeywordText" report_id="176"
source_id="social"/>
<rn:widget path="search/SearchButton" report_id="176"
source_id="social"/>
<rn:widget path="reports/Multiline" report_id="176"/>
```

In the above example, the KeywordText and SearchButton widgets are used to simultaneously search report 176 as well as social results.

By extending from SearchFilter, widgets inherit the searchSource() method. The searchSource() method can be called without any parameters. In this case, the caller gets back a handle to all reports and search sources that the widget has declared in its *report_id* and *source_id* attributes. Subscribing to or firing on that handle happens for all of those reports and search sources.

```
this.searchSource().on("search", sbl, this)
```

You can use the searchSource() function to respond to search events for additional sources. For example, for a widget with the attributes *report_id* with the value `176` and the *source_id* attribute with the value `social`:

```
...
/* When a search is triggered for either report 176 or social then
myHandlerFunction is called */
this.searchSource().on("search", this.myHandlerFunction, this);
...
/* When a search is triggered for the social source then
myHandlerFunction is called */
this.searchSource(this.data.attrs.source_id).on("search",
this.myHandlerFunction, this);
...
/* When a response comes back for report 176 then myResponder is
called */
this.searchSource(176).on("response", this.myResponder, this);
```

```
...
/* When a response comes back for social then myOtherResponder is
called */
this.searchSource(“social").on("response", this.myOtherResponder,
this);
```

In addition to the built-in external search source social, you can use any other search services that may be plugged-in. You can set the *source_id* attribute to an arbitrary name or number, and widgets can specify what data is sent to the server and where the data is to be sent.

The searchSource() method can also be called with a named subset of reports and search sources. In this case, the caller gets back a handle to all named reports and search sources that the widget has declared in its *report_id* and *source_id* attributes. Subscribing to or firing on that handle happens for only those named reports and search sources. For example:

```
this.searchSource(176).on("search", sbl, this)
this.searchSource("social").on("search", sbl, this)
```

Finally, the searchSource() method can be called with a named subset, as above, and additionally specify the following options.

- **reportIDorNamedSearchSource**—A report ID or source ID.
- **endpoint**—A string specifying where the AJAX request is handled.
- **filters**—An array specifying what report filter values are to be sent (only applies to non-report search sources).
- **params**—The key-value parameters to be sent to the server in the POST data.

For example, for a widget with `source_id="sbl"`:

```
this.searchSource({
    /* name of the search source */
    "sbl": {
    "endpoint": "/cc/myCustomController/search",
    "filters": [ "keyword", "sort" ]
    "params": {
        "banana": 0
    }
}).on("search", function() {
    return new RightNow.Event.EventObject(this, {data: {
        resource: "123",
        numOfResults: 20
    }});
});
```

The AJAX request when a search is triggered for `source_id="sbl"` (where the user searched on iphone and sort is set to 2 is therefore:

```
POST /ci/myCustomController/search
FORM DATA keyword=iphone&sort=2&banana=0&resource=123&numOfResults=20
```

Refer to The AdditionalResults sample widget for a sample widget that uses an additional search source with report widgets.

Creating custom models

You can create custom models that extend directly from the RightNow\Models\Base class. You can also create custom models that extend from and override standard models, which themselves extend from Base.

Customizing models can be useful for modifying the behavior of all the widgets that make calls to a particular model.

In your custom models, you can include Connect PHP API calls as well as ROQL calls. Refer to the Oracle RightNow Connect PHP API Cloud Service Developer Guide.

You must create a custom model when you need to create access to data that is not available through the standard models, which include the following:

- **Account**—Retrieves details about agent accounts based on its ID value.
- **Answer**—Retrieves and manipulates knowledge base answers and also retrieves related and previous answers.
- **AsyncBase**—Makes asynchronous HTTP requests to external servers when you need to make several external requests simultaneously without blocking execution.0
- **Base**—Serves as the base class for all models and provides a number of boilerplate methods and a built in cache.
- **Chat**—Initiates chat requests, sends content between the customer and agent, and checks on current chat availability.
- **Clickstream**—Inserts entries into the clickstream table.
- **Contact**—Creates and updates contacts and retrieves contact data.
- **Country**—Returns a country from the Connect PHP API based on its ID value.
- **Field**—Marshals contact and incident form data and directs it to the correct model to create and update records.
- **FileAttachment**—Retrieves file attachments from sources such as answers, incidents, and guides.

- **Guidedassistance**—Returns a GuidedAssistance object from the database based on the ID value of the guide.
- **Incident**—Creates and updates incidents and retrieves incident data.
- **Notification**—Returns an array of specified product, category, and answer notifications associated with the interface and formats the answer summary.
- **Polling**—Retrieves questions for displaying polling data, submits poll questions, and retrieves poll results.
- **PrimaryObjectBase**—Serves as the base class for models that are used to retrieve, create, and update objects within the Customer Portal.
- **Prodcat**—Retrieves product and category information from the database, works with product/category linking, and gets partial hierarchies of the data.
- **ProductCatalog**—Retrieves product data from the database.
- **Report**—Retrieves and manipulates analytics reports.
- **Social**—Interacts with the Social API to create social posts and comments and memcaches the results for performance benefits.
- **Survey**—Accesses specified surveys.
- **Topicbrowse**—Retrieves topic browse trees.

Model coding standards

Apply the following standards when preparing custom models.

- **File names**—File names must be singular and in Pascalcase format.
- **Class names**—Class names should be the same as the file name.
- **Content**—All calls to access the database (Connect PHP API and ROQL calls) must be contained within a model and not in any other part of the code.
- **Data caching**—If applicable, cache the results of database calls within the model. The two functions setCache() and getCache() use keys to store data over the course of a request. Connecting to the database consumes more resources and caching improves performance.

Standard models

Standard models are contained within the RightNow\Models namespace, and are located in the */cp/core/framework/Models* folder. Standard models include the Answer, Contact, and Incident models that provide access to objects in the knowledge base. All standard models extend from the Base model class.

Refer to the Customer Portal Framework Version 3.2 PHP API reference documentation.

About the ResponseObject object

For consistency, all functions in models should return a \RightNow\Libraries\ResponseObject object (all standard models return this object). This is recommended because it enables the caller to determine how to handle any errors or warnings, rather than requiring the called function to determine how to format and return the errors and warnings.

The only exception to returning the ResponseObject object is when a return type of the method is boolean. So, for example, \RightNow\Models\Answer::exists() just returns true or false.

The ResponseObject object contains five fields.

Table 390: ResponseObject Fields

Field Name	Type	Description
result	mixed	Whatever the function returns.
errors	ResponseError array	See Creating a ResponseObject object for information about the ResponseError object.
error	ResponseError	First ResponseError in errors field.
warnings	string array	Array of warning strings (for example, “Contact is not logged in.” while retrieving an incident).
warning	string	First string in warnings field.

The following example, which makes a call to a standard model function to get notifications for a contact, shows how a returned ResponseObject is used.

```
$notifications = $this->CI->model('Notification')->get('all',
$contactID);
if($notifications->error) {
    echo "Error about getting all notifications " . $notifications-
    >error->externalMessage;
    \RightNow\Utils\Framework::logMessage("Warning about getting all
    notifications " . $notifications->error->externalMessage);
    return;
}
else if($notifications->warning) {
    // warnings are usually for developer consumption only
```

```
        \RightNow\Utils\Framework::logMessage("Warning about getting all
        notifications " . $notifications->warning);
        return;
    }

    // now get the actual list of notification objects
    $notifications = $notifications->result;
    ...
```

The following example throws an exception if a contact cannot be retrieved.

```
    if(!$contact = $this->CI->model('Contact')->get($contactID)->return)
        throw new \Exception("What happened here?");
```

Creating a ResponseObject object

Within a model, the easiest way to create a ResponseObject object is to use the getResponse-Object() function, which is defined in the Base model class.

The getResponseObject() function has four parameters, but only the $return parameter is required.

Table 391: Parameters for getResponseObject() function

Parameter	Type	Description
$return	mixed	Whatever the function returns such as an object, array, Boolean, or string.
$validationFunction	function	A callable function that takes the return value as its only argument and returns true upon success. If specified as null, no validation is performed. The default value is is_-object.
$errors	mixed	A ResponseError object, ResponseError array, error string, or error string array.
$warnings	mixed	A warning string or warning string array.

The ResponseError array contains five fields.

Table 392: Fields for ResponseError

Field Name	Type	Description
externalMessage	string	Error message to display to end users and customers.

Table 392: Fields for ResponseError (Continued)

Field Name	Type	Description
errorcode	string	An error code that can be used by the caller to determine how to handle the error.
source	string	Defines where the error came from (for example, models/standard/report).
internalMessage	string	Error message for internal use.
extraDetails	mixed	Any extra details to attach to the error (for example, a stack trace).

The constructor of the ResponseError object has the same fields as shown in the above table and in the same order. The only field that is required is externalMessage.

The following is an example of using the getResponseObject() function in a standard model.

```
public function get($countryID)
    {
        if(!Framework::isValidID($countryID)){
            return $this->getResponseObject(null, null, "Invalid
            Country ID: $countryID");
        }
        try{
            $response = Connect\Country::fetch($countryID);
        }
        catch(Connect\ConnectAPIErrorBase $e)
        {
            return $this->getResponseObject(null, null, $e-
            >getMessage());
        }
        return $this->getResponseObject($response);
```

Extending from the Base model

You can create a custom model that extends directly from the Base model. The custom model must extend from the Base model class and call the parent constructor within its constructor as shown in this example.

```
<?php
namespace Custom\Models;
```

```
class Sample extends \RightNow\Models\Base
{
    function __construct()
    {
        parent::__construct();
    }

    function get($sampleID)
    {
        if(!\RightNow\Utils\Framework::isValidID($sampleID)){
            return $this->getResponseObject(null, null, "Invalid
            Sample ID: $sampleID");
        }
        return $this->getResponseObject(array('SampleID' =>
        $sampleID, 'SampleName' => "Sample $sampleID"), 'is_array');
    }
}
```

This example shows how you might use the custom model in a widget.

```
$sampleObject = $this->CI->model('custom/Sample')->get($sampleID);
if($sampleObject->error) {
    echo "Error in retrieving sample object " . $sampleObject->error-
    >externalMessage;
    return;
}

echo "Sample Name: " . $sampleObject->result['SampleName'];
```

Refer to Creating the CustomIncidentModel.php file for a sample custom model that extends from the Base model class.

Extending from a standard model

You can create a custom model that extends a standard model. The custom model is then automatically used in place of calls to the parent standard model. All functions of the parent model that are not marked as private can be called from the custom model.

The file *extensions.yml* file is a configuration file in which you must specify the standard models that you wish to override and the custom model that extends each standard model. The file consists of `modelExtensions` entries that name the standard model to override, and the custom model to use as a replacement.

To override the standard Answer model with a model at *development/models/custom/ExtendedSample.php:*

```
modelExtensions:
    Answer: ExtendedSample
```

To override the standard Contact model with a model at *development/models/custom/contacts/ContactCreation.php:*

```
modelExtensions:
    Contact: contacts/ContactCreation
```

In the custom model, the class declaration must extend from the standard model as shown in the following example, otherwise an error is thrown at runtime.

```
class ContactCreation extends \RightNow\Models\Contact
```

To extend a standard model

1 Open the */cp/customer/development/config/extensions.yml* file and edit it so that it contains an entry with the following format.

```
modelExtensions:
    Answer: ExtendedSample
```

2 Make sure that the custom model file contains code as in the following example, where the ExtendedSample custom model extends from the Answer standard model.

```
<?php
namespace Custom\Models;

class ExtendedSample extends \RightNow\Models\Answer
{
    function __construct()
    {
        parent::__construct();
```

3 Add code to override functions from the parent model or add new functions.

Refer to Custom model sample code for an example of a model that extends a standard model.

Calling custom model functions

The code to call a model function varies depending on where the model is called from. For example, to call the sampleFunction() function of the Sample model from a widget or another model:

```
$this->CI->model('custom/Sample')->sampleFunction();
```

To call the function from a custom controller:

```
$this->model('custom/Sample')->sampleFunction();
```

To call the function from anywhere else:

```
$CI = get_instance();
$CI->model('custom/Sample')->sampleFunction();
```

In each case, the model is automatically loaded.

When using the model() function to call a custom model's functions, you must specify the path to the custom model, as shown in the following example:

```
$sampleData = $this->CI->model('custom/input/SiteInfoCustomObject')-
>sampleFunction()->return;
```

However, in calls to standard models, you need to pass only the name of the model:

```
$chatHours = $this->CI->model('Chat')->getChatHours()->return;
```

Creating custom controllers

You can create custom controllers that extend from the \RightNow\Controllers\Base class. You cannot extend from any other controller class. All functions of the parent controller that are not marked as private can be called from the custom controller and additional code can be added as required.

Functions in custom controllers are called by sending a request to a URL with the following format:

```
cc/class_name/function_name
```

For example, to call the myHandler() function in the *MyController.php* controller, the URL is:

```
/cc/myController/myHandler
```

Controller coding standards

Within controllers, group public functions that are callable from URLs at the top of the file. All functions that are not intended to be callable with a URL should be labeled as private or protected, and their names should begin with an underscore (_). This is the only location where you can start your function names with a non-alphabetic character. Also, locate these private or protected functions toward the bottom of the file. This organizes the code better and makes it obvious which functions can be called with a URL and which ones cannot. For example:

```
function viewPage()
......
private function _addParms()
```

Only define an index() function within your controller when you need to be able to call the controller without defining a method. If you want to require a method to be defined to use the controller, omit the index() function.

Controller function content

For controller functions that interact with models and are called by using AJAX requests, the content of the function should harvest POST variables, call the model, and return JSON encoded data (plain text must not be returned from the server). Any business logic required for the AJAX call should be performed in the model. This allows model functions to be easily reused. For example:

```
function doSearch()
{
    $searchTerm = $this->input->post('term');
    $this->load->model('custom/Search');
    $results = $this->model('custom/Search')->query($searchTerm);
    echo json_encode($results);
}
```

Adding hooks

Hooks are sections of code in custom models that allow you to extend Customer Portal functionality. You specify hooks that you wish to execute before and after important events that occur within Customer Portal. You can use hooks, for example, to modify data, perform custom validation, and return customized error messages to display to the user.

You define hooks in the */cp/customer/development/config/hooks.php* file with `$rnhooks`. You specify the hook location that is, the event associated with the hook, as the array index and set that index to an array of three items.

- **`class`**—The name of the custom model you wish to use. The class name must match the name of the custom model, including case sensitivity.

Tip A best practice is to name the file the same as the class name. For example, the class MyCustomIncident would be in the *models/custom/MyCustomIncident.php* file, not *mycustomincident.php*.

- **`function`**—The name of the function within the class to call.
- **`filepath`**—The location of the model, which is automatically prefixed with models/custom/. The `filepath` item needs a value only if your model is contained within a subfolder.

For example, assume you want to call the sendFeedback() function immediately after an incident is created, and you will use the Immediateincidentfeedback model, which you created and placed in *models/custom/Immediateincidentfeedback.php*.

```
$rnHooks['post_incident_create'] = array(
    'class' => 'Immediateincidentfeedback',
    'function' => 'sendFeedback',
    'filepath' => ''
    );
```

For a list of events and more examples of hooks, refer to the comments in the *hooks.php* file. Also, refer to The ExtendedAnswerFeedback sample widget, for a sample where a hook is used with a custom widget.

Creating custom libraries

You can add custom libraries containing sets of utility functions in the folder */cp/customer/development/libraries*. A custom library must be a class file and have a structure as in the following example for a *Sample.php* library.

```
namespace Custom\Libraries;

class Sample
{
    function __construct(){
```

```
        }

        function sampleFunction()
        {

        }
    }
```

Loading a library

You can load a library in different ways depending on where it's being called. For example, to load a library called Sample from a widget or model:

```
$this->CI->load->library('Sample');
```

To load the library from a custom controller:

```
$this->load->library('Sample');
```

To load the library from anywhere else, including other libraries:

```
$CI = get_instance();
$CI->load->library('Sample');
```

Calling a library function

Once a library is loaded, you can call a library function in different ways, depending on where it's being called. For example to call the sampleFunction() function in the Sample library from a widget or model:

```
$this->CI->sample->sampleFunction();
```

To call the function from a custom controller:

```
$this->sample->sampleFunction();
```

To call the function from anywhere else, including other libraries:

```
$CI = get_instance();
$CI->sample->sampleFunction();
```

Creating custom helpers

You can add custom helpers in the folder */cp/customer/development/helpers*. You can load a helper in different ways depending on where it's being called. For example, to load a *sample_helper.php* file containing a helper function from a widget or model:

```
$this->CI->load->helper('sample')
```

From a custom controller:

```
$this->load->helper('sample')
```

To load multiple helpers at once, you can pass an array that loads each helper file, using the format shown in this example.

```
$this->load->helper(array ('sample1','sample2','sample3'))
```

Once a helper is loaded you can call all functions in the helper by simply using the name of the function, for example, *helperFunction()*.

Loading JavaScript content on every page

The */cp/customer/development/javascript/autoload.js* file is automatically loaded on every page so you can put common functions and event declarations in a single location without having to ensure they get loaded on every page.

As an example of how you can use this page, you might add code like the following to override the default failure handler to not display the error dialog if a particular request fails.

```
RightNow.Event.subscribe("on_before_ajax_request", function(name,
data){
    data = data[0];
    if(data.url === '/ci/ajaxRequestMin/getHierValues'){
        data.failureHandler = function(response){};
    }
});
```

This code subscribes to an event that is fired before making an AJAX request. In this case, if the request is made to a specific URL, the failure handler function is set to not do anything, and the request can be modified as required.

Customizing the error pages

The */cp/customer/development/errors* folder contains two PHP scripts used to display customized error pages. These are *error_general.php* and *error_php.php*. Besides customizing the appearance of these pages, you can also display information provided by the customer portal if an error occurs. This information includes severity, message, file name, and line number where the error occurred. By customizing these pages, you can provide your customers with more specific information than they will receive from a standard 404 error page delivered by the web server. You can edit these files but you cannot add any files to this folder.

Additionally, the */cp/customer/error* folder contains the following static HTML pages that you can customize to provide additional information when the following error types are returned. The default message is "There has been an error with your request."

- *error404.html*—Displayed when an **HTTP 404 Not found** error code is returned.
- *error413.html*—Displayed when an **HTTP 413 Request entity too large** error code is returned.
- *error500.html*—Displayed when an **HTTP 500 Internal server** error code is returned.

The *splash.html* page is displayed when your site is being upgraded. For information, refer to Splash page for maintenance mode.

Dynamic forms

A dynamic form is a form with fields that change depending on selections in other fields. For example, when a customer selects a certain product, you may want to ask for additional information that would not be relevant if the customer had selected a different product. A dynamic form identifies the customer-selected product and displays the additional fields for that product selection.

Because creating dynamic forms can be a complex coding task, the Customer Portal includes a change handler for the Field.js module (used by input widgets) in the Customer Portal JavaScript API. Input widgets subscribe to this change handler, which is called anytime the widget changes. When you want a widget for a dynamic form, you extend the corresponding standard input and override the onChange function. All input widgets have a *hide_on_load* attribute to let you hide forms that should appear only when the input value of another widget matches the condition you define.

Although product selection is a primary use case for dynamic forms, the change handler is triggered by changes to any form field, not just products or categories. In addition to changing a field's visibility, you can also change whether it is required based on a previous field. The setConstraints method indicates whether customers must add a value to the field.

The general steps for creating a dynamic form include the following.

1 Create a new widget by extending one of the following standard input widgets (DateInput, FileAttachmentUpload, MobileProductCategoryInput, PasswordInput, ProductCategory-Input, SelectionInput, or TextInput).

Note This is the widget that triggers the change when its value is changed rather than the widget that changes as a result of a value change. For example, if you want to make the Incident.Product field required when the Incident.Subject field equals "test," extend the TextInput widget so you can use it with the Incident.Subject field.

2 Edit the widget you created so it subscribes to the change event handler.

3 Use the findField method to retrieve the field that should change (the Incident.Product field in this example).

4 Call the setContraints method with a JavaScript object (for example, `constraint = {required:true}`) to change the field.

Dynamic forms code sample

Dynamic forms can be configured in a countless number of ways. We have created a code sample that introduces you to the functionality available in dynamic forms so that you can configure the forms you need.

Illustrated concepts

The dynamic forms code sample illustrates the following concepts.

- Extension of the *logic.js* file
- Implementation of a change event handler
- Overriding of show and hide methods to produce a dynamic form with multiple levels of nesting
- Making fields required or not required based on selections for other fields.

Steps for using the sample code

The following procedure describes the necessary steps for using the dynamic forms sample code.

To use the dynamic forms sample code

1. Download DynamicForm.zip from http://documentation.custhelp.com/euf/assets/docs/may2015/cp_resources/samples/DynamicForm.zip and extract the files.

2. Copy the downloaded *dynamic_ask.php* file from the *Dynamic Form/customer/development/views/pages* folder and paste into your development pages at */cp/customer/development/views/pages*.

3. Copy the downloaded *input* folder from *Dynamic Form/customer/development/widgets/custom* and paste into your development pages at */cp/customer/development/widgets/custom*.

4. Activate the downloaded widget.
   - **a** Go to the Customer Portal Administration site at https://[your_site]/ci/admin/versions/manage.
   - **b** Locate the DynamicProductCategoryInput widget in the left column. (Custom widgets are listed alphabetically before the standard widgets.)
   - **c** Select the widget and click Activate this Version in the upper right of the screen.

5. Create a new custom object. The following steps provide a brief overview of the process. For more detail, see [To import custom objects](#).
   - **a** Log in to Oracle Service Cloud.
   - **b** Double-click Object Designer in the navigation pane.
   - **c** Click in Import button on the ribbon, browse to *Dynamic Form/exports/CP CustomObject.zip*, and click Open.
   - **d** Click Next, and then click Next again. A message notifies you that the import was successful.
   - **e** Click Save on the ribbon.
   - **f** Click Deploy on the ribbon.

6. On the Service Console, click the Service button and then double-click Products/Categories/Dispositions.

7. Mouse over the products and categories for the ID values of the products and categories you want to use in the sample code. You will replace the product and category ID values used in the sample code with IDs that are relevant to your customer portal.

8. Edit the *dynamic_ask.php* page to use your organization's product and category IDs. These IDs are referenced in lines 33, 43, and 44.

When you go to your development site and select various products and categories, you will notice that the displayed fields vary with your selections. Notice that the sample code in the *dynamic_ask.php* page first displays the Category field only for selected products (those products associated with ID 1 and ID 2 in the sample code). Then it displays selected fields based on the category ID.

For example, using the code sample, select product ID 2 and category ID 68 will display the custom Serial Number field. The following table shows the dynamic fields that are displayed and/or required for selected product and category IDs called out in the code sample. You can substitute your product and category IDs to create a similar matrix for testing your custom code.

Table 393: Dynamic Fields in Sample *dynamic_ask* Page

Product ID	**Category ID**	**Displayed/Required Dynamic Fields**
1 or 2	68	Serial Number
1 or 2	78	Serial Number Purchase Date Request Callback
1 or 2	All	Email Address Subject Question Attach Documents
1 or 2	77	Required: Attach Documents
1 or 2	78	Required: Serial Number Required: Attach Documents
1 or 2	79	Required: Attach Documents

Creating the DynamicProductCategoryInput widget yourself

Here are the steps for creating the DynamicProductCategoryInput widget. By understanding the steps involved, you can use this procedure as an example of creating other dynamic input fields.

To create the DynamicProductCategoryInput widget

1 Open the widget builder on your Customer Portal Administration site by going to https://<your_site>/ci/admin/tools/widgetBuilder.

2 Click **Extend the functionality of an existing widget.**

3 The custom DynamicProductCategoryInput widget extends the standard ProductCategoryInput widget, so enter `ProductCategoryInput` in the field **Which widget shall it extend from?** and select input/ProductCategoryInput.

4 Type `DynamicProductCategoryInput` in **What is its name?** and `input` in **And its parent folder?**

5 Click Continue. The Components section opens to let you specify the files you require.

6 Select Yes for **Does this widget have its own controller?** and No for **Will it be doing any of its own AJAX handing?**

7 Select No for **Does this widget modify the parent widget's view?** and Yes for **Include the parent widget's CSS?**

8 Select Yes for **Does this widget have its own JavaScript?** and No for **JavaScript templates too?**

9 Click Continue. The Attributes section opens.The DynamicProductCategoryInput widget uses all of the standard ProductCategoryInput widget's attributes, and you will add two more attributes.

10 Scroll to the bottom of the Attributes section, click **Add an attribute,** and type `show_fields_for_ids` in the field.

a Select String from the Type drop-down menu.

b Add this description:
A list of IDs for the given data type and the fields that are associated with it. For instance:

```
2:Incident.Subject,Incident.Threads |
5:Incident.Subject,Incident.Threads, Incident.FileAttachments
```

c Leave the Default Value field blank.

d Leave the check box for **This attribute is required** cleared.

11 Scroll to the bottom of the Attributes section, click **Add an attribute,** and type `fields_required_for_ids` in the field.

a Select String from the Type drop-down menu.

b Add this description:
A list of IDs for the given data type and the fields that are associated with it that should be required. For instance:

```
2:Incident.FileAttachments | 5:Incident.FileAttachments,
Incidents.CustomFields.CP.SerialNumber
```

c Leave the Default Value field blank.

d Leave the check box for **This attribute is required** cleared.

12 Click Continue, and then click Create Widget. The code for the custom widget is generated automatically.

Important Although the widget builder generated the files you need and used the information you provided, you must now edit the files to complete the changes necessary for the functionality of the DynamicProductCategoryInput widget.

Editing the logic.js file

The *logic.js* file generated by the widget builder does not include a change event handler, so you must edit the file to add it. Review the code of the *logic.js* file you downloaded in To use the dynamic forms sample code to get an understanding of the various methods that form input widgets include. The following methods extend from RightNow.Field.

- hide( )—To hide a form input widget.
- show( )—To display a form input widget.
- getValue( )—To return the current value of a form input widget.
- getFieldName( )—To return the field name, for example, Incident.Product.
- isVisible( )—To return a boolean value that indicates whether the widget is visible.
- setConstraints( )—To indicate whether a field is required.
- parentForm( )—To locate the parent form. You can use this with findField( ), as this example shows.

  ```
  this.parentForm().findField('Incident.Subject').show()
  ```
- findField( )—To specify any read/write field, including custom fields and attributes, found in the Business Objects section of the Customer Portal Administration site (Framework > Business Objects).

You must also override the show and hide methods to support multiple levels in a dynamic form.

Editing the controller.php file

Add code to the *controller.php* file to parse the widget attributes and pass them to the *logic.js* file using the following as an example.

```
$this->data['js']['fieldMapping'] =
```

Editing the dynamic_ask.php page

Edit the DynamicProductCategoryInput widget on the sample *dynamic_ask.php* page to reflect the product and category IDs on your site.

Code samples

This section contains code samples for the widgets, models, controllers and other custom code that you can create for Customer Portal.

Note The sample code in this document or accessed through this document is not certified or supported by Oracle. It is intended for educational or testing purposes only. Use of this sample code implies acceptance of the License Agreement.

Custom widget sample code

This section contains the code for a number of custom widgets. For each widget, the following is included:

- A summary of the widget's purpose.
- The concepts illustrated by the sample widget.
- Any prerequisite tasks you must perform before using the widget.
- The steps required for installing and using the sample widget.
- The steps required if you were creating the sample widget yourself. This includes creating the widget with the widget builder and then customizing the code as necessary to match the sample widget's functionality.

Note If you want to use the custom widget exactly as it is, all you need to do is install the widget following "Steps for using the sample widget" under the widget's main heading. If, however, you want to customize the widget or understand the steps that went into creating it, refer to "Creating the widget yourself" under the widget's main heading.

- The *info.yml* file for the sample widget.
- For each of the other widget files and supporting files:
  - ▷ Code samples as generated by widget builder or as provided in model or controller template files.
  - ▷ Code samples for the custom widgets with a description of their purpose and showing the changes that you would need to make to the generated files or template files.

This section also contains cross-references to the topics that explain the ways in which widgets can be customized.

The order of the samples reflects a progression from more basic customization where a widget is extended, through customization of a parent widget, to the most complex customization where a new widget is created from scratch.

- The AdditionalResults sample widget
- The ExtendedAnswerFeedback sample widget
- The DisplayChartReport sample widget
- The PollingSlider widget

The zip files for these samples and additional samples are available at:

http://documentation.custhelp.com/euf/assets/docs/may2015/cp_resources/samples

Each sample zip includes a README file with information on how to build the sample using the widget builder and perform any further customization.

In addition to the samples described in this section, the following samples are also available:

- ClickCounterWithAjax sample widget—This widget provides a simple example of an AJAX request being processed by a widget's controller and the returned data being rendered within the widget. It illustrates widget creation, widget controller AJAX handling, and widget JavaScript views.
- FilteredTopAnswers sample widget—This widget provides an example of how to display results from a report that are filtered at runtime by the product and category ID, provided by widget attributes. It illustrates widget creation and report data interaction and display.

The AdditionalResults sample widget

The AdditionalResults sample widget queries a third-party search API when searching the Oracle Service Cloud knowledge base and appends the results onto the end of report results. It extends from the standard Multiline widget.

Duck Duck Go is the third-party search engine used as the source for search results. Simple phrases and keywords will return results, but Duck Duck Go's search API does not return results for complex queries or questions.

This sample widget assumes that the default Multiline report (ID 176) is being used.

Click to view

Illustrated concepts

The sample illustrates the following:

- Widget extension:
  - ▷ Extending a widget's controller
  - ▷ Extending a widget's logic file
  - ▷ Extending a widget's view (using <rn:block> elements in the PHP widget view and EJS widget view)
  - ▷ Including and inheriting CSS from the parent widget. See Extending a widget's CSS.
- Widget controller AJAX handler. See Handling AJAX requests in the widget controller.
- Using the widget's *source_id* attribute to trigger searches on an additional search end-point. See Using additional search sources with report widgets.
- Making a simple HTTP request to a third-party API and using the PersistentRead-ThroughCache class to cache responses.

Steps for using the sample code

To install the sample widget, follow this procedure.

To install the widget

1 Create a *search* folder in */cp/customer/development/widgets/custom*.

2 Download *Additional Results.zip* from http://documentation.custhelp.com/euf/assets/docs/may2015/cp_resources/samples/AdditionalResults.zip and extract the files.

3 Move or copy the *AdditionalResults.css* file from the unzipped *Additional Results/customer/assets/themes/standard/widgetCss* folder into your */cp/customer/assets/themes/standard/widgetCss* folder.

4 Move or copy the unzipped *Additional Results/customer/development/widgets/custom/search/AdditionalResults* folder into your */cp/customer/development/widgets/custom/search* folder that you created in step 1.

5 Activate the AdditionalResults widget.

  a Go to https://<your_site>/ci/admin/versions/manage.

  b In the left column, locate and select the AdditionalResults widget. Custom widgets are listed at the top, and it is grayed out to indicate that it is not yet active.

  c Click Start Using This Version in the upper right corner of the page.

6 Place the widget on a search results page and add the *source_id* attribute to widgets that are to trigger and provide filter values for the search. See The list.php page for information about which widgets require the *source_id* attribute.

See how to use the widget builder to create the AdditionalResults widget.

Creating the widget yourself

Here are the steps that let you create the AdditionalResults widget yourself by using the widget builder to extend an existing standard widget.

To create the widget

1 Open the widget builder on your Customer Portal Administration site by going to https://<your_site>/ci/admin/tools/widgetBuilder.

2 Click Extend the functionality of an existing widget.

3 The custom AdditionalResults widget extends the standard Multiline widget, so enter `Multiline` in the field **Which widget shall it extend from?** and select reports/Multiline. Type `AdditionalResults` in **What is its name?** and `search` in **And its parent folder?**

4 Click Continue. The Components section opens to let you specify which of the controller, view, and JavaScript files you require.

5 Select Yes for **Does this widget have a controller of its own?** and Yes for **Will it be doing any of its own AJAX handling?**

6 Select Yes for **Does this widget modify the parent widget's view?** and select the Extend the view radio button.

7 Select Yes for **Include the parent widget's CSS?**

8 Select Yes for **Does this widget have its own JavaScript?** and Yes for **JavaScript templates too?**

9 Click Continue. The Attributes section opens. The AdditionalResults custom widget example uses all of the standard Multiline widget's attributes.

10 Click Add attribute and add a *source_id* attribute.

- **Type**—string
- **Description**—ID for an additional search source
- **Default value**—ddg

11 Add a *search_endpoint* attribute.

- **Type**—ajax
- **Description**—Endpoint for searches
- **Default value**—/ci/ajax/widget

12 Add a *label_heading* attribute.

- **Type**—string
- **Description**—Heading for additional results
- **Default value**—Additional results

13 Click Continue.

14 Click Add additional details and type the following in the Widget description field: `This widget extends standard Multiline functionality in order to append additional search results from a third-party source onto standard knowledgebase report results.`

15 Click Create Widget at the bottom of the page. The code for the custom widget is generated automatically.

Important Although the widget builder generated the files you need and used the information you provided, you must now edit the files to complete the changes necessary for the functionality of the AdditionalResults widget.

The info.yml file

The YAML file shows that the sample widget extends from the Multiline widget and has its own extending controller, view, logic, and CSS files. Apart from the ten attributes inherited from the Multiline widget, the widget has three additional attributes: *source_id*, *search_endpoint*, and *label_heading*. The inherited attributes are not included in the *info.yml* file because their default values remain the same.

For more information, see Widget info files.

The YAML code generated by the widget builder

```
version: "1.0"
requires:
    jsModule:
    - standard
attributes:
    source_id:
        name: source_id
        type: string
        description: ID for an additional search source
        default: ddg
        required: false
    search_endpoint:
        name: search_endpoint
        type: ajax
        description: Endpoint for searches
        default: /ci/ajax/widget
        required: false
```

```
        label_heading:
            name: label_heading
            type: string
            description: Heading for additional results
            default: Additional results
            required: false
info:
    description: This widget extends standard Multiline functionality
    in order to append additional search results from a third-party
    source onto standard knowledgebase report results.
    urlParameters:
        kw:
            name: Keyword
            description: The current search term
            example: kw/search
        r_id:
            name: Report ID
            description: The report ID to apply filters to
            example: r_id/176
        st:
            name: Search Type
            description: Sets the search type to the URL parameter
            value
            example: st/6
        org:
            name: Organization Type
            description: Sets the organization type to the URL
            parameter value
            example: org/2
        page:
            name: Page
            description: Sets the select to the page number in the URL
            parameter
            example: page/2
        search:
            name: Search
            description: Key denoting if search should be performed
            example: search/0
        sort:
            name: Sort By
            description: Sets the sort column to value and direction.
```

```
                Use column number
                and 1 for ascending, 2 for descending
                example: sort/3,1
extends:
    widget: standard/reports/Multiline
    components:
    - php
    - view
    - js
    - css
```

The changes required for AdditionalResults

```
# File: info.yml
# Abstract: Definition of AdditionalResults widget
# Version: 1.0

version: "1.0"
requires:
framework: ["3.0", "3.1"]
    jsModule:
    - standard
attributes:
    source_id:
        name: source_id
        type: string
        description: ID for an additional search source
        default: ddg
    search_endpoint:
        name: search_ajax
        type: ajax
        description: Endpoint for searches
        default: /ci/ajax/widget
    label_heading:
        name: label_heading
        type: string
        description: Heading for additional results
        default: Additional results
extends:
```

```
        widget: standard/reports/Multiline
        includeParentCss: true
        components:
        - php
        - view
        - css
        - js
    info:
        description: This widget extends standard Multiline functionality
        in order to append additional search results from a third-party
        source onto standard knowledgebase report results.
        urlParameters:
            kw:
                name: rn:msg:KEYWORD_LBL
                description: rn:msg:THE_CURRENT_SEARCH_TERM_LBL
                example: kw/search
```

The list.php page

The containing page for the AdditionalResults widget, *list.php*, also includes a number of other widgets that must share the same *source_id* attribute value as the AdditionalResults widget.

- **KeywordText**—Provides the search term.
- **SearchButton**—Triggers the search.

Report and search widgets such as Paginator and ResultInfo will not include the Duck Duck Go search source's results. Even if their widget declarations are updated to share the same *source_id* value, their *controller.php* and *logic.js* code needs to be updated to look at the specific return structure of the results (specifically the RelatedTopics array in the returned object), for example, to properly calculate pagination, and number of results returned. You can extend these widgets' standard functionality in a similar manner as for AdditionalResults to properly handle results returned from Duck Duck Go.

Code for the list.php page

```
<rn:meta title="#rn:msg:FIND_ANS_HDG#" template="standard.php"
clickstream="answer_list"/>

<rn:widget path="knowledgebase/RssIcon"/>
<rn:container report_id="176">
<div id="rn_PageTitle" class="rn_AnswerList">
```

```
        <div id="rn_SearchControls">
            <h1 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_CMD#</h1>
            <form onsubmit="return false;">
                <div class="rn_SearchInput">
                    <rn:widget path="search/AdvancedSearchDialog"/>
                    <rn:widget path="search/KeywordText"
                    label_text="#rn:msg:FIND_THE_ANSWER_TO_YOUR_QUESTION_
                    CMD#" initial_focus="true" source_id="ddg"/>
                </div>
                    <rn:widget path="search/SearchButton"
                    source_id="ddg"/>
            </form>
            <rn:widget path="search/DisplaySearchFilters"/>
        </div>
    </div>
    <div id="rn_PageContent" class="rn_AnswerList">
        <div class="rn_Padding">
            <h2 class="rn_ScreenReaderOnly">#rn:msg:SEARCH_RESULTS_CMD#</
            h2>
            <rn:widget path="reports/ResultInfo"/>
            <rn:widget path="knowledgebase/TopicWords"/>
            <rn:widget path="search/AdditionalResults" source_id="ddg"/>
            <rn:widget path="reports/Paginator"/>
        </div>
    </div>
</rn:container>
```

Editing the logic.js file

The widget builder creates the basic template you need for your custom widget's JavaScript functionality, which is shown in the first code sample. The second sample shows the changes you must make for the AdditionalResults custom widget.

The logic file for AdditionalResults sets the AJAX endpoint for the custom search source, oversees the report and additional results responses, and calls the parent widget's method to render the combined results.

The endpoint for the custom search source is specified in the constructor function. For every *source_id* used on the page, an endpoint must be specified. The endpoint is the route to a controller and handler method for the AJAX request. In this case, the widget's controller itself processes the AJAX request, so the widget's *search_endpoint* attribute value defaults to */ci/*

ajax/widget, which is the generic controller route to specify when the widget's controller method is handling the request. However, the *search_endpoint* attribute could specify a custom controller route (for example, */cc/myController/myMethod)* to process the request.

The parent functions _searchInProgress() and _onReportChanged() are overridden.

For more information, refer to Extending a widget's logic file.

The JavaScript code generated by the widget builder

```
RightNow.namespace('Custom.Widgets.search.AdditionalResults');
Custom.Widgets.search.AdditionalResults =
RightNow.Widgets.Multiline.extend({
    /**
    * Place all properties that intend to
    * override those of the same name in
    * the parent inside `overrides`.
    */
overrides: {
        /**
        * Overrides RightNow.Widgets.Multiline#constructor.
        */
        constructor: function() {
            // Call into parent's constructor
            this.parent();
        }

        /**
        * Overridable methods from Multiline:
        *
        * Call `this.parent()` inside of function bodies
        * (with expected parameters) to call the parent
        * method being overridden.
        */
        // _setFilter: function()
        // _searchInProgress: function(evt, args)
        // _setLoading: function(loading)
        // _onReportChanged: function(type, args)
        // _displayDialogIfError: function(error)
        // _updateAriaAlert: function(text)
    },
```

```
        /**
        * Sample widget method.
        */
        methodName: function() {

        },

        /**
        * Makes an AJAX request for `search_endpoint`.
        */
        getSearch_endpoint: function() {
            // Make AJAX request:
            var eventObj = new RightNow.Event.EventObject(this, {data:{
                w_id: this.data.info.w_id,
                // Parameters to send
            }});
            RightNow.Ajax.makeRequest(this.data.attrs.search_endpoint,
            eventObj.data, {
                successHandler: this.search_endpointCallback,
                scope:          this,
                data:           eventObj,
                json:           true
            });
    },

        /**
        * Handles the AJAX response for `search_endpoint`.
        * @param {object} response JSON-parsed response from the server
        * @param {object} originalEventObj `eventObj` from
        * #getSearch_endpoint
        */
        search_endpointCallback: function(response, originalEventObj) {
            // Handle response
        },

        /**
        * Renders the `view.ejs` JavaScript template.
        */
        renderView: function() {
```

```
            // JS view:
            var content = new EJS({text:
            this.getStatic().templates.view}).render({
                // Variables to pass to the view
                // display: this.data.attrs.display
            });
        }
    });
```

The changes required for AdditionalResults

```
    /**
    * File: logic.js
    * Abstract: Extending logic for AdditionalResults widget
    * Version: 1.0
    */
    RightNow.namespace('Custom.Widgets.search.AdditionalResults');
    Custom.Widgets.search.AdditionalResults =
    RightNow.Widgets.Multiline.extend({
    overrides: {
            /**
            * Overrides RightNow.Widgets.Multiline#constructor.
            */
            constructor: function() {
                //Call into parent's constructor
                this.parent();

                this.Y.one(this.baseSelector).delegate('click',
                this.onResultClick, '.result');

                // The endpoint for searches for this source_id is
                specified here.
                var options = {};
                options[this.data.attrs.source_id] = { endpoint:
                this.data.attrs.search_endpoint };
                // Any searches that are triggered with this source_id
                will automatically POST the
                // search term (kw) to the endpoint.
                // Additional options can also be specified such as...
                // Additional search filters to include (if they're on the
                page) and POST values to the endpoint.
```

```
        // options[this.data.attrs.source_id].filters = [ 'p',
        'c', 'sort' ];
        // Additional parameters to POST to the endpoint.
        // options[this.data.attrs.source_id].params = { 'key':
        'value' };

        this.searchSource(options)
            .on('search', this.onSearch, this)
            .on('response', this.onAdditionalResultsResponse,
            this);
    },

    /**
    * Overrides RightNow.Widgets.Multiline#_searchInProgress.
    * Resets the _reportResults member on a new search before
    calling its parent.
    * @param {string} evt Event name
    * @param {array} args Event object
    */
    _searchInProgress: function(evt, args) {
        this._reportResults = null;
        this.parent(evt, args);
    },

    /**
    * Overrides RightNow.Widgets.Multiline#_onReportChanged.
    * Sets the _reportResults member to the given results. If both
    the
    * report results and additional results have returned then the
    additional
    * results are added to data so that they're applied toward the
    rendered view
    * in the parent method.
    * @param {string} evt Event name
    * @param {array} args Event object
    */
    _onReportChanged: function(type, args) {
        this._reportResults || (this._reportResults = args);

        if (this._reportResults) {
            this._reportResults[0].data.heading =
```

```
                this.data.attrs.label_heading;
                this._reportResults[0].data.results =
                this._additionalResults  || [];
                this.parent('response', this._reportResults);
            }
        }
    },

    /**
    * Click handler for result div.
    * Makes the result href easier to click
    * by making the entire result div clickable.
    * @param {object} e Click event
    */
    onResultClick: function(e) {
        e.halt();

        RightNow.Url.navigate(e.currentTarget.one('.content
        a').get('href'), true);
    },

    /**
    * Called when a new search is triggered by a widget with the same
    source_id attribute.
    * Resets the member keeping track of additional results and
    responds with an event object
    * containing the widget's id.
    * @return {object} EventObject
    */
    onSearch: function() {
        this._additionalResults = null;

        return new RightNow.Event.EventObject(this, { data: {
            // Since the keyword being searched on is automatically
            included
            // (see the constructor comments above),
            // the only thing we need to send to the server is the
            widget's id
            // which is used to sort out which widget instance's
            method should
            // be used to handle the AJAX request.
```

```
            w_id: this.data.info.w_id
        }});
    },

    /**
    * Called when results for the AJAX request for additional results
    are returned from the server.
    * @param {string} evt Event name
    * @param {array} args Event arguments; the event object that we
    want will be at index 0
    */
    onAdditionalResultsResponse: function(evt, args) {
        this._additionalResults = args[0].data.RelatedTopics;
        this._onReportChanged();
    }
});
```

Editing the controller.php file

The widget builder creates the basic template you need for your custom widget's controller, which is shown in the first code sample. The second sample shows the changes you must make for the AdditionalResults custom widget.

The controller for AdditionalResults processes the widget's search AJAX request and retrieves and caches search results from the third-party API. The controller does its own AJAX handling, therefore the controller contains code to register the AJAX handler method, getSearchResults(), for the widget.

The HTTP request is made through the getResults() function using PersistentReadThrough-Cache. For more information, refer to Extending a widget's controller and Handling AJAX requests in the widget controller.

The controller code generated by the widget builder

```
<?php
namespace Custom\Widgets\search;

class AdditionalResults extends \RightNow\Widgets\Multiline {
    function __construct($attrs) {
        parent::__construct($attrs);
```

```
        $this->setAjaxHandlers(array(
            'search_endpoint' => array(
                'method'      => 'handle_search_endpoint',
                'clickstream' => 'custom_action',
            ),
        ));
    }

    function getData() {

        return parent::getData();

    }

    /**
    * Handles the search_endpoint AJAX request
    * @param array $params Get / Post parameters
    */
    function handle_search_endpoint($params) {
        // Perform AJAX-handling here...
        // echo response
    }
}
```

[The changes required by AdditionalResults]()

```
<?php
/**
* File: controller.php
* Abstract: Extending controller for AdditionalResults widget
* Version: 1.0
*/

namespace Custom\Widgets\search;

use RightNow\Libraries\Cache;

/**
* AdditionalResults
* @uses RightNow\Widgets\Multiline
```

```
*/
class AdditionalResults extends \RightNow\Widgets\Multiline {
    const CACHE_TIME = 1800; // Amount of time to cache results from
    the third-party API (in seconds)
    const API_URL = 'http://api.duckduckgo.com/?q=%s&format=json';

    function __construct($attrs) {
        parent::__construct($attrs);

        // Register the AJAX-handler method for this widget.
        // The key is the name of the widget's AJAX-type attribute.
        // The value can either be a String name of the method that
        // will handle the AJAX request OR an associative array with
        // two keys:
        // * method: String name of the method that will handle the
        AJAX request
        // * clickstream: String name of a clickstream entry to record
        for the AJAX request
        $this->setAjaxHandlers(array(
            'search_endpoint' => array(
                'method'      => 'getSearchResults',
                'clickstream' => 'custom_search',
            ),
        ));
    }

    function getData() {
        if ($kw = \RightNow\Utils\Url::getParameter('kw')) {
            $this->data['additionalResults'] = json_decode($this-
            >getResults($kw));
        }

        return parent::getData();
    }

    /**
     * Produces search results as an AJAX endpoint.
     * @param array $params POST params
     * @return string JSON results
     */
    function getSearchResults($params) {
```

```
        $response = $this->getResults($params['keyword']);

        header('Content-Length: ' . strlen($response));
        header('Content-type: application/json');
        echo $response;
    }

    /**
    * Makes the HTTP request thru the PersistentReadThroughCache
    * caching mechanism to the third-party API.
    * @param string $kw search query
    * @return string response from third-party; if no search query
    * is supplied, an object consisting of a "RelatedTopics" property
    * with an empty array is returned
    * @see http://api.duckduckgo.com/ Format of what's returned
    */
    protected function getResults($kw) {
        // If no query is supplied, the API doesn't return anything.
        // Our code expects that, at the very least,
        // this minimal object is returned.
        if ($kw === '' || $kw === null) return '{"RelatedTopics":[]}';

        $cache = new
        Cache\PersistentReadThroughCache(self::CACHE_TIME,
        function($kw, $url) {
            \RightNow\Utils\Framework::logMessage(sprintf($url,
            $kw));
            return @file_get_contents(sprintf($url, $kw));
        });

        return $cache->get($kw, self::API_URL);
    }
}
```

Editing the view.php and view.ejs files

The widget builder creates the basic template you need for your custom widget's *view.php* and *view.ejs* files, which are shown in the first set of code samples. The second set of samples shows the changes required for the AdditionalResults custom widget.

The PHP and EJS view files of AdditionalResults use an `<rn:block>` element as an insertion point to append additional results after the standard report results. Compared to the templates generated by widget builder, most of the `<rn:block>` elements and all of the comments are deleted.

For more information, refer to Extending a widget's view.

The view.php code generated by the widget builder

```
<!--
<rn:block id='Multiline-top'>

</rn:block>
-->

<!--
<rn:block id='Multiline-preLoadingIndicator'>

</rn:block>
-->

<!--
<rn:block id='Multiline-postLoadingIndicator'>

</rn:block>
-->

<!--
<rn:block id='Multiline-topContent'>

</rn:block>
-->

<!--
<rn:block id='Multiline-preResultList'>

</rn:block>
-->

<!--
```

```
<rn:block id='Multiline-topResultList'>

</rn:block>
-->

<!--
<rn:block id='Multiline-resultListItem'>

</rn:block>
-->

<!--
<rn:block id='Multiline-bottomResultList'>

</rn:block>
-->

<!--
<rn:block id='Multiline-postResultList'>

</rn:block>
-->

<!--
<rn:block id='Multiline-bottomContent'>

</rn:block>
-->

<!--
<rn:block id='Multiline-bottom'>

</rn:block>
-->
```

The view.ejs code generated by the widget builder

```
<!--
<rn:block id='preResultList'>
```

```
</rn:block>
-->

<!--
<rn:block id='topResultList'>

</rn:block>
-->

<!--
<rn:block id='resultListItem'>

</rn:block>
-->

<!--
<rn:block id='bottomResultList'>

</rn:block>
-->

<!--
<rn:block id='postResultList'>

</rn:block>
-->
```

The changes to view.php required by AdditionalResults

```
<?php
/**
* File: view.php
* Abstract: Extending PHP view for AdditionalResults widget
* Version: 1.0
*/
?>
<rn:block id='Multiline-postResultList'>
<? if ($this->data['additionalResults']->RelatedTopics): ?>
<div class="additionalresults">
```

```
<? if ($this->data['attrs']['label_heading']): ?>
    <h3><?= $this->data['attrs']['label_heading'] ?></h3>
<? endif; ?>
    <div id="rn_<?= $this->instanceID ?>" class="results">
    <? foreach ($this->data['additionalResults']->RelatedTopics as
    $topic): ?>
        <? if (!$topic->Result) continue; ?>
        <div class="result">
            <div class="icon">
                <img src="<?= $topic->Icon->URL ?>"/>
            </div>
            <div class="content">
                <?= $topic->Result ?>
            </div>
        </div>
    <? endforeach; ?>
    </div>
</div>
<? endif; ?>
</rn:block>
```

The changes to view.ejs required by AdditionalResults

```
<%
/**
* File: view.ejs
* Abstract: Extending JS view for AdditionalResults widget
* Version: 1.0
*/
%>
<rn:block id='Multiline-postResultList'>
<% if (results.length) { %>
<div class="additionalresults">
<% if (heading) { %>
    <h3><%= heading %></h3>
<% } %>
<% for (var i = 0; i < results.length; i++) { %>
    <% if (!results[i].Result) continue; %>
    <div class="result">
```

```
            <% if(results[i].Icon && results[i].Icon.URL) { %>
            <div class="icon">
                <img src="<%= results[i].Icon.URL %>"/>
            </div>
            <% } %>
            <div class="content">
                <%= results[i].Result %>
            </div>
        </div>
    <% } %>
    </div>
    <% } %>
    </rn:block>
```

Editing the presentation CSS file

The first CSS code shows the basic container for the CSS code as it was generated by the widget builder. The second set of CSS code is used to display the AdditionalResults as it appears in the example. You can also modify CSS characteristics to match whatever presentation you want for the custom widget.

The CSS for the Multiline widget is included. The AdditionalResults.css file simply adds styling for the custom widget.

The AdditionalResults.css code generated by the widget builder

```
/**
* AdditionalResults.css: Presentation CSS
*/
.rn_AdditionalResults.rn_Multiline {

}
```

The changes required by AdditionalResults

```
/**
* File: AdditionalResults.css
* Abstract: Provides styling for AdditionalResults widget
* Version: 1.0
*/
```

```
.rn_AdditionalResults.rn_Multiline .additionalresults {
    background: #FAF8F8;
    border: 1px solid #CCC;
    border-radius: 4px;
    box-shadow: 0 0 7px rgba(0, 0, 0, .3);
    margin: 2em;
    padding: 10px;
}

.rn_AdditionalResults.rn_Multiline h3 {
    border-bottom: 1px dashed #CCC;
    margin-bottom: 1em;
}
.rn_AdditionalResults.rn_Multiline .result {
    border-radius: 4px;
    border: 1px solid #CCC;
    box-shadow: 0 0 1px rgba(0, 0, 0, .2);
    clear: both;
    cursor: pointer;
    margin-bottom: 1.6em;
    overflow: hidden;
    padding: 1em;
}
.rn_AdditionalResults.rn_Multiline .result:hover {
    background: #F8F5F5;
}
.rn_AdditionalResults.rn_Multiline .icon {
    float: right;
    margin-left: 3em;
}
```

The ExtendedAnswerFeedback sample widget

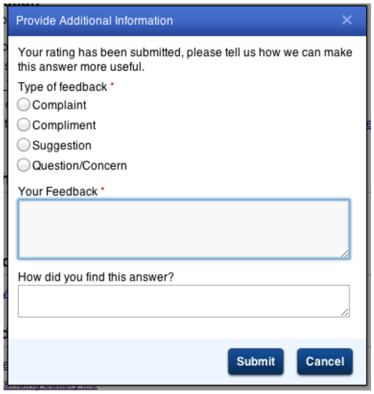
The ExtendedAnswerFeedback sample widget extends the standard AnswerFeedback widget to display and submit custom Incident fields in the feedback form.

This sample is one of the possible solutions to this common customization scenario. A different implementation could, for example, send the AJAX request to a custom endpoint that then sends the POST parameters to a custom model that either extends the standard Incident model or re-implements its own feedback creation logic. That implementation is a more classical approach to the problem, but it involves more code.

The approach that this sample takes—allowing the standard controller endpoint and model to process the feedback submittal normally, but using a hook model to add POST parameter values to the incident—is probably not the cleanest approach. However, it has the advantage of leaving the standard controller and Incident model processing intact, so that features like auto abuse-detection and enhancements and bug fixes in future framework updates will continue to happen automatically.

The sample widget requires two Incident custom fields. As the two incident custom fields are editable by the user, they will appear anywhere that the standard CustomAllInput widget is used, including on the Ask page. When the fields are not null, they will also appear where the standard CustomAllDisplay widget is used, for example, on the *questions/detail* page.

Click to view



Illustrated concepts

The sample illustrates the following:

- Widget extension:
  - ▷ Extending a widget's controller
  - ▷ Extending a widget's logic file
  - ▷ Extending a widget's view (using <rn:block> elements in the PHP widget view)
  - ▷ Including and inheriting CSS from the parent widget. See Extending a widget's CSS.
  - ▷ Overriding attributes to set different default values
  - ▷ Using a hook to add data to an incident before it is saved. See Adding hooks.

Prerequisites

You must complete the following tasks before you can use the sample code.

1 Create a menu-only custom object, TypeOfFeedbackMenu, with settings as follows:
   - **Type**—Menu Only Object
   - **Package**—CO
   - **Menu Items**—Complaint, Compliment, Suggestion, Question/Concern.

2 Add a custom field, type, for Incident, with settings as follows.
   - **Name**—type
   - **Label**—Type of feedback
   - **Package**—CO
   - **Data Type**— Menu
   - **Menu**—CO.TypeOfFeedback.

(Refer to Adding and editing custom fields for information about adding custom fields through the administration interface.)

3 Add a custom field, source, for Incident, with settings as follows.
   - **Name**—source
   - **Package**—CO
   - **Label**—How did you find this answer?
   - **Field Usage**—Long text.

Steps for using the sample code

To install the sample widget, follow this procedure.

To install the widget

1 Create a *feedback* folder in */cp/customer/development/widgets/custom*.

2 Download *ExtendedAnswerFeedback.zip* from http://documentation.custhelp.com/euf/assets/docs/may2015/cp_resources/samples/ExtendedAnswerFeedback.zip and extract the files.

3 Move or copy the *ExtendedAnswerFeedback.css* file from the unzipped *Extended AnswerFeedback/customer/assets/themes/standard/widgetCss* folder into your */cp/customer/assets/themes/standard/widgetCss* customer portal file folder.

4 Move or copy the unzipped *Extended AnswerFeedback/customer/development/widgets/custom/feedback/ExtendedAnswerFeedback* folder into your */cp/customer/development/widgets/custom/feedback* folder that you created in step 1.

5 Activate the ExtendedAnswerFeedback widget.
   - a Go to https://<your_site>/ci/admin/versions/manage.
   - b In the left column, locate and select the ExtendedAnswerFeedback widget. Custom widgets are listed at the top, and it is grayed out to indicate that it is not yet active.
   - c Click Start Using This Version in the upper right corner of the page.

6 Replace the AnswerFeedback widget on the standard *answers/detail.php* page with ExtendedAnswerFeedback.

7 Move or copy the *CustomIncidentModel.php* file from the unzipped *Extended AnswerFeedback/customer/development/models/custom* folder into your */cp/customer/development/models/custom* folder.

8 Register the hook by adding the following to */cp/customer/development/config/hooks.php*.

```
$rnHooks['pre_feedback_submit'] = array(
    'class'    => 'CustomIncidentModel',
    'function' => 'preFeedbackSubmit',
);
```

9 To view the new custom field values on newly-created Answer feedback incidents, add the new Incident.Co.type and Incident.CO.source fields to the Incident workspace that's currently in use.

See how to use the widget builder to create the ExtendedAnswerFeedback widget.

Creating the widget yourself

Here are the steps that let you create the ExtendedAnswerFeedback widget yourself by using the widget builder to extend an existing standard widget.

To create the widget

1 Open the widget builder on your Customer Portal Administration site by going to https://<your_site>/ci/admin/tools/widgetBuilder.

2 Click **Extend the functionality of an existing widget.**

3 The custom ExtendedAnswerFeedback widget extends the standard AnswerFeedback widget, so enter `AnswerFeedback` in the field **Which widget shall it extend from?** and select feedback/AnswerFeedback.

4 Type `ExtendedAnswerFeedback` in **What is its name?** and `feedback` in **And its parent folder?**

5 Click Continue. The Components section opens to let you specify which of the controller, view, and JavaScript files you require.

6 Select Yes for **Does this widget have a controller of its own?** and No for **Will it be doing any of its own AJAX handling?**

7 Select Yes for **Does this widget modify the parent widget's view?** and select the Extend the view radio button.

8 Select Yes for **Include the parent widget's CSS?**

9 Select Yes for **Does this widget have its own JavaScript?** and No for **JavaScript templates too?**

10 Click Continue. The Attributes section opens. The ExtendedAnswerFeedback custom widget example uses all of the standard AnswerFeedback widget's attributes.

11 For the *dialog_threshold* attribute, change the value for default to 3.

12 For the *options_count* attribute, change the value for default to 5.

13 Click Continue.

14 Click Add additional details and type the following in the Widget description field: `This widget extends standard AnswerFeedback functionality in order to save additional custom fields on the created Incident.`

15 Click Create Widget at the bottom of the page. The code for the custom widget is generated automatically.

Important Although the widget builder generated the files you need and used the information you provided, you must now edit the files to complete the changes necessary for the functionality of the ExtendedAnswerFeedback widget. You would also need to create the custom model as described in Creating the CustomIncidentModel.php file.

The info.yml file

The *info.yml* file shows that the sample widget extends from the AnswerFeedback widget and has its own extending controller, view, logic, and CSS files. Apart from the attributes inherited from the AnswerFeedback widget, the widget has two inherited attributes with modified values: *dialog_threshold*, and *options_count*.

For more information, see [Widget info files](#).

The YAML code generated by the widget builder

```
version: "1.0"
requires:
    jsModule:
    - standard
attributes:
    dialog_threshold:
        name: dialog_threshold
        type: int
        description: Rating level at which an additional form displays
        to allow additional comments to be submitted
        default: 3
        required: false
    options_count:
        name: options_count
        type: int
        description: Number of options to display
        default: 5
        required: false
info:
        description: This widget extends standard AnswerFeedback
        functionality in order to save additional custom fields on the
        created Incident.
        urlParameters:
            a_id:
                name: Answer ID
                description: Answer ID from which to associate
                feedback
                example: a_id/3
extends:
    widget: standard/feedback/AnswerFeedback
        components:
```

```
        - php
        - view
        - js
        - css
```

The changes required for ExtendedAnswerFeedback

```
version: "1.0"
requires:
    framework: ["3.0", "3.1"]
    jsModule:
    - standard
attributes:
    dialog_threshold:
        name: dialog_threshold
        type: int
        description: Rating level at which an additional form displays
        to allow additional comments to be submitted
        default: 3
        required: false
    options_count:
        name: options_count
        type: int
        description: Number of options to display
        default: 5
        required: false
extends:
    widget: standard/feedback/AnswerFeedback
        components:
        - view
        - js
        - css
```

Editing the logic.js file

The widget builder creates the basic template you need for your custom widget's JavaScript functionality, which is shown in the first code sample. The second sample shows the changes required for the ExtendedAnswerFeedback custom widget.

The logic file of ExtendedAnswerFeedback validates that a value is supplied for the type custom field, because it is required, and subscribes to an event (evt_answerFeedbackRequest) to add the two custom fields to the data sent to the server in the AJAX request. (The actual request is made through the parent widget.) The function that subscribes to the evt_answerFeedbackRequest event is the onAnswerFeedbackRequest() function.

For more information, refer to Extending a widget's logic file.

The JavaScript code generated by the widget builder

```
RightNow.namespace('Custom.Widgets.feedback.ExtendedAnswerFeedback');
Custom.Widgets.feedback.ExtendedAnswerFeedback =
RightNow.Widgets.AnswerFeedback.extend({
    /**
    * Place all properties that intend to
    * override those of the same name in
    * the parent inside `overrides`.
    */
    overrides: {
        /**
        * Overrides RightNow.Widgets.AnswerFeedback#constructor.
        */
        constructor: function() {
            // Call into parent's constructor
            this.parent();
        }

/**
* Overridable methods from AnswerFeedback:
*
* Call `this.parent()` inside of function bodies
* (with expected parameters) to call the parent
* method being overridden.
*/
// _onClick: function(event, rating)
// _showDialog: function()
// _onSubmit: function(type, args)
// _onCancel: function()
// _validateDialogData: function()
// _closeDialog: function(cancelled)
// _submitFeedback: function()
```

```
// _onResponseReceived: function(response, originalEventObj)
// _submitAnswerRating: function()
// _onRatingResponseReceived: function(response, originalEventObj)
// _addErrorMessage: function(message, focusElement)
// _onCellOver: function(event, chosenRating)
// _updateCellClass: function(minBound, maxBound, removeOrAddClass)
// _onCellOut: function(event, args)
// _onFormTokenUpdate: function(type, args)
},

    /**
    * Sample widget method.
    */
    methodName: function() {

    }
});
```

The changes required by ExtendedAnswerFeedback

```
/**
* File: logic.js
* Abstract: Extending logic for ExtendedAnswerFeedback widget.
* Version: 1.0
*/
RightNow.namespace('Custom.Widgets.feedback.ExtendedAnswerFeedback');
Custom.Widgets.feedback.ExtendedAnswerFeedback =
RightNow.Widgets.AnswerFeedback.extend({
        /**
        * Place all properties that intend to
        * override those of the same name in
        * the parent inside `overrides`.
        */
    overrides: {
        /**
        * Overrides RightNow.Widgets.AnswerFeedback#constructor.
        */
        constructor: function() {
            // Call into parent's constructor
            this.parent();
```

```
        // Overriding the parent's _submitFeedback method in order
        to add the custom field values
        // to the AJAX request's data would require duplicating a
        lot of code.
        // Rather, by subscribing to this event, which fires just
        prior to the AJAX request, we can
        // then just add to the data that'll be sent in the
        request.
        RightNow.Event.subscribe('evt_answerFeedbackRequest',
        this.onAnswerFeedbackRequest, this);
    },

    /**
    * Overrides RightNow.Widgets.AnswerFeedback#_showDialog.
    */
    _showDialog: function() {
        this.parent();

        // If there's not an email field present (user is logged-
        in) or it has an
        // autofilled value (saved email from the session) then
        the feedback textarea
        // is autofocused when the dialog is shown. But that's
        below our new type
        // custom field, so we'll refocus on the first type radio
        input instead
        if (document.activeElement ===
        this.Y.Node.getDOMNode(this._feedbackField)) {
            this.Y.one(this.baseSelector +
            '_FeedbackType').one('input').focus();
        }
    },

    /**
    * Calls the parent's _validateDialogData method before
    validating
    * that a feedback type option has been selected.
    * @return {boolean} True if the parent validation passed and a
    feedback type
    *       option has been selected; False if parent validation
    failed or a feedback
    *       type option hasn't been selected
```

```
    */
    _validateDialogData: function() {
        var parentReturnValue = this.parent();

        this.Y.all(this.baseSelector + '_FeedbackType
        input').some(function(input) {
            if (input.get('checked')) {
                this._selectedFeedbackType = input.get('value');
                return true;
            }
        }, this);

        if (!this._selectedFeedbackType) {
            this._addErrorMessage(
                // Use the label for the fieldset for the '{field
                name} is required' error message.
            RightNow.Text.sprintf(RightNow.Interface.getMessage("
            PCT_S_IS_REQUIRED_MSG"), this.data.js.typeLabel),
                // This is the DOM element ID of the first radio
                // input to focus on when the error message's link
                // is clicked.
                this.Y.one(this.baseSelector +
                '_FeedbackType').one('input').get('id')
            );
            return false;
        }

        return parentReturnValue;
    }
},

/**
* The value of the selected radio input for the type field.
* Set during validation and retrieved to send the value along
* in the AJAX request.
* @type {null|string}
*/
_selectedFeedbackType: null,

/**
* Called when the 'evt_answerFeedbackRequest' event is fired
```

```
        * by the parent just prior to making the AJAX request that posts
        * the supplied EventObject data to the server. Since objects in
        JavaScript
        * are passed by reference, modifying the EventObject's data will
        * add these additional fields to the data that's posted.
        * @param {string} evt Event name
        * @param {array} args Event data; in this case, the EventObject
        * that's supplied is in only element in the array
        */
        onAnswerFeedbackRequest: function(evt, args) {
            args[0].data.type = this._selectedFeedbackType;
            args[0].data.source = this.Y.one(this.baseSelector +
            '_Source').get('value');
        }
    });
```

Editing the controller.php file

The widget builder creates the basic template you need for your custom widget's controller, which is shown in the first code sample. The second sample shows the changes required for the ExtendedAnswerFeedback custom widget.

The controller of ExtendedAnswerFeedback retrieves metadata for the two Incident custom fields, source and type, to retrieve their labels. (The metadata is retrieved through the Connect utility, which in turn calls a function in the Incident model to get the metadata).

For more information, refer to Extending a widget's controller.

The controller code generated by the widget builder

```
<?php
namespace Custom\Widgets\feedback;

class ExtendedAnswerFeedback extends \RightNow\Widgets\AnswerFeedback
{
    function __construct($attrs) {
        parent::__construct($attrs);
    }

    function getData() {

        return parent::getData();
```

```
        }

        /**
        * Overridable methods from AnswerFeedback:
        */
        // protected function getRateLabels()
    }
```

[The changes required by ExtendedAnswerFeedback]()

```
<?php
    /**
    * Copyright Â© 2014, Oracle Corporation and/or its affiliates. All
    rights reserved.
    *
    * The sample code in this document or accessed through this document
    is not certified or
    * supported by Oracle. It is intended for educational or testing
    purposes only. Use of this
    * sample code implies acceptance of the License Agreement
    * (http://www.oracle.com/technetwork/licenses/standard-license-
    152015.html).
    *
    * File: controller.php
    * Abstract: Extending controller for ExtendingAnswerFeedback widget
    * Version: 1.0
    */

namespace Custom\Widgets\feedback;

use RightNow\Utils\Connect;

/**
    * ExtendingAnswerFeedback
    * @uses RightNow\Widgets\AnswerFeedback
    */
class ExtendedAnswerFeedback extends \RightNow\Widgets\AnswerFeedback {
    function __construct($attrs) {
        parent::__construct($attrs);
    }
```

```
function getData() {
    // If a widget's getData method returns false then the widget
    isn't rendered.
    // This check ensures that we won't do additional work if the
    parent indicates
    // that the widget shouldn't be rendered.
    if (parent::getData() === false) return false;

    // Retrieve an empty Incident object and get the metadata for
    // its CustomFields.
    $incident = $this->CI->model('Incident')->getBlank()->result;
    $customFields = $incident->CustomFields;
    $customFieldsMeta = $customFields::getMetadata();

    if ($customFieldsMeta->CO) {
        $co = new $customFieldsMeta->CO->type_name;
        $meta = $co::getMetadata();

        // Check the existence and type of the two fields.
        if ($meta->type && $meta->type->named_values) {
            $this->data['js']['typeLabel'] = $meta->type->label;
            $this->data['feedbackTypes'] = $meta->type->named_values;
        }
        else {
            echo $this->reportError("Expecting a Menu field named type
            on Incident.CustomFields.CO");
            return false;
        }

        if ($meta->source && $meta->source->type_name === 'string') {
            $this->data['js']['sourceLabel'] = $meta->source->label;
        }
        else {
            echo $this->reportError("Expecting a String field named
            source on Incident.CustomFields.CO");
            return false;
        }
    }
    else {
        echo $this->reportError("Expecting a CO package to exist on
        the Incident object");
```

```
            return false;
        }
    }
}
```

Editing the view.php file

The widget builder creates the basic template you need for your custom widget's view, which is shown in the first code sample. The second sample shows the changes required for the ExtendedAnswerFeedback custom widget.

The PHP view file of ExtendedAnswerFeedback uses two <rn:block> elements to insert the Incident custom fields into the widget's feedback form. The view also specifies that the type custom field is required to fill out the form.

For more information, refer to Extending a widget's view.

The view.php code generated by the widget builder

```
<!--
<rn:block id='AnswerFeedback-top'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-preRatingButtonsLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-topRatingButtonsLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-bottomRatingButtonsLoop'>

</rn:block>
```

```
-->

<!--
<rn:block id='AnswerFeedback-postRatingButtonsLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-preRatingButtonsLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-topRatingButtonsLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-bottomRatingButtonsLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-postRatingButtonsLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-preRatingMeterLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-topRatingMeterLoop'>
```

```
</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-bottomRatingMeterLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-postRatingMeterLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-preRatingMeterLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-topRatingMeterLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-bottomRatingMeterLoop'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-postRatingMeterLoop'>

</rn:block>
-->
```

```
<!--
<rn:block id='AnswerFeedback-preForm'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-topForm'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-preEmailInput'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-postEmailInput'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-preFeedbackInput'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-postFeedbackInput'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-bottomForm'>

</rn:block>
```

```
-->

<!--
<rn:block id='AnswerFeedback-postForm'>

</rn:block>
-->

<!--
<rn:block id='AnswerFeedback-bottom'>

</rn:block>
-->
```

The changes required by ExtendedAnswerFeedback

```
<?php
/**
* File: view.php
* Abstract: Extending PHP view for ExtendedAnswerFeedback widget
* Version: 1.0
*/
?>
<rn:block id='AnswerFeedback-preFeedbackInput'>
    <fieldset id="rn_<?= $this->instanceID ?>_FeedbackType" aria-
    describedby="rn_<?= $this->instanceID ?>_FeedbackTypeLabel"
    class="rn_FeedbackType">
        <div id="rn_<?= $this->instanceID ?>_FeedbackTypeLabel">
            <span class="rn_LabelText"><?= $this-
            >data['js']['typeLabel'] ?></span>
            <span class="rn_Required" >
            <?=\RightNow\Utils\Config::getMessage(FIELD_REQUIRED_MARK
            _LBL);?></span><span
            class="rn_ScreenReaderOnly"><?=\RightNow\Utils\Config::ge
            tMessage(REQUIRED_LBL)?></span>
        </div>
        <? foreach ($this->data['feedbackTypes'] as $namedValue): ?>
        <label>
            <input type="radio" name="rn_<?= $this->instanceID
            ?>_FeedbackTypeChoice" value="<?= $namedValue->ID ?>"/>
```

```
<?= $namedValue->LookupName ?>
        </label>
        <? endforeach; ?>
    </fieldset>
</rn:block>

<rn:block id='AnswerFeedback-bottomForm'>
    <label for="rn_<?= $this->instanceID ?>_Source"><?= $this-
    >data['js']['sourceLabel'] ?></label>
    <textarea id="rn_<?= $this->instanceID ?>_Source" cols="60"
    rows="2" class="rn_Textarea"></textarea>
</rn:block>
```

Editing the presentation CSS file

The first CSS code shows the basic container for the CSS code as generated by the widget builder. The second set of CSS code is used to display the ExtendedAnswerFeedback widget as it appears in the example. You can also modify CSS characteristics to match whatever presentation you want for the custom widget.

The ExtendedAnswerFeedback.css code generated by the widget builder

```
/**
* ExtendedAnswerFeedback.css: Presentation CSS
*/
.rn_ExtendedAnswerFeedback.rn_AnswerFeedback {

}
```

The changes required by ExtendedAnswerFeedback

```
/**
* File: ExtendedAnswerFeedback.css
* Abstract: Provides styling for ExtendedAnswerFeedback widget
* Version: 1.0
*/
.rn_AnswerFeedbackForm .rn_FeedbackType {
margin-bottom: 10px;
padding: 0;
}
```

```
.rn_AnswerFeedbackForm .rn_FeedbackType input[type="radio"] {
margin: 4px 0 4px 0;
}
```

Creating the CustomIncidentModel.php file

The *CustomIncidentModel.php* custom model has a preFeedbackSubmit() function that receives the incident about to be created for the feedback submission, and sets the two custom field values to what was submitted to the server.

For information about custom models, see Creating custom models.

The custom model required by ExtendedAnswerFeedback

```
<?php
/**
* File: CustomIncidentModel.php
* Abstract: Saves values on several custom fields for the incident
* supplied by the pre_feedback_submit hook.
* Version: 1.0
*/

namespace Custom\Models;

use RightNow\Connect\v1_2 as Connect;

class CustomIncidentModel extends \RightNow\Models\Base {
    function __construct() {
        parent::__construct();
    }

    /**
    * This method is triggered via a hook that fires prior
    * to site or answer feedback (incident creation via
    * the Incident Model's submitFeedback method).
    * @param Array $hookInfo Array containing key whose value is
    * the incident that's about to be saved
    */
    function preFeedbackSubmit(&$hookInfo) {
```

```
        if ($this->CI->input->post('a_id')) {
        // Answer feedback was submitted (as opposed to site
        // feedback).
        $incident = $hookInfo['data'];

        $typeOfFeedback = $this->CI->input->post('type');
        $sourceOfFeedback = $this->CI->input->post('source');

        if (ctype_digit($typeOfFeedback)) {
            // Since type is a Menu field that uses a Menu Only
            // Custom Object (TypeOfFeedback),
            // we expect an int and fetch a TypeOfFeedback custom
            // object instance corresponding to that ID value.
            $incident->CustomFields->CO->type =
            Connect\CO\TypeOfFeedback::fetch((int)
            $typeOfFeedback);
         }

        if ($sourceOfFeedback) {
            // source is a Text Area field.
            $incident->CustomFields->CO->source =
            $sourceOfFeedback;
        }
    }
}
```

The DisplayChartReport sample widget

The DisplayChartReport sample widget is an example of how to use the YUI charting library, a custom widget AJAX endpoint, and a custom report to create a chart display widget for two-dimensional data.

The widget retrieves the data from a report and sends it to the client side to be displayed. When the data arrives at the client side, it is extracted from the data array and transformed into the appropriate format for the YUI charting library. This transformed data can be used to render any two-dimensional YUI chart including bar, column, line, and pie charts. These charts are displayed using Scalable Vector Graphics (SVG) to create a simple interactive chart.

The widget also contains a button to update the displayed results. The button makes an AJAX request to the server to get the modified results (in this case, simple random data), which is then displayed to the user. The widget expects the first two columns of the report data to be the first two dimensions of the rendered chart. If you plan to use the widget as more than a sample, it is worth modifying the controller to more intelligently handle different formats of report data.

The XML file for this sample (*report_def.xml*) is not described in the following pages, but it is available in the zip file for the sample.

Illustrated concepts

The sample illustrates the following:

- Widget creation. See Creating a new widget from scratch.
- Widget controller AJAX handler. See Making AJAX requests to the server.
- Additional YUI library dependency. See Using YUI components.
- Report data interaction and display.

Steps for using the sample code

To install the sample widget, follow this procedure.

To install the widget

1 Create a *samples* folder in */cp/customer/development/widgets/custom*.

2 Download *DisplayChartReport.zip* from http://documentation.custhelp.com/euf/assets/docs/may2015/cp_resources/samples/DisplayChartReport.zip and extract the files.

3 Move or copy the *DisplayChartReport.css* file from the unzipped *DisplayChartReport/customer/assets/themes/standard/widgetCss* folder into your */cp/customer/assets/themes/standard/widgetCss* customer portal file folder.

4 Move or copy the unzipped *DisplayChartReport/customer/development/widgets/custom/sample/DisplayChartReport* folder into your */cp/customer/development/widgets/custom/sample* folder that you created in step 1.

5 Import the *DisplayChartReport/exports/report_def.xml* file into the Reports Explorer and note the report ID.

6 In the *info.yml* file, change the default value for the *report_id* attribute from -1 to the report ID from step 5.

7 Activate the DisplayChartReport widget.

a Go to https://<your_site>/ci/admin/versions/manage.

b In the left column, locate and select the DisplayChartReport widget. Custom widgets are listed at the top, and it is grayed out to indicate that it is not yet active.

c Click Start Using This Version in the upper right corner of the page.

8 Place the widget on a page, for example.

```
<rn:widget path="sample/DisplayChartReport"/>
```

See how to use the widget builder to create the DisplayChartReport widget.

Creating the widget yourself

Here are the steps that let you create the DisplayChartReport widget yourself by using the widget builder to create a new widget.

To create the widget

1 Open the widget builder on your Customer Portal Administration site by going to https://<your_site>/ci/admin/tools/widgetBuilder.

2 Click **Create a brand new widget from scratch.**

3 Type `DisplayChartReport` in **What is its name?** and `sample` in **And its parent folder?**

4 Click Continue. The Components section opens to let you specify which of the controller, view, and JavaScript files you require.

5 Select Yes for **Does this widget have a controller?** and Yes for **Will it be doing any AJAX handling?**

6 Select Yes for **Does this widget have a view?**.

7 Select Yes for **Does this widget have JavaScript?** and No for **JavaScript templates too?**

8 Under **YUI Modules**, click Add Module and type `charts`.

9 Click Continue. The Attributes section opens.

10 Rename the provided *default_ajax_endpoint* attribute to *get_chart_data_ajax*.

11 Add seven attributes:

- A *label_loading* attribute:
  - ▷ **Type**—String
  - ▷ **Description**—The label that appears while new results are loading into the display

  - ▷ **Default value**—Loading.
- A *label_result_link* attribute:
  - ▷ **Type**—String
  - ▷ **Description**—The label that appears on the button for loading updated results
  - ▷ **Default value**—Get Latest Results.
- A *chart_type* attribute:
  - ▷ **Type**—Option
  - ▷ **Options**—bar, column, line
  - ▷ **Description**—The type of chart to be displayed
  - ▷ **Default value**—column
- A *chart_header* attribute:
  - ▷ **Type**—String
  - ▷ **Description**—The title to display at the top of the chart
  - ▷ **Default value**—Number of page hits by Answer ID.
- A *report_id* attribute:
  - ▷ **Type**—String
  - ▷ **Description**—ID number of the report that contains charting data
  - ▷ **Default value**— –1 (minus 1).
- A *category_axis_label* attribute:
  - ▷ **Type**—String
  - ▷ **Description**—The label to display on the category axis. Uses the report header by default.
- A *value_axis_label* attribute:
  - ▷ **Type**—String
  - ▷ **Description**—The label to display on the value axis. Uses the report header by default.

12 Click Continue.

13 Click Add additional details and type the following in the Widget description field: `This widget provides an example of how to use the YUI charting library, a custom widget AJAX endpoint and a custom report to create a chart display widget for two dimensional data.`

14 Click Create Widget at the bottom of the page. The code for the custom widget is generated automatically.

Important Although the widget builder generated the files you need and used the information you provided, you must now edit the files to complete the changes necessary for the functionality of the DisplayChartReport widget.

The info.yml file

The *info.yml* file shows that the sample widget requires the Charts YUI module. The provided attribute *default_ajax_endpoint* is renamed to *get_chart_data_ajax*.

For more information, see Widget info files.

The YAML code generated by the widget builder

```
version: "1.0"
requires:
    jsModule:
        - standard
        - mobile
attributes:
    get_chart_data_ajax:
        name: get_chart_data_ajax
        type: ajax
        description: Default AJAX endpoint
        default: /ci/ajax/widget
        required: false
    label_loading:
        name: label_loading
        type: STRING
        description: The label that appears while new results are
        loading into the display
        default: Loading
        required: false
    label_result_link:
        name: label_result_link
        type: STRING
        description: The label that appears on the button for loading
        updated results
        default: Get Latest Results
```

```
            required: false
        chart_type:
            name: chart_type
            type: OPTION
            description: The type of chart to be displayed
            options:
            - bar
            - column
            - line
            default: column
            required: false
        chart_header:
            name: chart_header
            type: STRING
            description: The title to display at the top of the chart
            default: Number of page hits by Answer ID
            required: false
        report_id:
            name: report_id
            type: STRING
            description: ID number of the report that contains charting
            data
            default: "-1"
            required: false
        category_axis_label:
            name: category_axis_label
            type: STRING
            description: The label to display on the category axis. Uses
            the report header by default.
            default: ""
            required: false
        value_axis_label:
            name: value_axis_label
            type: STRING
            description: The label to display on the value axis. Uses the
            report header by default.
            default: ""
            required: false
    info:
        description: This widget provides an example of how to use the YUI
        charting library,a custom widget AJAX endpoint and a custom report
```

to create a chart display widget for two dimensional data.

[The changes required by DisplayChartReport]

```
version: "1.0"
requires:
    framework: ["3.0", "3.1"]
    jsModule:
        - standard
        - mobile
    yui: ['charts']
attributes:
    get_chart_data_ajax:
        name: get_chart_data_ajax
        type: ajax
        description: Default AJAX endpoint
        default: /ci/ajax/widget
    label_loading:
        name: label_loading
        type: STRING
        description: The label that appears while new results are
        loading into the display
        default: Loading
    label_result_link:
        name: label_result_link
        type: STRING
        description: The label that appears on the button for loading
        updated results
        default: Get Latest Results
    chart_type:
        name: chart_type
        type: OPTION
        description: The type of chart to be displayed
        options: [bar, column, line]
        default: column
    chart_header:
        name: chart_header
        type: STRING
        description: The title to display at the top of the chart
        default: Number of page hits by Answer ID
```

```
    report_id:
        name: report_id
        type: STRING
        description: ID number of the report that contains charting
        data
        default: -1
    category_axis_label:
        name: category_axis_label
        type: STRING
        description: The label to display on the category axis. Uses
        the report header by default.
    value_axis_label:
        name: value_axis_label
        type: STRING
        description: The label to display on the value axis. Uses the
        report header by default.
info:
    description: This widget provides an example of how to use the YUI
    charting library,a custom widget AJAX endpoint and a custom report
    to create a chart display widget for two dimensional data.
```

Editing the logic.js file

The widget builder creates the basic template you need for your custom widget's JavaScript functionality, which is shown in the first code sample. The second sample shows the changes you must make for the DisplayChartReport custom widget.

The logic file for DisplayChartReport contains code in the constructor to inserts the initial data set into the chart, and also has the following functions.

- **getUpdatedResults()**—Makes an AJAX request for the latest chart data.
- **onSuccessfulUpdate()**—Takes the results from the AJAX response and renders them in the chart.
- **onFailedUpdate()**—Displays a warning dialog if an update has failed.
- **setLoading()**—Prevents simultaneous requests to the server.
- **transformReportResults()**—Takes the report results returned from the server and transforms them into a data structure that can be fed directly into the YUI charting library.

[The JavaScript code generated by the widget builder]

```
RightNow.namespace('Custom.Widgets.sample.DisplayChartReport');
```

```
Custom.Widgets.sample.DisplayChartReport = RightNow.Widgets.extend({
    /**
    * Widget constructor.
    */
    constructor: function() {

    },

    /**
    * Sample widget method.
    */
    methodName: function() {

    },

    /**
    * Makes an AJAX request for `get_chart_data_ajax`.
    */
    getGet_chart_data_ajax: function() {
        // Make AJAX request:
        var eventObj = new RightNow.Event.EventObject(this, {data:{
            w_id: this.data.info.w_id,
            // Parameters to send
        }});

    RightNow.Ajax.makeRequest(this.data.attrs.get_chart_data_ajax,
    eventObj.data, {
        successHandler: this.get_chart_data_ajaxCallback,
        scope:          this,
        data:           eventObj,
        json:           true
        });
    },

    /**
    * Handles the AJAX response for `get_chart_data_ajax`.
    * @param {object} response JSON-parsed response from the server
    * @param {object} originalEventObj `eventObj` from
    #getGet_chart_data_ajax
    */
```

```
    get_chart_data_ajaxCallback: function(response, originalEventObj)
    {
        // Handle response
    }
});
```

The changes required for DisplayChartReport

```
/**
* File: logic.js
* Abstract: Logic file for the DisplayChartReport widget
* Version: 1.0
*/
RightNow.namespace('Custom.Widgets.sample.DisplayChartReport');
Custom.Widgets.sample.DisplayChartReport = RightNow.Widgets.extend({

    constructor: function() {
        // Insert the initial data set into the chart. Notice how the
        // this.data.js.reportData corresponds to the equivalent
        // field in the controller getData function. Additionally,
        // notice that the this.data.attrs.chart_type field
        // corresponds to the same attribute in the info.yml file.
        this._chart = new this.Y.Chart({
            dataProvider:
            this.transformReportResults(this.data.js.reportData),
            render: this.baseSelector + '_Container',
            type: this.data.attrs.chart_type,
            axes: {
                category: {
                    title: this.data.js.categoryLabel,
                    styles: {
                        title: {
                        fontSize: '120%'
                        }
                    }
                },
                value: {
                    title: this.data.js.valueLabel,
                    styles: {
                        title: {
```

```
                        fontSize: '120%'
                        }
                    }
                }
            },

            valueAxisName: 'value',
            horizontalGridlines: true,
            verticalGridlines: true
        });

        //Set up some instance variables and add a click handler for
        //the latest results link
        this._container = this.Y.one(this.baseSelector +
        '_Container');
        this._resultsLink = this.Y.one(this.baseSelector +
        '_ResultsLink');
        this._resultsLink.on('click', this.getUpdatedResults, this);
    },

    /**
    * Make an AJAX request to the server to retrieve and modify the
    * charting data. Notice that this function makes a request to the
    * this.data.attrs.get_updates_ajax endpoint. The same endpoint
    * can be seen in the controller.php file in the setAjaxHandlers
    * call and in the info.yml file.
    */
    getUpdatedResults: function() {
        //Add a loading indicator to the button
        this.setLoading(true);

        // Make a request for the new data. When the data is retrieved
        // add it to the current chart.
        // If the response contains invalid data, display a warning
        // dialog.
        RightNow.Ajax.makeRequest(this.data.attrs.get_chart_data_ajax
        , {
            report_id: this.data.attrs.report_id,
            r_tok: this.data.js.r_tok,
            w_id: this.data.info.w_id
```

```
        }, {
            successHandler: this.onSuccessfulUpdate,
            failureHandler: this.onFailedUpdate,
            json: true,
            scope: this
        });

    },

    /**
    * Executed when a successful update has occurred. Take the results
    * from the AJAX response and
    * render them in the chart.
    * @param {Object} response The JSON response from the server
    */
onSuccessfulUpdate: function(response) {
        //Disable the loading indicator
        this.setLoading(false);
        if(typeof response !== 'string') {
            this._chart.set('dataProvider',
            this.transformReportResults(response));
        }
        else {
            RightNow.UI.Dialog.messageDialog(response, {'icon':
            'ALARM'});
        }
    },

    /**
    * Executed when an update has failed. Display a warning dialog and
    * clear the load indicator.
    */
    onFailedUpdate: function() {
        this.setLoading(false);
        RightNow.UI.Dialog.messageDialog('There was an error with the
        request. Please try again.', {'icon': 'ALARM'});
        },
    /**
    * Add a little bit of flair to the loading indicator while also
    * preventing simultaneous requests to the server. This function
```

```
* acts like a locking mechanism, toggling on and off with each
* successful request to the server.
* @param {Boolean} isLoading true or false to enable or disable
* loading
*/
setLoading: function(isLoading) {
    var resultLink = this._resultsLink,
        scope = this;
    if(isLoading) {
        resultLink.detach('click', this.getUpdatedResults);
        resultLink.set('innerHTML',
        this.data.attrs.label_loading);
        this._ticker = setInterval(function() {
            var currentContent = resultLink.get('innerHTML');
            if(currentContent.indexOf('...') !== -1) {
                resultLink.set('innerHTML',
                scope.data.attrs.label_loading);
            }
            else {
            resultLink.set('innerHTML', currentContent +
                '.');
            }
        }, 200);
    }
    else {
        clearInterval(this._ticker);
        resultLink.set('innerHTML',
        this.data.attrs.label_result_link);
        resultLink.on('click', this.getUpdatedResults, this);
    }
},

/**
* Take the report results returned from the server and transform
* them into a data structure that can be fed directly into the
* YUI  charting library. Charts use two keys 'category' and
* 'value' to represent the two different dimensions of data
* in a bar, line, column or pie chart.
*/
transformReportResults: function(results) {
```

```
            var chartData = [];
            this.Y.Object.each(results, function(element, key) {




                chartData.push({
                    category: element[0], /* Grab the column label from
                    the data */
                    value: element[1] /* And the associated value */
                });
            });

            return chartData;
        }
    });
```

Editing the controller.php file

The widget builder creates the basic template you need for your custom widget's controller, which is shown in the first code sample. The second sample shows the changes you must make for the DisplayChartReport custom widget.

The controller for DisplayChartReport has methods to handle the widget's AJAX request and retrieve chart data.

The controller does its own AJAX handling, therefore the controller contains code to register the AJAX handler method, getChartData(), for the widget.

In this case, the widget's controller handles the AJAX request, so the widget's *get_chart_data_ajax* attribute value defaults to /ci/ajax/widget, which is the generic controller route to specify when the widget's controller method is handling the request.

The controller also has a addRandomizedData() function, which can be used if the report doesn't have much interesting data. If your site has a report with appropriate data, you can remove this function and its calls.

Refer to Handling AJAX requests in the widget controller.

The controller code generated by the widget builder

```
<?php
namespace Custom\Widgets\Sample;
```

```
class DisplayChartReport extends \RightNow\Libraries\Widget\Base {
    function __construct($attrs) {
        parent::__construct($attrs);

        $this->setAjaxHandlers(array(
            'get_chart_data_ajax' => array(
                'method' => 'handle_get_chart_data_ajax',
                'clickstream' => 'custom_action',
            ),
        ));
    }

    function getData() {

        return parent::getData();

    }

    /**
    * Handles the get_chart_data_ajax AJAX request
    * @param array $params Get / Post parameters
    */
    function handle_get_chart_data_ajax($params) {
         // Perform AJAX-handling here...
         // echo response
    }
}
```

[The changes required by DisplayChartReport]()

```
<?php
namespace Custom\Widgets\Sample;

class DisplayChartReport extends \RightNow\Libraries\Widget\Base {
    function __construct($attrs) {
        parent::__construct($attrs);

        //This function registers the AJAX handler getChartData so
        //that subsequent requests for data are correctly routed to
```

```
    //this controller instance.
    $this->setAjaxHandlers(array(
        'get_chart_data_ajax' => array(
            'method' => 'getChartData'
            'clickstream' => 'custom_action'
        )
    ));
}
/**
* This function is executed during the widget creation process
* when a new page request is made to the server. The results are
* used when rendering the view and executing the JavaScript on the
* client side.
*/
function getData() {
    if($this->data['attrs']['report_id'] === -1) {
    echo $this->reportError('The report_id is unset. Please check
    the readme document to determine how to setup the report.');
        return false;
        }
    //Retrieve our initial set of data results
    $reportToken = \RightNow\Utils\Framework::createToken($this-
    >data['attrs']['report_id']);
    $results = $this->CI->model('Report')->getDataHTML($this-
    >data['attrs']['report_id'], $reportToken, array(), array())-
    >result;

    if($results['error'] !== null) {
        echo $this->reportError($results['error']);
        return false;
        }

    //Make sure that the report has two columns with valid headers
    if(count($results['headers']) !== 2) {
        echo $this->reportError(sprintf("The report '%s' does not
        use exactly two columns and cannot be displayed with this
        widget.", $this->data['attrs']['report_id']));
        return false;
    }

    //Add the results to the data sent to the client so that
```

```
    //they can be rendered
    $this->data['js'] = array(
        'reportData' => $this->addRandomizedData($results, true),
        'categoryLabel' => ($this-
        >data['attrs']['category_axis_label']) ?:
        $results['headers'][0]['heading'],
        'valueLabel' => ($this-
        >data['attrs']['value_axis_label']) ?:
        $results['headers'][1]['heading'],
        'r_tok' => $reportToken
    );
}
/**
* This function is used as an AJAX endpoint for requests for newly
* updated chart data.
* @param $parameters
*/
function getChartData($parameters) {
    //Look up the new results
    $results = $this->CI->model('Report')-
    >getDataHTML($parameters['report_id'], $parameters['r_tok'],
    array(), array())->result;
    if($results['error'] !== null) {

        echo
        json_encode(getMessage(ERROR_REQUEST_ACTION_COMPLETED_MSG
        ));
        return;
    }

    //Seed in some random data so the chart looks different
    //with each refresh
    echo json_encode($this->addRandomizedData($results));
    }

/**
* Used in case the report doesn't have much interesting data. It
* will add randomized results so that it is easy to see how
* the charts will display different data sets.
* If your site has a report with appropriate data, this
* function and its calls can be removed.
```

```
        */
        function addRandomizedData($results, $isInitialRequest = false) {
            //If the report data is empty, just add in some random data so
            //a chart can be displayed
            $data = (empty($results['data'])) ? array(array(6, 4),
            array(7, 3), array(8, 16), array(9, 10), array(10, 5)) :
            $results['data'];

            //Only randomize the data on requests after the initial
            if(!$isInitialRequest) {
                foreach($data as &$item) {
                    $randomOffset = rand(0, 20);
                    if($randomOffset % 5) {
                        $item[1] -= $randomOffset;
                    }
                    else {
                        $item[1] += $randomOffset;
                    }
                    if($item[1] < 0) {
                        $item[1] = abs($item[1]);


                    }
                }
            }
            return $data;
        }
    }
```

The view.php file

The widget builder generates a blank *view.php* file when you create a widget from scratch. The following is the *view.php* file for DisplayChartReport.

```
<?php
/**
* File: view.php
* Abstract: View file for the DisplayChartReport widget
* Version: 1.0
*/
?>
<div id="rn_<?=$this->instanceID;?>" class="rn_DisplayChartReport">
```

```
        <div class="rn_ChartHeaderText">
            <?= $this->data['attrs']['chart_header'];?>
            <a id="rn_<?=$this->instanceID;?>_ResultsLink"
            class="rn_UpdateButton"><?=$this-
            >data['attrs']['label_result_link'];?></a>
        </div>
        <div id="rn_<?=$this->instanceID;?>_Container"
        class="rn_ChartContainer"></div>
    </div>
```

Editing the presentation CSS file

The first CSS code shows the basic container for the CSS code as generated by the widget builder. The second set of CSS code is used to display the DisplayChartReport as it appears in the example. You can also modify CSS characteristics to match whatever presentation you want for the custom widget.

The DisplayChartReport.css code generated by the widget builder

```
/**
* DisplayChartReport.css: Presentation CSS
*/
.rn_DisplayChartReport {

}
```

The changes required by DisplayChartReport

```
/**
*
* File: DisplayChartReport.css
* Abstract: Provides styling for the DisplayChartReport widget
* Version: 1.0
*/
.rn_DisplayChartReport .rn_ChartContainer {
    width: 750px;
    height: 600px;
    padding-top: 12px;
}

.rn_DisplayChartReport .rn_ChartHeaderText {
```

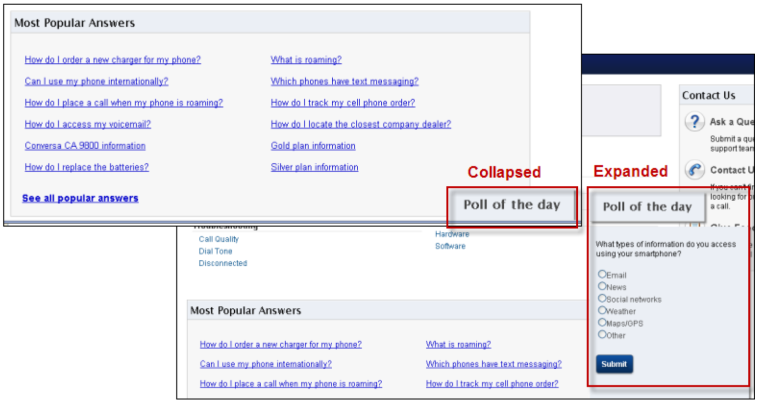
```
    font-weight: bold;
}
.rn_DisplayChartReport .rn_UpdateButton {
    float: right;
    background:#0E53A7 url('../images/buttonGradientCombo.png') 0px
    0px repeat-x;
    -webkit-border-radius: 4px;
    border-radius: 4px;
    -webkit-box-shadow: 0 1px 3px rgba(0,0,0,0.5);
    box-shadow: 0 1px 3px rgba(0,0,0,0.5);
    color:#FFF;
    cursor:pointer;
    font-weight:bold;
    padding: 4px;
    margin-right: 10px;
    min-width: 54px;
}

.rn_DisplayChartReport .rn_UpdateButton:hover {
    background-position: 0px -40px;
```

The PollingSlider widget

The custom PollingSlider widget extends the standard Polling widget to create a slider drawer at the bottom of the page that opens a polling survey when it is clicked.

Click to view

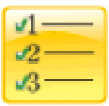


Illustrated concepts

The sample illustrates the following:

- Extending the JavaScript of a standard widget
- Including and inheriting the CSS of a standard widget

Prerequisites



You must complete the following tasks before you can use the sample code.

- Create a choice question for the survey you want to add to the page. For best results, use the radio button or check box display types.
- Create a polling survey.
- Determine the survey ID value.

Steps for using the sample code

To install the sample widget, follow this procedure.

To install the widget

1 Create a *surveys* folder in */cp/customer/development/widgets/custom*.

2 Download *Polling Slider.zip* from http://documentation.custhelp.com/euf/assets/docs/may2015/cp_resources/samples/PollingSlider.zip and extract the files to a temporary location.

3 Move or copy the *PollingSlider.css* file from the unzipped *Polling Slider/customer/assets/themes/standard/widgetCss* folder into your */cp/customer/assets/themes/standard/widgetCss* customer portal file folder.

4 Move or copy the unzipped *Polling Slider/customer/development/widgets/custom/surveys/Polling-Slider* folder into your */cp/customer/development/widgets/custom/surveys* folder that you created in step 1.

5 Activate the PollingSlider widget.

  a Go to https://<your_site>/ci/admin/versions/manage.

  b In the left column, locate and select the PollingSlider widget. Custom widgets are listed at the top, and it is grayed out to indicate that it is not yet active.

  c Click Start Using This Version in the upper right corner of the page.

6 Open the page where you want to add the widget and add the following code, substituting the survey ID for "12" in this example:

```
<rn:widget path="surveys/PollingSlider" survey_id="12" />
```

Note It doesn't matter where you add the code because the widget CSS places it at the bottom of the page automatically.

Also, if you want to test the survey on your development page, add `cookie_duration="0"` to the widget code. This prevents a cookie from being set so you can take the survey repeatedly. (Your customers will not be offered a survey again. Instead, they will simply see the results of the survey until the cookie on their browser expires.)

See how to use the widget builder to create the PollingSlider widget.

Creating the widget yourself

Here are the steps that let you create the PollingSlider widget yourself by using the widget builder to extend an existing standard widget.

1 Open the widget builder on your Customer Portal Administration site by going to https://<your_site>/ci/admin/tools/widgetBuilder.

2 Click Extend the Functionality of an Existing Widget.

3 The custom PollingSlider extends the standard Polling widget, so enter `Polling` in the field **Which widget shall it extend from?** and select surveys/Polling.

4 Type `PollingSlider` in **What is its name?** and `surveys` in **And its parent folder?**

5 Click Continue. The Components section opens to let you specify which of the controller, view, and JavaScript files you require.

6 Select No to answer **Does this widget have a controller of its own?**

7 Select No to answer **Does this widget modify the parent widget's view?**

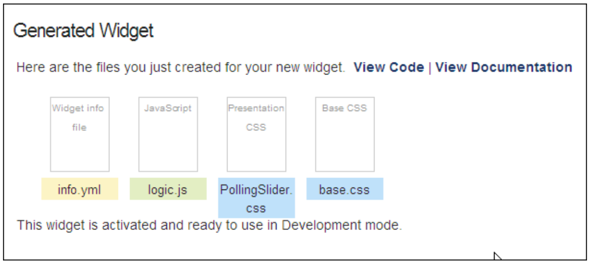
8 Select Yes for **Does this widget have its own JavaScript?** and No for **JavaScript templates too?**

9 Under **YUI Modules**, click Add Module and type `transition`.

10 Click Continue. The Attributes section opens. The PollingSlider custom widget example uses all of the standard Polling widget's attributes except *modal, poll_logic,* and *seconds*, so click the X to the right of those three attributes (above **This attribute is inherited**) to remove them.

11 Click continue.

12 Click Create Widget at the bottom of the page. The code for the custom widget is generated automatically.



Important Although the widget builder generated the files you need and used the information you provided, you must now edit the files to complete the changes necessary for the functionality of the PollingSlider widget.

The info.yml file

You'll need to edit the generated *info.yml* file slightly. The second sample shows the code to add.

The YAML code generated by the widget builder

```
version: "1.0"
requires:
    jsModule:
    - standard
    - mobile
    yui:
    - charts
    - transition
attributes:
    modal: unset
    seconds: unset
    poll_logic: unset
info:
    description: Placeholder description of the PollingSlider widget
extends:
    widget: standard/surveys/Polling
    components:
    - js
```

The changes required for PollingSlider

```
version: "1.0"
requires:
    framework: ["3.0", "3.1"]
    jsModule:
    - standard
    yui:
    - charts
    - transition
attributes:
    survey_id:
        name: survey_id
        type: int
```

```
        description: The ID of the polling survey to be used
        default: ~
        required: false
    modal: unset
    seconds: unset
    poll_logic: unset
extends:
    widget: standard/surveys/Polling
    components:
    - js
    - css
info:
    description: This widget extends the standard Polling widget in order
    to have the Polling dialog slide in from the bottom with a drawer
    effect.
```

Editing the logic.js file

The widget builder creates the basic template you need to extend your custom widget's JavaScript functionality, which is shown in the first code sample. The second sample shows the changes you must make for the PollingSlider custom widget.

Note These file changes are for demonstration purposes only. If you are using the PollingSlider custom widget without modification, we suggest you use the procedure described in Steps for using the sample code.

The *logic.js* file of the PollingSlider widget:

- Uses the constructor of the parent Polling widget `(this.parent())` and adds code to perform the following tasks:
  - ▷ Calculate the slider drawer offset.
  - ▷ Close the drawer on page load.
  - ▷ Hide the survey if your customer has already taken it.
- Overrides the way the standard Polling widget displays the survey results if you're showing the results chart inside the slider drawer so that clicking the poll title permanently closes the drawer.
- Uses the YUI Transition module to add a click handler function that toggles the polling slider open and closed

[The JavaScript code generated by the widget builder]

```
RightNow.namespace('Custom.Widgets.surveys.PollingSlider');
Custom.Widgets.surveys.PollingSlider =
RightNow.Widgets.Polling.extend({
    /**
    * Place all properties that intend to
    * override those of the same name in
    * the parent inside `overrides`.
    */
    overrides: {
        /**
        * Overrides RightNow.Widgets.Polling#constructor.
        */
        constructor: function() {
                // Call into parent's constructor
                this.parent();
        }

        /**
        * Overridable methods from Polling:
        *
        * Call `this.parent()` inside of function bodies
        * (with expected parameters) to call the parent
        * method being overridden.
        */
        // _showDialog: function()
        // _actionDialogButtonClicked: function()
        // _submitButtonClicked: function(e)
        // _viewResultsLinkClicked: function()
        // _getPollResults: function(flow_id, question_id)
        // _onSubmit: function()
        // _setCookie: function()
        // _validate: function(formElement)
        // _getFieldData: function()
        // _getSurveyFieldObjectList: function(formElement)
        // _onShowPoll: function()
        // _onResponseReceived: function(response, originalEventObj)
        // _showThankYou: function()
        // _showChart: function(jsonString, totalVotes)
```

```
            // _buildSimpleChart: function(chartData, flipAreaElement)
            // _buildChart: function(data, flipAreaElement)
            // markerLabelFunction: function(categoryItem, valueItem,
            itemIndex, series, seriesIndex)
            // _getChartAltText: function (chartType, chartData)
            // _showTotalVotes: function(totalVotes)
        },

        /**
        * Sample widget method.
        */
        methodName: function() {

        }
    });
```

The changes required by PollingSlider

```
    /**
    * File: logic.js
    * Abstract: Extending logic for PollingSlider widget
    * Version: 1.0
    */
    RightNow.namespace('Custom.Widgets.surveys.PollingSlider');
    Custom.Widgets.surveys.PollingSlider =
    RightNow.Widgets.Polling.extend({
        overrides: {
            /**
                * Overrides RightNow.Widgets.Polling#constructor
                */
            constructor: function() {
                // Call into parent's constructor
                this.parent();

                this._sliderNode = this.Y.one(this.baseSelector);
                this._pollTitleNode = this.Y.one(this.baseSelector +
                "_PollTitle");
                // Calculate the offset to use for the slider drawer in
                the closed position
                this._closedDrawerOffset =
                this._pollTitleNode.get('offsetHeight') -
```

```
            this._sliderNode.get('offsetHeight') - 1;

            // Start with the drawer closed
            this._sliderNode.setStyle('bottom',
            this._closedDrawerOffset + "px");
            this._drawerOpen = false;

            this._pollTitleNode.on('click', this._toggleDrawer,
            this);

            // If the user has already taken the survey, hide the
            slider entirely
            if(this.data.js.cookied_questionID > 0) {
            this._sliderNode.hide();
            }
    },

    /**
        * Overrides RightNow.Widgets.Polling#_showChart
        */
    _showChart: function(jsonString, totalVotes) {
            // Call parent's _showChart
            this.parent(jsonString, totalVotes);

            // If we have a poll title and we are attempting to show
            the chart inside the slider drawer
            if(this._pollTitleNode) {
                // Change the title click to permenantly close the
                drawer
                this._pollTitleNode.detach('click',
                this._toggleDrawer);
                this._pollTitleNode.on('click',
                this._closeDrawerPermenantly, this);
            }
        }
    },

    // Opens and closes the slider drawer
    _toggleDrawer: function() {
        this._sliderNode.transition({
            duration: 1,
```

```
                bottom: (this._drawerOpen) ? this._closedDrawerOffset +
                "px" : "0px"
            });
            // Toggle the drawer open flag
            this._drawerOpen = !this._drawerOpen;
        },

        // Closes the drawer permenantly (all the way off the screen)
        _closeDrawerPermenantly: function() {
            this._sliderNode.transition({
                duration: 1,
                bottom: this._sliderNode.get('offsetHeight') * -1 + "px"
                });
                this._drawerOpen = false;
        }

    });
```

Editing the presentation CSS file

The widget builder generates the PollingSlider.css file and places it in the */cp/customer/assets/themes/standard/widgetCss* folder. You can customize the CSS if you want, but no customization is necessary if you want to use the code that has been generated.

The PollingSlider.css code generated by the widget builder

```
/**
* PollingSlider.css: Presentation CSS
*/
.rn_PollingSlider.rn_Polling {
    position: fixed;
    bottom: 0px;
    width: 250px;
    right: 250px;
    border-left: 1px solid #fff;
}
.rn_PollTitle {
    text-decoration: none;
    background: none;
}
.rn_PollTitle h2 {
```

```
    font-weight: bold;
    font-size: 1.5em;
    padding: 10px;
    cursor: pointer;
    width: 160px;
    background: #EBEFF5;
    color: #464646;
    text-align: center;
    border-top: 1px solid #fff;
    -moz-box-shadow: 3px 3px 3px #888;
    -webkit-box-shadow: 3px 3px 3px #888;
    box-shadow: 3px 3px 3px #888;
}
.rn_PollingSlider form {
    padding: 20px 10px 40px 10px;
    background: #EBEFF5;
    color: #464646;
    -moz-box-shadow: 3px 3px 3px #888;
    -webkit-box-shadow: 3px 3px 3px #888;
    box-shadow: 3px 3px 3px #888;
}
.rn_PollAnswerArea {
    min-height:40px;
}
.rn_PollSubmit {
    margin-top: 20px;
}
```

Custom model sample code

The following sample custom model extends from the standard Answer model. It provides am emailToFriend() function that overrides the parent function so that the From field is modified with a company email address.

```
<?php
namespace Custom\Models;

class ExtendedSample extends \RightNow\Models\Answer
{
    function __construct()
    {
```

```
            parent::__construct();
        }

        function emailToFriend($sendTo, $name, $from, $answerID){
        // Modify from field to company email and add user specified
        // email to name
            $name .= "(Email: $from)";
            $from = "support@companyName.com";
            $response = parent::emailToFriend($sendTo, $name, $from,
            $answerID);
            // Remember that $response is an instance of a
            // ResponseObject, so we need to check the return property
            // for success
            if($response->result){
                return $response;
            }
            // Add an additional error to the return which might be
            // potentially handled by a custom widget
            $response->error = "Unable to send email, please try again
            later.";
            return $response;
        }
    }
```

For more information, refer to Creating custom models.

Custom controller sample code

The following sample code illustrates the required structure of a custom controller.

```
<?php

namespace Custom\Controllers;

class AjaxCustom extends \RightNow\Controllers\Base
{
    // This is the constructor for the custom controller.
    // Do not modify anything within this function.
    function __construct()
    {
        parent::__construct();
    }
```

```
        /**
        * Sample function for ajaxCustom controller. This function
        * can be called by sending a request to:
        * /ci/ajaxCustom/ajaxFunctionHandler.
        */
        function ajaxFunctionHandler()
        {
            $postData = $this->input->post('post_data_name');
            //Perform logic on post data here
            echo $returnedInformation;
        }
    }
```

For more information, see Creating custom controllers.

Chat

The following sections are intended for administrators and staff members. They contain information and procedures for configuring and using areas specific to Oracle RightNow Chat Cloud Service and Co-Browse.

- Chat Configuration
- Chat
- Co-Browse Configuration

65

Chat Configuration

Though self-service and email response management can solve the majority of customer issues, one-on-one interaction remains the best venue and value for certain queries. With Oracle RightNow Chat Cloud Service (Chat), you can provide access to agents for customer questions and issues that merit human interaction through real-time chat sessions.

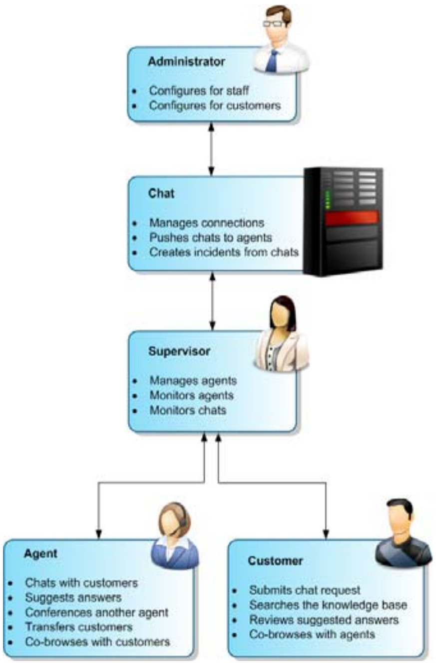
Once you implement Chat for your application, you can measure its effectiveness using powerful analytics. Refer to Real-time reports and Chat Audit report.

Best Practices for Implementing Chat

Effective chat implementations are simple when best practices are followed. The Best Practices Guide for Implementing Chat provides best practices that should be considered before implementing Chat. By following the recommendations in the guide, you are ensuring a great chat experience for your customers. Refer to *Top 12 Best Practices for Implementing Chat*.

Chat overview

Chat is a component of Oracle Service Cloud that can be used to provide one-on-one interaction between your supervisors and agents and agents and customers. You must configure Chat for supervisors, agents, and customers to take advantage of these functions. To get started, become familiar with the interactions illustrated in the following figure.



Configuring Chat for supervisors and agents

When configuring Chat, it is important that you set certain configuration options before others. For example, chat session queues must be added to Oracle Service Cloud before they will display in profiles, and profiles must be added or updated before they can be assigned to agents. For this reason, we recommend that you configure Chat options in the following order.

- Add **chat session queues**. Refer to Adding and editing chat session queues.
- Add **chat agent statuses**. Refer to Adding and editing chat agent statuses.
- Add chat reports to **navigation sets**. Refer to Adding chat reports to navigation sets.
- Add or update **profiles** to include Chat permissions. Refer to Adding Chat permissions to profiles.

- Add or update **staff accounts** to use profiles that include Chat permissions. Refer to Adding and editing staff accounts.

Note Configuration options will not be visible until Chat is enabled. To enable Chat, contact your Oracle account manager.

❖ Adding chat reports to navigation sets
❖ Adding Chat permissions to profiles
❖ Adding and editing staff accounts

Adding and editing chat session queues

Chat session queues, when used with **profiles** and **business rules**, enable automatic sorting of incoming chats based on contact, organization, product, category, and custom field information.

For example, a wireless communications organization might have agents that specialize in different types of sales products or services. You could add chat session queues such as cell phones and wireless service. You would then create profiles that allow agents to access the different queues and assign the appropriate profile to your agents based on their area of expertise.

Tip The following chat configuration settings are not interface specific, the setting in the primary interface takes precedence: AVERAGE_WAIT_TIME_SAMPLES, ESTIMATED_WAIT_TIME_SAMPLES, IDLE_QUEUE_WAIT_-TIME_RESET_SECONDS, and MIN_WAIT_INFO_UPDATE_SECONDS. Setting each configuration setting in additional interfaces to the same value as the primary interface avoids confusion. Refer to Multiple Interfaces.

Business rules, which perform actions on incoming chat requests based on specific conditions, can be used to automatically assign incoming chat requests to specified chat session queues. This ensures that chat requests are routed to the appropriate agent based on the agent's skill set. Refer to Business rules overview.

To add or edit a chat session queue

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree opens on the **content pane**.

3 Click the arrow next to the System Menus folder to expand the list.

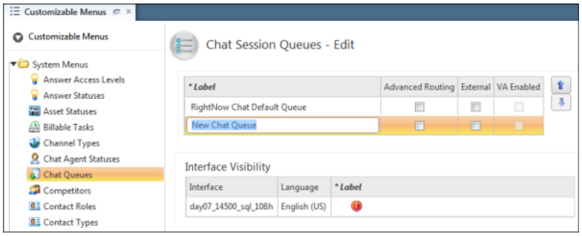
4 Click Chat Queues to display the editor.

Note Chat has one default chat session queue named Default Chat Queue. The name of the default queue can be changed, but the queue cannot be deleted. All incoming chat requests are routed to the Default Chat Queue unless new queues are added and **business rules** are implemented to route chats to the new queues.

5 To add a chat session queue, click the New button on the **ribbon** to display the editor.

Or

To edit a chat session queue, click it in the tree.



6 Type the name of the chat session queue in the Label field. The same name is added to the Label field in the Interface Visibility section.

Note When using multiple-language **interfaces**, you must type the name in the Label field in the language of the interface.

7 To designate the queue for use with advanced routing of chat requests, select the Advanced Routing check box. Refer to [Configuring advanced routing](#).

a Enter a value for Skill Requirement Relaxation for each skill.

b Enter a value for the Overflow Timer.

Note Smart Interaction Hub (SIH) must be enabled. To enable, contact your Oracle account manager.

8 To designate the queue for use with third-party-initiated chat requests, select the External check box.

Note The read-only VA Enabled check box is used to designate the queue for use with virtual assistant initiated chat requests. Refer to Configuring virtual assistant.

9 To change the order in which chat session queues display on the editor, select the queue and click the Move Up or Move Down button.

10 Click the Save and Close button on the ribbon.

Important If you try to delete a chat session queue that is used in a business rule, a message displays the rules that depend on the queue. Before you can delete the chat session queue, you must first edit the rules so they no longer use the queue.

❖ Business rules overview

Adding and editing chat agent statuses

An agent's status describes his or her availability to chat with customers as well as assist supervisors and other agents with their chats. Although Chat contains default chat agent statuses, you can create custom agent statuses and associate them with either the Available or Unavailable status type. While working in Chat, agents can change their status as necessary.

By default, Chat has five chat agent statuses that are assigned to three chat status types.

- **Available**—The Available status type signifies that the agent is available to chat. The following chat status is associated with the Available status type.
  - ▷ Unrestricted—The Unrestricted status indicates that there are no restrictions to an agent's availability to chat.
- **Unavailable**—The Unavailable status type signifies that the agent is not available to chat. The following chat statuses are associated with the Unavailable status type.
  - ▷ Unqualified—The Unqualified status indicates that the agent did not specify a reason for being unavailable to chat.
  - ▷ In Meeting—The In Meeting status indicates that the agent is in a meeting and is not available to chat.
  - ▷ On Break—The On Break status indicates that the agent is on a break and is not available to chat.

- **Logged Out**—The Logged Out status type is restricted to the Unspecified chat agent status type and cannot be modified.
  - ▷ Unspecified—The Unspecified status indicates that the agent is logged out of Chat. This chat status does not display to staff on the Agent Status drop-down menu.

The default chat agent statuses may be enough for your organization. However, if additional chat agent statuses will help you more accurately determine the status of agents, you can add them. When you add a chat agent status, you must assign it to one of the default status types and then make it available through the Chat Agent Statuses section in profiles. Refer to Adding Chat permissions to profiles.

To add or edit a chat agent status

1 Click the Configuration button on the **navigation pane**.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree displays on the **content pane**.

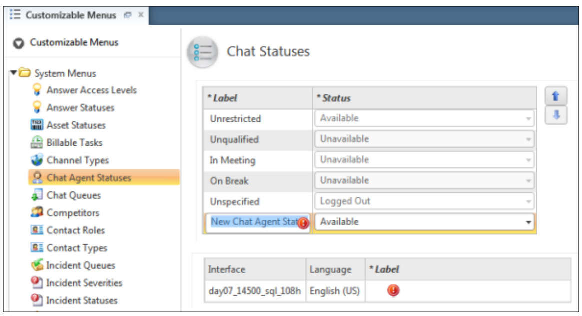
3 Click the arrow next to the System Menus folder to expand the list.

4 Click Chat Agent Statuses to display the editor.

5 To add a chat agent status, click the New button on the **ribbon** to display the editor.

Or

To edit a chat agent status, click it in the tree.



6 Type the name of the chat agent status in the Label field. The same label is added to the Label field in the Interface Visibility section.

7 Click the Status drop-down menu and select a status type. The options include Available, Unavailable, and Logged Out.

Note Once you save a chat agent status, you can change its label but not its status.

8 To change the order in which chat agent statuses display on the editor, select the status and click the Move Up or Move Down button.

9 Click the Save and Close button on the ribbon.

Tip The In Meeting and On Break default chat agent statuses and custom chat agent statuses can be deleted.

❖ Adding Chat permissions to profiles
❖ Live Media bar

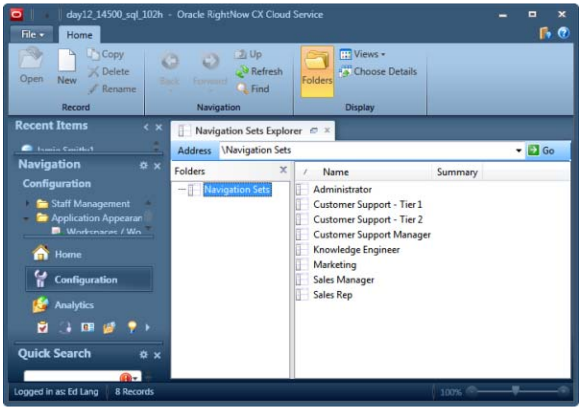
Adding chat reports to navigation sets

Before staff members chat with customers, we recommend that you add the applicable real-time chat reports to their **navigation sets** so they can view a dashboard of their chat activity. Refer to Real-time reports. For complete information about modifying navigation sets, refer to Modifying navigation sets.

To add a real-time chat report to a navigation set

1 Click the Configuration button on the **navigation pane**.

2 Double-click Navigation Sets under Application Appearance. The Navigation Sets explorer opens on the **content pane**.



3 Double-click the navigation set used by your agents. The content pane displays the Navigation Sets editor.

4 On the right side of the content pane, select the Communication Center check box. All Communication Center items display in the lower portion.

5 On the left side of the content pane, click the plus signs next to Public Reports > Service > Chat Reports > Real-Time Reports.

6 To configure the navigation set for agents, drag Chat Agent Home–Real Time from the left column and drop it in the lower portion of the right column.

7 To configure the navigation set for supervisors, drag Chat Supervisor Home–Real Time from the left column and drop it in the lower portion of the right column.

8 Click the Save and Close button on the **ribbon**.

Note The navigation set containing Chat Agent Home or Chat Supervisor Home must be selected in the Interfaces section on the Profile editor. Refer to Adding Chat permissions to profiles.

❖ Modifying navigation sets
❖ Adding Chat permissions to profiles

Real-time reports

Real-time reports and dashboards are available at Public Reports > Service > Chat Reports > Real-Time Reports. All of the reports include a default refresh rate of fifteen seconds or less. The following table describes the real-time reports and dashboards available for Chat.

Table 394: Real-Time Chat Reports Description

Report	Description
Active Chat List Per Agent	This report displays information about active chats that are assigned to agents.
Active Chat List Per Queue	This report displays information about active chats in queues.
Chat Agent Home–Real Time	This dashboard is a real-time alternative to the Chat Agent Home dashboard located at \Public Reports\Service\Chat Reports.
Chat Agent List Per Queue	This report displays information about agents and their assignment to queues.
Chat Agent Queue Snapshot	This report displays information about an agent's current chats.
Chat Supervisor Home–Real Time	This dashboard is a real-time alternative to the Chat Supervisor Home dashboard located at \Public Reports\Service\Chat Reports.
Chat Supervisor Queue Snapshot	This report displays information about each engagement in a queue.
Current Chat Agent Statistics	This report displays statistics for individual agents. **Note:** The Chats in Last Hour column is non-functional, displays 0, for the virtual assistant. Refer to Configuring virtual assistant.
Current Chat Group Statistics	This report displays statistics for agent groups.
Current Chat Queue Statistics	This report displays statistics for chat queues.
My Chat Agent Statistics	This report displays basic statistics for the current agent.
Waiting Chat List Per Queue	This report displays information about waiting chats in queues.

Chat Audit report

The Chat Audit report is a top-level report that provides a 360-degree view of chat data during a selected time period. The report includes drill-down links into associated audit detail reports and is available at Public Reports > Service > Chat Reports > Audit Reports.

Tip To view column definitions in the Chat Audit report, hover over the column headings.

Adding Chat permissions to profiles

Chat is not fully functional until staff members have been assigned as agents. Once you create or edit a **profile** containing Chat permissions, you can then assign the profile to individual staff members. This lets you designate which staff members have access to Chat. You can assign Chat permissions to one or more profiles based on your organization's needs.

To add Chat permissions to a profile

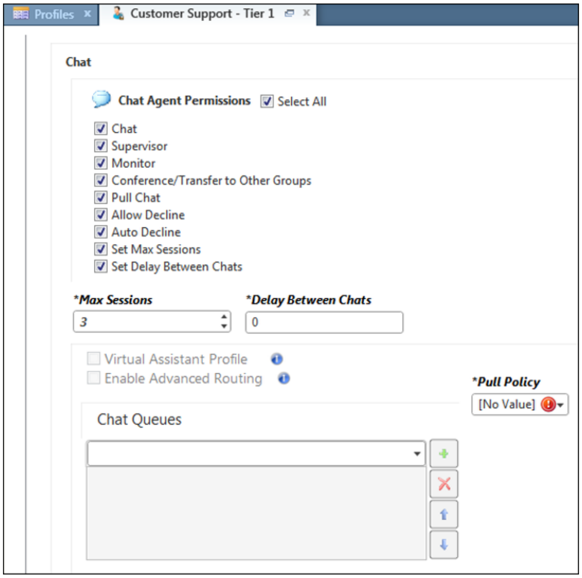
1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management. The report opens on the **content pane**.

3 Double-click the profile you want to edit. The Profiles editor opens.

4 Click the Permissions button on the **ribbon**.

5 Click the Service tab and scroll down to Chat permissions.



6 Enter the following field information.

Table 395: Chat Profile Settings Description

Field	Description
Chat Agent Permissions	Select the Select All check box to select all options in the Chat section. **Note:** If you do not want agents having full chat permissions in their profile, you must clear the check boxes next to the functions you do not want agents to have access to.
Chat	Select this check box to allow staff members with this profile to chat with customers.
Supervisor	Select this check box to allow staff members with this profile supervisory permissions in Chat.
Monitor	Select this check box to allow supervisors with this profile to monitor other agents. **Note:** This check box cannot be selected unless the Supervisor check box is selected, as monitoring can be performed only by supervisors.

Table 395: Chat Profile Settings Description (Continued)

Field	Description
Conference/Transfer to Other Groups	Select this check box to allow staff members to conference with agents in other groups and transfer customers to agents in other groups. **Note:** Agents can always conference with agents in their own group and transfer customers to agents within their own group.
Pull Chat	Select this check box to allow agents to pull chats from the wait queue. **Note:** By default, the chat server automatically pushes chat requests to agents. If the Pull Chat check box is selected, a corresponding pull policy must be selected so that chat requests are offered to agents when they click the Request Chat button on the Live Media bar.
Allow Decline	Select this check box to allow agents with this profile to manually decline chat requests. **Note:** If Allow Decline is selected, but Auto Decline is not, chats will automatically be assigned to agents if they click X on the top of toast invitations. To decline chats, agents must click Decline on toast invitations.
Auto Decline	Select this check box to allow the system to automatically decline chat requests when the toast notification expires. **Note:** The chat toast expiration timeout can be configured through the CHAT_ALERTFORM_AUTOCLOSE_TIMEOUT configuration setting.
Set Max Sessions	Select this check box and enter in the associated Max Sessions field the maximum number of chat sessions that a staff member can be engaged in. **Note:** The value set in this field also determines the value that displays in the Maximum Chat Sessions field on the Oracle Service Cloud Options window. Refer to Changing chat options.
Set Delay Between Chats	Select this check box and enter in the associated Delay Between Chats field the number of seconds that elapse before a new chat is presented to an agent. **Note:** The value set in this field determines the value that displays in the Stagger Incoming Chats field on the Oracle Service Cloud Options window. Refer to Changing chat options.

Table 395: Chat Profile Settings Description (Continued)

Field	Description
***Max Sessions**	Type the maximum number of chat sessions that a staff member can be engaged in.
***Delay Between Chats**	Type the number of seconds that elapse before a new chat is presented to an agent.
Virtual Assistant Profile	This read-only check box is used to designate the profile for use with virtual assistant initiated chat requests. Refer to Configuring virtual assistant.
Enable Advanced Routing	Select this check box to designate the profile for use with advanced routing. Refer to Configuring advanced routing.
Chat Queues	Click this drop-down menu and select the chat queue you want to be available for this profile. After selecting a queue, the queue can be moved up or down in the queue list. If needed, you can then select additional chat queues to associate with this profile. Refer to Adding and editing chat session queues. **Note:** An agent must be assigned to a chat queue to log in to Chat and accept chat requests from customers.
Pull Policy	Click this drop-down menu to select a pull policy that determines the queues that chat requests are retrieved from and their order. • **Strict priority**—Uses the priority ranking of the available queues to determine which queue to pull chats from, starting with the highest ranking queue. Chats are pulled from this queue until the staff member's active session limit is met or the queue is empty. If the queue is empty before the staff member's limit is met, then chats are pulled from the queue with the next highest priority ranking. • **First due**—Uses the order that chats were requested to determine which chats are sent to staff members. The first chat requested is the first chat pulled from a queue. Chats are pulled from all the staff member's available queues in the order the chats were requested until the staff member's maximum session limit is met or all queues are empty. Queue ranking will not affect the pull order.

Table 395: Chat Profile Settings Description (Continued)

Field	Description
Advanced Routing - Chat Queues	Click this drop-down menu and select the advanced routing chat queue you want to be available for this profile. After selecting a queue, the queue can be moved up or down in the queue list. If needed, you can then select additional chat queues to associate with this profile. Refer to Configuring advanced routing.
Chat Agent Statuses	This section contains panels for moving chat agent statuses between the Available and Assigned lists. Chat agent statuses are added through the Chat Agent Statuses editor. Refer to Adding and editing chat agent statuses.
Available	The Available list displays chat agent statuses that are not available to agents on the Agent Status drop-down menu located on the Live Media bar. Select a status and click the Add button to move the status to the Assigned list.
Assigned	The Assigned list displays chat agent statuses that are available to agents on the Agent Status drop-down menu located on the Live Media bar. Select a status and click the Remove button to move the status to the Available list. **Note:** By default, the Logged Out–Unspecified radio button is selected so agents are not automatically logged in to Chat when they log in to Oracle Service Cloud. Select the Available–Unrestricted radio button to automatically log agents in to Chat (and make them available) when they log in to Oracle Service Cloud.

7 Click the Save and Close button on the ribbon.

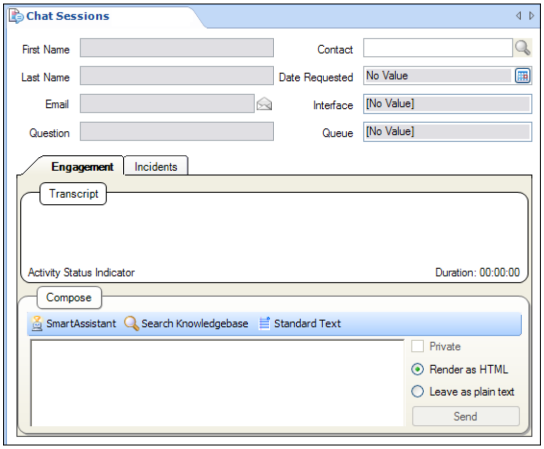
Important Before agents can use Chat, you must assign a profile containing chat permissions to their staff account. Refer to Adding and editing staff accounts.

Chat workspaces

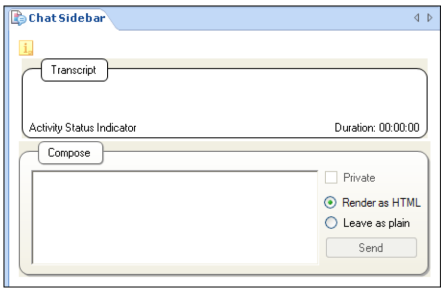
Chat contains two standard **workspaces** that are used by supervisors and agents. Workspaces determine what staff members see when they chat with customers or among themselves.

You can use the standard workspaces or create custom workspaces by copying one to use as a starting point. You assign a workspace in the profile used by agents. If you do not assign a workspace, the system uses the default.

- **Chat sessions**—The chat sessions workspace displays when an agent accepts a chat from a customer or when a supervisor monitors a chat. It consists of information about the customer plus an Engagement tab and an Incidents tab. The Engagement tab consists of a Transcript section (where the chat session is recorded to) and a Compose section (where you type your responses to customers). The Incidents tab contains a list of incidents previously submitted by customers, so you can review any correspondence that customers had with other agents prior to the chat session.



- **Chat sidebar**—The chat sidebar workspace displays as a new tab and is used when transferring chats to other agents or conferencing agents into chat sessions.



Additional chat configuration options

Powerful configuration options are available for Chat. For instance, you can set service level requirements to ensure agents respond to customers in a timely manner and set up **standard text** to increase agent efficiency when responding to contacts. Chat can be integrated with guided assistance so agents can present **guides** to contacts when they are chatting with them. Chat can also be integrated with **Oracle RightNow Feedback Cloud Service (Feedback)** so that contacts are presented with a **survey** at the conclusion of a chat session.

Configuring service level requirements

Chat has configurable service level requirements that allow you to set realistic service goals for your agents and reasonable expectations for your customers. For instance, you can define the amount of time that elapses before a customer tab changes from green to yellow, indicating to the agent that the customer is waiting for a response. The Chat service level configuration settings are located at Chat > General > Service Level. Refer to Customizing configuration settings and Chatting with customers.

Configuring agent and system service level statistics

From the Chat Agent Home dashboard, agents can view chat statistics, such as the available chat queues, the number of current chat sessions, active chats, waiting customers, average wait time, and average chat duration. By default, all cumulative statistics are a representation of system activity for the last thirty minutes and are updated each minute. By configuring agent service level statistics, you can configure both the reporting, or "lookback" period, and the frequency of updates to meet your requirements. The agent service level statistics configuration settings are located at Chat > General > Service Level.

- Customizing configuration settings
- Chatting with customers

Configuring standard responses and URLs for chat sessions

Agents can send chat responses to customers from predefined **standard text** responses. By creating standard responses and URLs for agents to use during chat sessions, your agents can save valuable time by not having to type answers for commonly asked questions or URLs.

A Shortcut field allows agents to quickly insert standard text responses and URLs during a chat session. To view the shortcut ID code, agents can hover over the response or URL entry to see the shortcut ID. Typing the shortcut ID in the Shortcut field and pressing **Enter** automatically sends the response or URL to the customer. For additional information about configuring standard text and URLs, refer to Adding standard text.

Tip If your organization uses **variables** in standard text, such as *contacts.first_name*, agents can type (or copy and paste) the variable inline when responding to a customer. The variable is then replaced with the appropriate data before the response is sent to the customer. For additional information about configuring variables, refer to Adding variables.

- ❖ Adding standard text
- ❖ Adding variables

Pulling chats from the wait queue

By default, chats are automatically pushed to agents, but this functionality is configurable. If you select the Pull Chat check box in an agent profile, agents can manually pull chat requests from the wait queue. If the Pull Chat check box is not selected, the Request Chat and Cancel Request buttons are disabled on the Live Media bar and chats are pushed to agents by the system.

Important If the Pull Chat check box is selected, you must also select a **pull policy**. Refer to Adding Chat permissions to profiles.

By clicking the Request Chat button, the agent is requesting to pull a chat from the wait queue. If there is a chat in the wait queue, the agent will receive a toast notification that the agent can either accept or decline. If the wait queue is empty, the Request Chat button remains active, letting the chat server know that the agent is attempting to request the next chat that enters the wait queue.

- ❖ Adding Chat permissions to profiles

Creating incidents from chat sessions

Chat can capture chat sessions as incidents, allowing you to track all chat correspondence. By default, agents are prompted to create an incident when a chat sessions ends, but this functionality is configurable so that an incident can be created when a chat session begins. In addition, incident fields can be added to the chat session workspace for viewing and editing purposes. By configuring the chat sessions **workspace**, you can customize this functionality to meet your organization's needs.

Important To create an incident when a chat session begins, you must copy the standard chat sessions workspace. The copied workspace will contain an Options button on the ribbon, which you can use to customize incident creation and editing at the beginning of a chat. If you do not copy the chat sessions workspace, incident creation is dictated by the default behavior. Contact your Oracle account manager for more information.

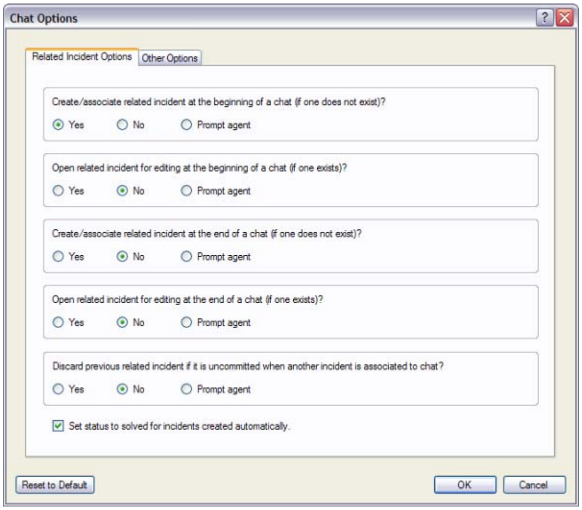
The following default actions are performed at the conclusion of the chat session.

- The agent is prompted to create an incident.

- The agent is prompted to enter wrap-up mode. Wrap-up mode allows agents to complete any post-chat tasks before automatically receiving the next chat request.
- If a customer account does not exist for the customer, a new customer account is created and a contact record is added to the knowledge base. If the email address field is not enabled on the Live Help page, the field is set to a generic email address (chat@nodomain.com).
- The Assigned field is set to the agent who participated in the chat session.
- The incident custom fields you have made visible on the Live Help page are updated.
- The chat conversation appears as a chat transcript on the Messages tab of the incident.
- The Subject field is populated with Chat Session.
- The status of the incident is set to Solved.

To configure incident creation and editing for chat

1. Click the Configuration button on the **navigation pane**.
2. Double-click Workspaces under Application Appearance. The Workspaces explorer opens on the **content pane**.
3. Click the Standard folder in the tree under Workspaces.
4. Right-click the Chat Sessions workspace and select Copy.
   - **a** Select the folder you want to add the copied workspace to.
   - **b** Type a name for the copied workspace in the Name field.
   - **c** Click the OK button. The workspace displays on the explorer in the folder that you selected.
5. Double-click the new workspace. The workspace opens on the content pane.
6. Click the Options button on the ribbon. The Chat Options window opens and the Related Incident Options tab displays by default.



7 Select from the options described in the following table.

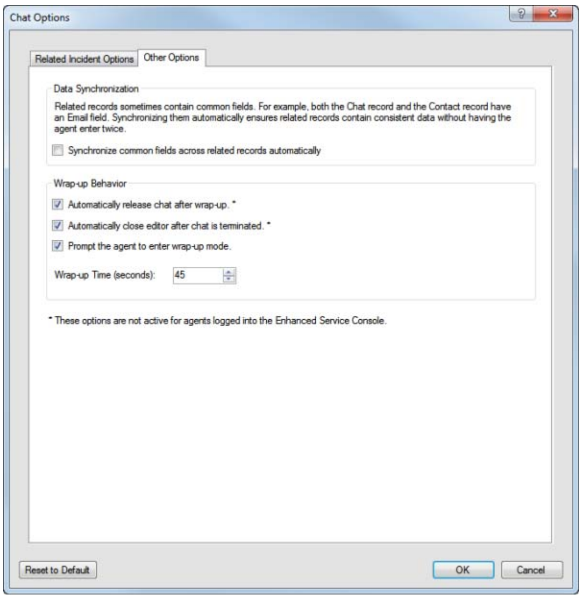
Table 396: Related Incident Options Tab Description

Option	Description
Create/associate related incident at the beginning of a chat (if one does not exist)?	Select from the following radio buttons. • Yes • No • Prompt agent **Note:** This option is set to Yes by default.
Open related incident for editing at the beginning of a chat (if one exists)?	Select from the following radio buttons. • Yes • No • Prompt agent **Note:** This option is set to No by default.
Create/associate related incident at the end of a chat (if one does not exist)?	Select from the following radio buttons. • Yes • No • Prompt agent **Note:** This option is set to No by default.

Table 396: Related Incident Options Tab Description

Option	Description
Open related incident for editing at the end of a chat (if one exists)?	Select from the following radio buttons. • Yes • No • Prompt agent **Note:** This option is set to No by default. Incident opens only when Wrap-up is selected to end a chat.
Discard previous related incident if it is uncommitted when another incident is associated to chat?	Select from the following radio buttons. • Yes • No • Prompt agent **Note:** This option is set to No by default.
Set status to solved for incidents created automatically.	Select this check box to set the incident's status to Solved if it is not automatically opened by Oracle Service Cloud. **Note:** This check box is selected by default.

8 Click the Other Options tab.



9 Select from the options described in the following table.

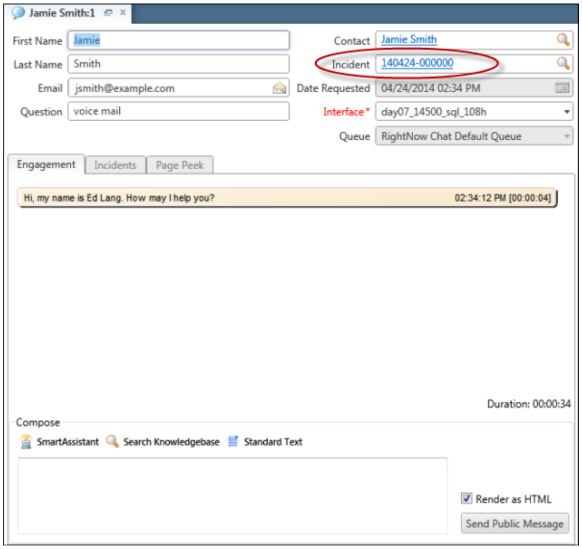
Table 397: Other Options Tab Description

Option	Description
Data Synchronization	This section contains an option to synchronize common fields across related records. For example, both the chat sessions and contact workspaces include an Email field that is synchronized for data consistency purposes.
Synchronize common fields across related records automatically	Select this check box to enable data synchronization between the following fields. • *chats.email* and *contacts.email* • *chats.first_name* and *contacts.first_name* • *chats.last_name* and *contacts.last_name* • *chats.c_id* and *incidents.c_id* **Note:** This feature is disabled by default.
Wrap-up Behavior	This section contains options for configuring wrap-up mode, which allows agents to complete any post-chat tasks before automatically receiving the next chat request.
Automatically release chat after wrap-up	Select this check box to automatically release a chat after wrap-up mode has ended. **Note:** This feature is enabled by default. This feature is not available for the enhanced Service Console.
Automatically close editor after chat is terminated	Select this check box to close the incident workspace after the chat has ended. **Note:** This feature is enabled by default. This feature is not available for the enhanced Service Console.
Prompt the agent to enter wrap-up mode	Select this check box to prompt agents to enter wrap-up mode. **Note:** This feature is enabled by default.
Wrap-up time (seconds)	Type the number of seconds to specify the maximum time allowed for chat sessions to wrap up. **Note:** This option is set to 45 seconds by default. If it is set to zero, agents will not be prompted to enter wrap-up mode.

10 Click the Save and Close button on the **ribbon** to save and close the custom workspace.

After configuring the custom workspace, it must be assigned to one or more profiles. Refer to Customizing profiles.

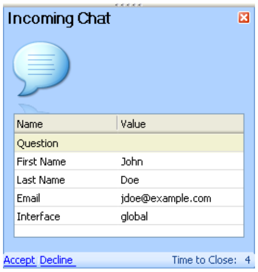
If you have configured Oracle Service Cloud to create an incident at the beginning of a chat session, the chat sessions workspace includes an Incident field that displays the reference number of the incident. To view or edit the incident while chatting with the customer, right-click the reference number and select Open. Refer to Editing incidents.



❖ Adding incidents
❖ Editing incidents

Configuring preliminary screen pop

Preliminary screen pop functionality enhances toast notifications that agents view before accepting chats. The preliminary screen pop displays as a two-column table that allows agents to view additional information about chat requests.



The information that displays on the preliminary screen pop table can be specified using the CHAT_ALERTFORM_DISPLAY configuration setting. You can also disable the preliminary screen pop using the CHAT_ALERTFORM_ENABLED configuration setting. Both settings are located at Chat > General > Agent. Refer to Customizing configuration settings.

- Chatting with customers
- Customizing configuration settings

Feedback for chat

Both website link and transactional surveys can be distributed to customers to gather feedback during or after a chat session. This includes the ability to either send an invitation message to the customer containing a link to the survey during the chat session (website link survey) or popping a browser window containing a survey at the end of the chat session (transactional survey). Customer responses to the surveys are linked back to the chat session to facilitate reporting. Refer to Creating surveys.

If you are creating a transactional survey, you must also create a **business rule** to trigger the survey upon completion of the chat session. Refer to Creating rule bases and Actions for chat rules.

- Creating surveys
- Creating rule bases
- Actions for chat rules

Guided assistance for chat

Guided assistance **guides** can be added to custom chat sessions workspaces to assist agents as they chat with customers. For information about adding the Guided Assistance control to a custom chat sessions workspace, refer to Adding fields to workspaces and scripts. For information about how agents use guides while chatting with customers, refer to Accessing guided assistance guides.

- Adding fields to workspaces and scripts
- Accessing guided assistance guides

Chat presence management

Presence management ensures that chat participants are notified when either the agent or the customer experiences communication difficulties with the chat service. By default, if the chat service does not receive signals from an agent or customer within two minutes, the chat service begins the process of disconnecting the agent or customer and handling any active chats in which either party is a participant. Presence management is available on a per-site basis.

Because agents and customers are recognized by the chat service as existing in an active, absent, or disconnected state, three configuration settings are available for modifying the intervals in which agents and customers are recognized by the chat service. The chat presence management configuration settings are located at Chat > General > Chat Session.

Proactive chat

With the proactive chat widget, you can offer a chat invitation to customers while they are using your website. The proactive chat widget is accessed from the **customer portal**. You can configure the chat widget to select when the chat invitation is displayed to the customer based on the time the customer has spent on the page and the number of searches conducted as well as chat agent availability and estimated wait time. Refer to Offering customers a chat session.

❖ Offering customers a chat session

Chat data purging

Because chat data can potentially build up quickly, it can be purged according to configuration settings located at Agedatabase Utility > Chat Purging.

Caution Be cautious when configuring chat data purging, as chat data is permanently deleted from the database. If you need assistance with chat data purging, submit an incident to our support site.

Configuring advanced routing

You can route incoming chats to agents with specific language or product skills. Routing chats to agents with a specific skill set ensures that customers' questions are answered accurately and efficiently.

Products and categories selected by the customer and the language of the customer portal page from which the chat was initiated determine which agent skills are required. If your customer is viewing the English version of the customer portal when they initiate the chat, connecting them to a chat agent fluent in English is going to provide the best experience. If your customer is looking for information about your newest product, connecting them to a chat agent who is an expert with that product is going to provide the quickest resolution.

Additionally, you can track the performance of advanced routing of chat sessions using standard reports available at Public Reports > Service > Advanced Routing.

Note Advanced routing reports and configuration options will not be visible until Chat and Smart Interaction Hub are enabled. To enable, contact your Oracle account manager.

You will need to complete the following tasks before you can configure and use advanced routing for incoming chats.

- Define products and categories. Refer to Adding and editing products, categories, and dispositions.
- Add product and category fields to the Live Help page of the customer portal. Refer to Live Help page.
- Create an advanced routing chat queue. Refer to Adding and editing chat session queues.
- Create and activate a rule to route chats to the advanced routing chat queue. Refer to Adding rules.
- Assign advanced routing permissions to a profile. Refer to Adding Chat permissions to profiles.

Additionally, you will need to configure skills and staff account skill scores to finish the configuration and begin using advanced routing for incoming chats.

To assign the Skill Edit permission in profiles

1. Click the Configuration button on the navigation pane.
2. Double-click Profiles under Staff Management. The report opens on the content pane.
3. Double-click the profile you want to edit. The Profiles editor opens.
4. Click the Permissions button on the ribbon. The Permissions page opens.
5. Select the Skill Edit check box in the Administration section on the Administration tab.
6. Click the Save and Close button on the ribbon.

Note Next, you need to add Product Skills and Language Skills to the navigation set. Refer to Modifying navigation sets.

To add skills

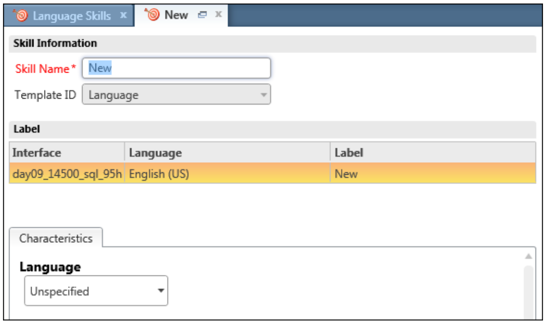
1 Click the Configuration button on the navigation pane.

2 Double-click Language Skills or Product Skills under Service. The Skills editor displays on the content pane.

3 To add a skill, click the New button on the ribbon to display the editor.

Or

To edit a skill, click it in the tree.



Caution You can delete a skill at any time by selecting the skill entry in the tree and clicking the Delete button on the ribbon. However, when you delete a skill, all instances of the skill will also be deleted.

4 Enter the following field information.

Table 398: Skills Editor Description

Field	Description
Skill Information	This section defines the name and type of the skill.
*Skill Name	Type the name of the skill.
Template ID	This read-only field identifies the type of skill.
Label	Select the interface.

Table 398: Skills Editor Description (Continued)

Field	Description
Characteristics	This section specifies the language, product, or category for the skill.
Language	Select a language from the drop-down menu. **Note:** This field is available only on the Language Skills editor.
Product	Select a product from the drop-down menu. **Note:** This field is available only on the Product Skills editor.
Category	Select a category from the drop-down menu. **Note:** This field is available only on the Product Skills editor.

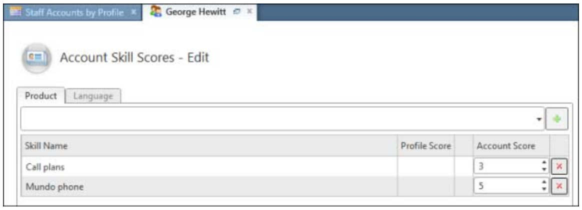
5 Click the Save and Close button on the ribbon.

To assign skill scores to a staff account

1 Click the Configuration button on the navigation pane.

2 Double-click Profiles under Staff Management and double-click the profile you want to edit. The Profiles editor opens.

3 Click the Skills button on the **ribbon**. The Account Skill Scores page opens.



4 Select the Product or Language tab.

5 Select a product or language from the drop-down menu.

6 Click the green plus sign to add it to the profile.

7 Assign the skill an account score from the drop-down menu.

8 Click the Save and Close button on the ribbon.

Configuring engagement engine rules

Engagement engine rules give you greater control over when, where, and how proactive and reactive chats are provided to your customers. A robust set of built-in rule conditions regarding customer behavior and page data determine the initiation of a chat offer.

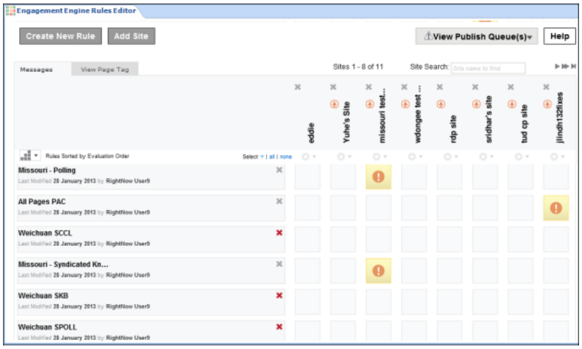
Note Engagement engine rules must be enabled. Contact your Oracle account manager.

To assign engagement engine rules permissions in profiles

1. Click the Configuration button on the **navigation pane**.
2. Double-click Profiles under Staff Management. The report opens on the **content pane**.
3. Double-click the profile you want to edit. The Profile editor opens.
4. Click the Permissions button on the **ribbon**. The Permissions page opens.
5. Select the Engagement Engine Rules check box on the Administration tab.
6. Click the Save and Close button on the ribbon.
7. Add the Engagement Engine Rules item to your **configuration list** for the Configuration button. Refer to Creating a navigation set for the administrator.

To access the Engagement Engine Rules editor

1. Double-click Engagement Engine Rules in the configuration list. The Engagement Engine Rules editor login screen opens on the content pane.
2. Enter your user ID, password, and account ID, provided by your Oracle account manager.
3. Click the Log In button. The Engagement Engine Rules editor opens on the content pane.



For detailed procedures about creating and editing engagement engine rules, click the Help button.

Configuring visitor browser history

Visitor browser history gives you more information about what your customers were viewing prior to initiating a chat. A list of up to fifteen URLs tracking the pages of your organization's website displays on the visitor browser history tab of the chat workspace. Visitor browser history provides agents with valuable information about what customers were viewing before requesting a chat.

Note Engagement engine must be enabled and all pages of your organization's website that you want to track must contain the engagement engine tag. Contact your Oracle account manager. Refer to Oracle Engagement Engine documentation for more information about tagging your pages.

Configuring Chat for customers

Many options are available for customizing Chat to match your business requirements. Because the chat pages are integrated with the **customer portal**, they are highly configurable.

Note Chat must be enabled in order for your customers to chat with agents. Contact your Oracle account manager.

Configuring the Live Help page

The Live Help page on the customer portal is your customers' entry point for submitting chat requests. Within each section you can place incident custom fields to gather additional information before customers can engage in chat. Refer to Live Help page.

Setting chat hours

You can set chat hours for Chat availability to control when customers can submit chat requests. Outside of those chat hours, customers cannot request assistance. Additionally, your chat hours are displayed on the Live Help page.

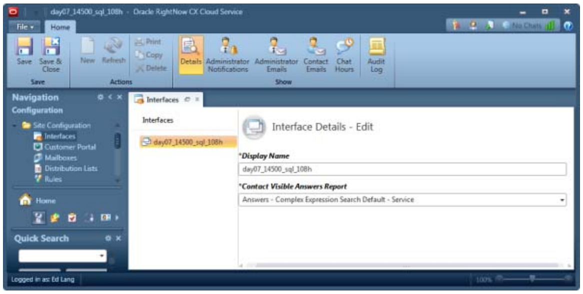
You can also specify more than one set of chat hours per day to allow for multiple time periods in a single day (for example, if you wanted to offer chat during peak traffic times only, such as 8:00 A.M. to 12:00 P.M. and 1:00 P.M. to 5:00 P.M.).

To set chat hours

1 Click the Configuration button on the **navigation pane**.

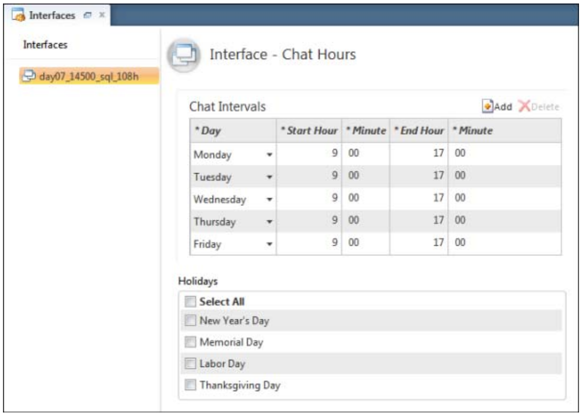
2 Double-click Interfaces under Site Configuration. The Interfaces tree displays on the **content pane**.

3 Click the **interface** to add chat hours to. The Interfaces editor displays on the content pane.



4 Click the Chat Hours button on the **ribbon**. The Chat Hours page opens.

Note Chat hour intervals will always be entered at the bottom of the list, but when you save your changes, the intervals are arranged in chronological order.



5 Enter field information described in the following table.

Table 399: Chat Hours Editor Description

Field	Description
Chat Intervals	Edit the following fields to set chat hour intervals.
Day	Click in this field and select the day of the week from the drop-down menu. **Note:** Use this functionality to specify more than one set of chat hours per day to allow for multiple time periods in a single day.
*Start Hour	Type the hour of the day that you want the service interval to begin. This field uses the 24-hour clock. For example, type 8 for 8:00 A.M and type 17 for 5:00 P.M.
*Minute	Type the minute of the hour that you want the service interval to begin.
*End Hour	**Note:** Type the hour of the day that you want the service interval to end. This field uses the 24-hour clock. For example, type 8 for 8:00 A.M and type 17 for 5:00 P.M.
*Minute	Type the minute of the hour that you want the service interval to end.

Table 399: Chat Hours Editor Description (Continued)

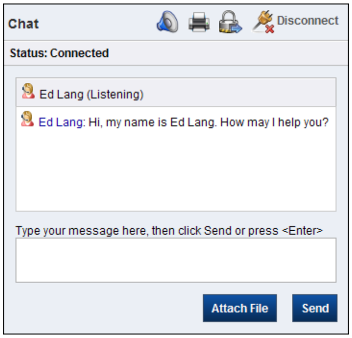
Field	Description
Holidays	Select the holidays that will affect your chat hours. Chat hours will not be available during selected holidays. **Note:** If you have not defined any holidays, this field is blank. Refer to Adding and editing holidays.

6 Click the Save and Close button on the ribbon.

The chat hours will now appear on the Live Help page of the customer portal. Refer to Live Help page.

Configuring the Chat page

The Chat page opens after customers submit chat requests from the Live Help page. From this page, customers can chat with agents, send file attachments, and print chat correspondence. Because your organization has its own image and web presence, you may want to customize the Chat page to match the look and feel your customers have come to expect. Refer to Chat page.



To learn more about Chat and how agents interact with customers while chatting, refer to Chat for agents.

Configuring virtual assistant

If your site is integrated with Oracle RightNow Virtual Assistant Cloud Service (Virtual Assistant), you can route incoming chats to a virtual assistant. For complete information about Virtual Assistant, refer to the Virtual Assistant documentation.

Using virtual assistant chats, you can ease the volume of chats requiring an agent. Many customer questions can quickly be answered with existing information in the knowledge base. Agent chats and virtual assistant chats can be initiated, routed, and tracked through the Service Console.

Note The virtual assistant component must be enabled in both Oracle Service Cloud and Virtual Assistant. Contact your Oracle account manager.

Once virtual assistant is enabled, you need to perform the following steps so incoming chats can be routed to the virtual assistant.

- Assign the Virtual Assistant Edit permission to your profile—You will need this permission in order to configure the virtual assistant for your application. Refer to Administration permissions.
- Add the Virtual Assistant editor to a navigation set—All configuration takes place on this editor. Refer to Creating a navigation set for the administrator.
- Create the virtual assistant profile, account, and chat queue—In this step, you will define the virtual assistant name that will display to customers during a chat and the chat queue that will handle incoming chats and escalation. Once you fill in this information and save it to the database, the virtual assistant profile is created automatically. Refer to Adding and editing chat session queues.
- Create chat rules to route virtual assistant chats and escalate virtual assistant chats to agents when necessary. Upon escalation, you can view a complete transcript of the virtual assistant chat leading to a smooth transition from virtual assistant to agent. Refer to Configuring engagement engine rules for steps to create rules.

To add virtual assistant edit permissions to a profile

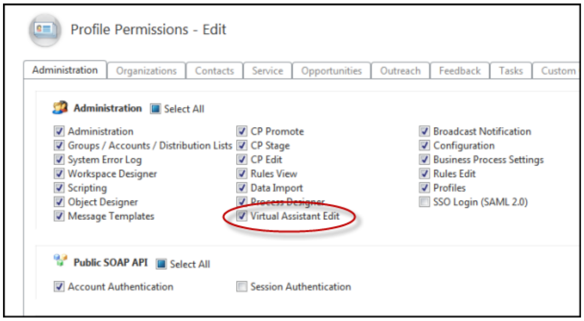
1 Click the Configuration button on the **navigation pane**.

2 Double-click Profiles under Staff Management. The report opens on the **content pane**.

3 Double-click the profile you want to edit. The Profiles editor opens.

4 Click the Permissions button on the **ribbon**.

5 Select the Virtual Assistant Edit check box in the Administration section on the Administration tab.



6 Click the Save and Close button on the ribbon.

To add the virtual assistant editor to a navigation set

1 Click the Configuration button on the navigation pane.

2 Double-click Navigation Sets under Application Appearance. The Navigation Sets explorer opens.

3 Right-click the navigation set you want to edit and select Open. The navigation set opens on the content pane.

4 Click Configuration on the right side of the content pane. The folders and configuration items associated with this button display in the lower portion of the right column.

5 Expand the Components list and Common folder in the left column.

6 Click the Virtual Assistant Editor item and click the Add button.

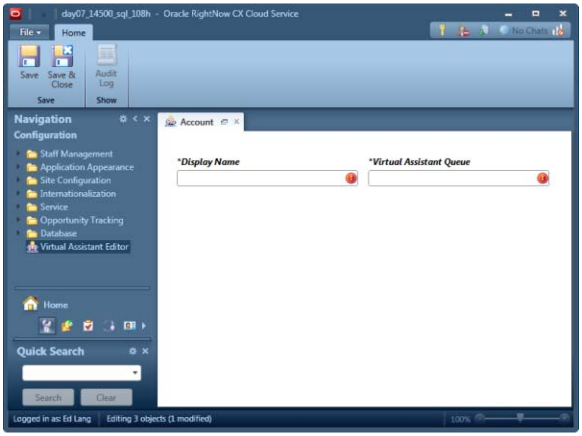
7 Click the Save and Close button on the ribbon to save the modified navigation set.

To create a virtual assistant profile, virtual assistant account, and virtual assistant queue

Note You can have only one virtual assistant account and one virtual assistant queue. Once created, the virtual assistant profile, account, and queue cannot be deleted. However, you can change the names of the virtual assistant account and queue using the Virtual Assistant editor.

1 Click the Configuration button on the navigation pane.

2 Double click Virtual Assistant Editor in the list.



3 Type the name for the virtual assistant in the Display Name field. This is the account name that will be displayed to customers during a chat.

4 Type the name for the virtual assistant chat queue in the Virtual Assistant Queue field. This is the name of the chat queue that you will use to configure rules to handle incoming chats and escalation.

5 Click the Save and Close button on the ribbon to save the information and create the virtual assistant profile (automatically labeled VA_Accounts_Profile), virtual assistant account, and virtual assistant queue.

Important In order to complete the configuration and begin routing incoming chats to the virtual assistant, you must create chat rules. Refer to Configuring engagement engine rules.

66

Chat

While self-service and email response management can solve the majority of customer issues, Oracle RightNow Chat Cloud Service (Chat) offers the best venue for certain queries, such as helping customers finalize purchases.

Chat for agents

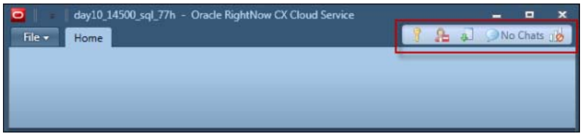
As a chat agent, you can serve customers in real time through typed conversation. While chatting, you can send predefined responses and URLs to customers, offering a faster response time. When you need assistance with a chat session, you can **conference** another agent into a chat or **transfer** a chat to another agent. Both the conference and transfer features can be useful if another agent is more knowledgeable in a particular area.

By default, when you are finished chatting with a customer, Chat creates an **incident** from a chat session, which results in all correspondence being recorded to the **knowledge base** for resolution and reporting purposes.

- Inserting standard text
- Chat for supervisors
- Chat for customers

Logging in to Chat

Once Chat is enabled and your **profile** includes chat permissions, you can log in as an agent from the **Live Media bar**. The Live Media bar appears on the **content pane** regardless of which **navigation list** is selected or what is displayed on the content pane. Refer to Adding Chat permissions to profiles.



Live Media bar

With the Live Media bar, you can log in, log out, and set your status in Chat. In addition, you can request and cancel chat requests, manage active chat sessions, and view the status of your connection with the chat server.

The following table describes the options available on the Live Media bar.

Table 400: Live Media Bar Description

Button	Description
Login Chat	Click this button to log in to Chat. The Agent Status drop-down menu (located next to the Login button) is enabled. **Note:** This button appears only when you are logged out.
Logout Chat	Click this button to log out of Chat. The Agent Status drop-down menu (located next to the Logout button) is disabled. **Note:** This button appears only when you are logged in.
Agent Status	Click the drop-down menu on this button to select an agent status type and status. **Note:** Chat contains default agent status types of Unavailable and Available. By default, the Unavailable status type is selected, but your administrator can select Available as your default status type. In addition, your administrator can add custom statuses and select any of them as the default. Refer to Adding and editing chat agent statuses.
Available	The Available status type signifies that you are available to chat.
Unavailable	The Unavailable status type signifies that you are not available to chat.
In Meeting	The In Meeting status indicates that you are in a meeting and unavailable to chat. **Note:** By default, this status does not display on the Agent Status drop-down menu.

Table 400: Live Media Bar Description (Continued)

Button	Description
On Break	The On Break status indicates that you are on a break and unavailable to chat. **Note:** By default, this status does not display on the Agent Status drop-down menu.
Request Chat	Click this button to request (pull) a chat from the queue. **Note:** By default, chats are pushed to you by the system. This button is enabled only if Pull Chat permission is set in your profile and you are available to chat.
Cancel Request	Click this button to cancel a chat request after it has been pulled from the queue. **Note:** By default, chats are pushed to you by the system. This button is enabled only if Pull Chat permission is set in your profile, you are available to chat, and the Request Chat button is not active.
Active Chats	If you are chatting with multiple customers, click this drop-down menu and select a chat session to participate in. When you are not chatting with customers, the drop-down menu is disabled and displays No Chats. When you are engaged in a chat session, the name of the customer you are chatting with displays in the menu. **Note:** The color of the selections in the Active Chats drop-down menu correspond to the customer tab colors. Refer to Chatting with customers.
Connectivity	A symbol with all green bars signifies that your connection to the Oracle server is excellent. A symbol with yellow bars signifies that your connection to the Oracle server is intermediate, but could be better. A symbol with a small red bar signifies that your connection to the Oracle server is poor. A symbol with white bars covered by a red circle signifies that you are logged out of Chat.

To log in to Chat

1 Click the Communication Center button on the **navigation pane**.

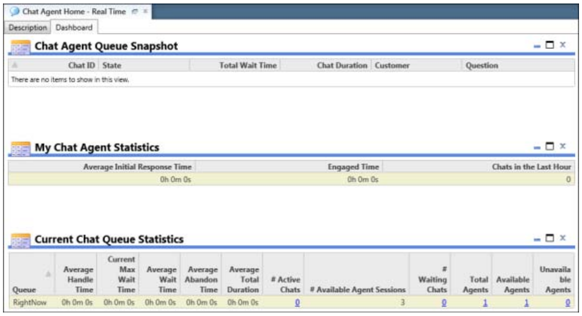
2 Double-click Chat Agent Home–Real Time or Chat Supervisor Home–Real Time in the **navigation list**. The dashboard opens on the **content pane**.

Note If the Chat Agent Home–Real Time or Chat Supervisor Home–Real Time reports do not display in your navigation list, you can add them if you have the correct profile permission. Refer to Customizing navigation and configuration lists.

3 Click the Login Chat button on the Live Media bar.

4 Click the Agent Status drop-down menu and select Available.

Tip Your administrator can configure your profile so that you are automatically logged in and available to chat after logging in to Oracle Service Cloud.



The following reports display on the Chat Agent Home dashboard.

- **Chat Agent Queue Snapshot**—Shows the service statistics for each chat queue that the logged-in agent is assigned to.
- **My Chat Agent Statistics**—Shows chat agents their basic chat statistics, including average response time, engaged time, and chats completed.
- **Current Chat Queue Statistics**—Shows the service statistics for all of the chat queues.

Tip The Chat Agent Home–Real Time dashboard refreshes every fifteen seconds or less, depending on server load.

❖ Customizing navigation and configuration lists

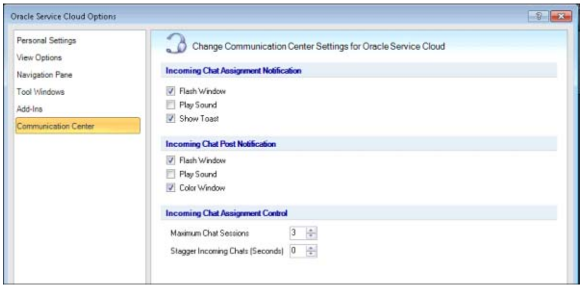
❖ Real-time reports

Changing chat options

Visual and audible alerts are available to notify you when customers request to chat or when they update existing chat sessions. You can change certain settings to provide the most effective assistance possible.

To change your chat options

1 Click **File** and select Options > Communication Center to view chat options.



2 Select from the options described in the following table.

Table 401: Chat Notification Settings Description

Field	Description
Incoming Chat Assignment Notification	Incoming Chat Notification options apply only to new chat requests.
Flash Window	Select this check box to flash the minimized window on the Windows task bar whenever a new chat arrives. **Note:** This option is selected by default.
Play Sound	Select this check box to enable an incoming sound alert whenever a new chat arrives.
Show Toast	Select this check box to display a toast notification whenever a new chat request arrives. **Note:** This option is selected by default.

Table 401: Chat Notification Settings Description (Continued)

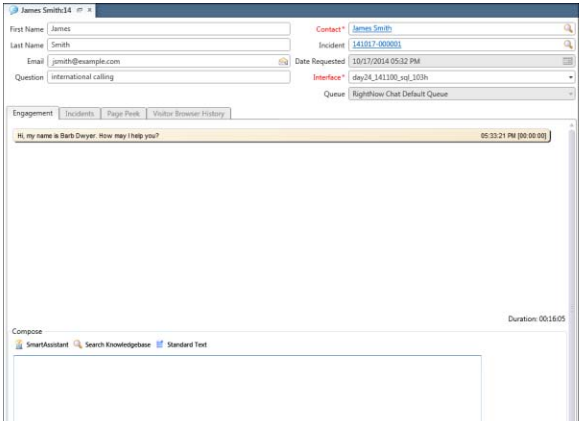
Field	Description
Incoming Chat Post Notification	Incoming Chat Post Notification options apply only to existing chats that are updated by the customer.
Flash Window	Select this check box to flash the minimized window on the Windows task bar whenever a chat is updated by the customer. **Note:** This option is selected by default.
Play Sound	Select this check box to enable sound alerts whenever the chat is updated by the customer.
Color Window	Select this check box to change colors on the customer tab as time passes to alert you that you need to respond to the customer. **Note:** This option is selected by default. If this option is not selected, a colored icon will display on the customer tab whenever the customer updates the chat session.
Incoming Chat Assignment Control	Incoming Chat Assignment Control options apply only to new chat requests.
Maximum Chat Sessions	This number represents the maximum number of chat sessions that you can have open at one time. Click the up arrow to increase sessions and click the down arrow to decrease sessions. **Note:** The maximum number is set by your administrator in your profile.
Stagger Incoming Chats (Seconds)	This number represents the amount of time that elapses before you are offered another chat. Click the up arrow to increase seconds and click the down arrow to decrease seconds.

3 Click the OK button to save your chat notification settings.

Chat sessions workspace overview

Your main role is to chat with customers and access tools to answer their questions. This is accomplished through the chat sessions **workspace**. It is important to familiarize yourself with the chat sessions workspace before chatting with customers.

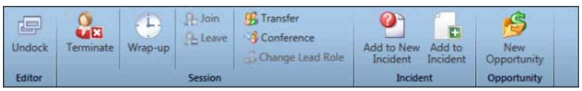
Note The following figure shows the standard chat sessions workspace for an agent after accepting a chat request from a customer. Keep in mind that what you see may be different if your administrator has created a custom chat sessions workspace and assigned it to your **profile**.



Notice in the previous figure the customer's name on the content pane tab. Additional tabs will display when you are engaged in multiple chat sessions.

Chat ribbon

While chatting with customers, multiple chat agent tools are available on the chat **ribbon**.



The following table describes the buttons on the chat ribbon.

Table 402: Chat Ribbon Description

Group/Button	Description
Editor	
Undock	Click this button to undock the chat workspace editor from the console and display it in a separate window.
Session	
Terminate	Click this button to terminate the chat session.
Wrap-up	Click this button to conclude the chat and enter wrap-up mode. Wrap-up mode allows you to do any post-chat tasks before automatically receiving the next chat request. Tasks can include creating an incident from the chat, adding the chat to an existing incident, or creating an opportunity from the chat.
Join	Click this button to join a chat session while monitoring a chat. Refer to Monitoring chats. **Note:** This button is disabled until you begin monitoring a chat session.
Leave	Click this button to leave a chat session during a conference. Refer to Conferencing another agent into your chat. **Note:** For this button to be enabled, you must be the agent who was conferenced into the chat.
Transfer	Click this button to transfer the customer to another agent. Refer to Transferring chats.
Conference	Click this button to conference another agent into your chat. Refer to Conferencing another agent into your chat.
Change Lead Role	Click this button to select the lead chat agent. **Note:** You must be involved in a conference session for this button to be enabled.

Table 402: Chat Ribbon Description (Continued)

Group/Button	Description
Incident	
Add to New Incident	Click this button to create an incident from the chat session while the chat is in progress or after you have entered wrap-up mode. Refer to Creating incidents from chat sessions. **Note:** Chat correspondence that is added to an incident is read-only and cannot be edited.
Add to Incident	Click this button to add the chat correspondence to an existing incident. Refer to Adding incidents. **Note:** Chat correspondence that is added to an incident is read-only and cannot be edited.
Opportunity	
New Opportunity	Click this button to create an opportunity from the chat session while the chat is in progress or after you have entered wrap-up mode. Refer to Adding opportunities.
Offer Advisor	Click this button to present an offer to the customer. Refer to Presenting offers. **Note:** Offer Advisor must be enabled. Contact your Oracle account manager.

❖ Working with the ribbon

Chat contact fields

After you accept a chat request, read-only customer fields display at the top of the content pane. Refer to Viewing customer information.

Tip Much of the information listed on the **content pane** is also provided in the toast invitation you see before accepting the chat request.

❖ Viewing customer information

Chat session workspace tabs

Below the information about the customer is a tab set containing information about the chat session and the customer's existing incidents.

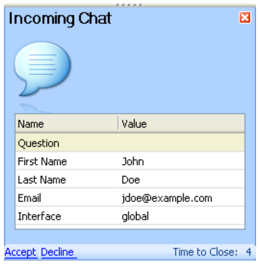
- **Engagement**—The Engagement tab is where you chat with customers.
  - ▷ **Transcript**—The Transcript section contains all chat correspondence between you and the customer. As text is sent from the customer, it appears in the Transcript section with a time stamp. After you send text to the customer from the Compose section, it is added to the Transcript section with a time stamp. Refer to Chatting with customers.
  - ▷ **Compose**—The Compose section is where you respond to a customer during a chat session. You can use **SmartAssistant** to request answers from the **knowledge base**, manually search for answers in the knowledge base, and send predefined text and URLs to the customer. Refer to Using agent chat tools.
- **Incidents**—The Incidents tab is where you view incident that the customer has submitted prior to requesting the chat.
- **Page Peek**—The Page Peek tab is where you view a snapshot of the web page that the customer was viewing when the chat was initiated.
- **Visitor Browser History**—The Visitor Browser History tab is where you view a list of up to fifteen URLs tracking the pages of your organization's website that the customer was viewing prior to initiating the chat. The amount of time browser history is retained is configured using the VS_PURGE_NON_PAGELOAD_EVENT_DAYS configuration setting (Agedatabase > Batch Processing > Visitor Service).

Note Engagement engine must be enabled in order to configure and use page peek and visitor browser history. Contact your Oracle account manager. We recommend creating a custom chat workspace and removing these tabs if you are not using page peek or visitor browser history.

Chatting with customers

If you are the agent selected for a chat request, you will receive a toast notification. Through chat notification settings, you can also enable sound notification. Refer to Changing chat options.

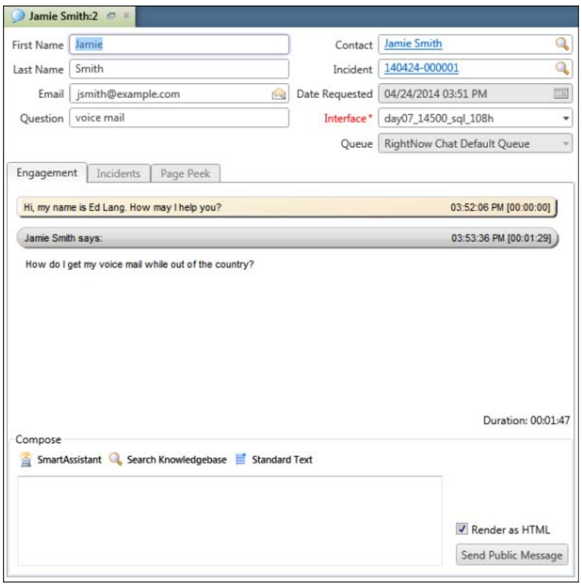
By default, the toast notification contains customer information, including the customer's first and last names, email address, and any incident custom fields that have been configured by your administrator.



To chat with a customer

1 Click Accept on the toast invitation to accept the chat request and activate the chat session. An automatic greeting is sent to the customer and displays in the Transcript section.

Note By default, you have fifteen seconds to manually accept or decline an incoming chat request. After fifteen seconds, the toast notification closes and the chat request is returned to the **chat queue** from which it originated.



The customer tab is gray until the customer asks a question. After the customer asks a question, the customer tab turns green to notify you that it is your turn to respond.

Important By default, the customer tab will change from green to yellow when a customer has been waiting for a response for thirty seconds. When the tab changes to red, it signifies that a customer has been waiting for sixty seconds. After you respond to the customer, the tab color changes back to gray. The timing of the changes in tab color can be configured by your administrator. Refer to Configuring service level requirements.

Additional customer tabs will display if you are engaged in multiple chat sessions. To manage the individual chat sessions, simply click the appropriate tab when the color changes from gray to green. You can also move between active chat sessions using the Active Chats drop-down menu on the Live Media bar. The colors of the selections in the drop-down menu correspond to the colors of the customer tabs. Refer to Live Media bar.

2 Type your reply in the message text box in the Compose section.

As you type, an inline spell checker recognizes misspelled words and marks them with a red zigzag underline. Right-clicking the misspelled word presents a list of substitute words from which you can choose. You can also choose to add words to your spell check dictionary. Refer to Inline spell checking.

Tip To copy and paste text, press **Ctrl+c** and **Ctrl+v**. To start a new paragraph, press **Shift+Enter**.

By default, the Render As radio button is selected when responding to customers. To send XML, HTML, or any other type of markup language to the customer without the tags being rendered, you can select the Leave As Plain radio button and all of the markup tags will display in the response to the customer.

3 Click the Send button or press **Enter** to send your response. Your response is added to the Transcript section and the customer's tab color changes back to gray, signifying it is the customer's turn to respond.

For information about terminating chats and creating incidents from chat sessions, refer to Creating incidents from chat sessions.

- Changing chat options
- Configuring preliminary screen pop

Email address sharing in Chat

Email address sharing lets you associate a single email address with multiple contact records. By default, email address sharing is disabled, but when it is enabled and a contact submits a chat request, the Email field on the chat sessions workspace displays a yellow icon with a black exclamation point if a duplicate email address is detected by the system. Although contact-matching logic is used to determine which contact to associate the chat session with, you can manually change the contact association by clicking the Contact field and selecting Change. Refer to [Email address sharing](#).

Using agent chat tools

Agent chat tools give you access to customer information, **SmartAssistant** suggested answers, answers in the Oracle Service Cloud **knowledge base**, and **standard text**. In addition, you can transfer chats to other agents, conference other agents into your chat sessions, access guided assistance **guides**, and **co-browse** with customers.

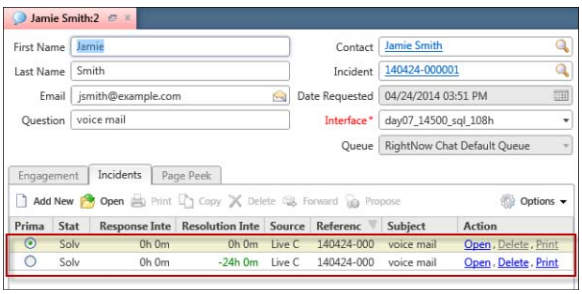
Note Agent chat tools are available only when chatting with customers.

Viewing customer information

You can tailor your assistance to customers if you know what issues they are experiencing. For example, if a customer has an open **incident** in Oracle RightNow Cloud Service (Service), you can view the contents of the incident while chatting with the customer.

To view incidents submitted by a customer

1 While chatting with a customer, click the Incidents tab.



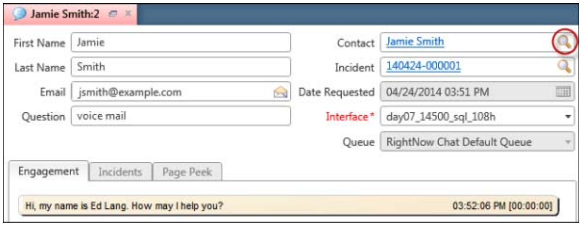
2 Double-click an incident to open it. Refer to [Working with incidents](#).

3 After reviewing the customer's current incidents, click the Engagement tab to return to the chat.

❖ Working with incidents

Searching for contact records

You can also access additional information about the customer using the Contact Search feature. For example, if the customer has a contact record in the **knowledge base**, you can see any **organization association** and where the customer is located.

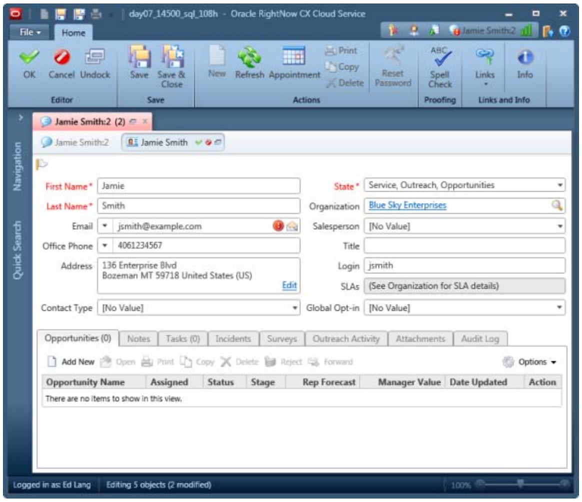


To search for a contact record

1 If a contact record exists, the customer's name appears in the Contact field. Click the customer's name and select Open to open the contact record. Depending on your profile permissions, other options (Change, Add New, Print, and Clear) will also be available. Refer to Contacts.

Or

If a contact record does not exist for the customer, the Contact field is blank. Click the Search button to the right of the Contact field to open the Contact Search window. Refer to Searching for records.



2 After viewing or editing the contact record, click the OK button on the **ribbon** to return to the chat session.

❖ [Contacts]()

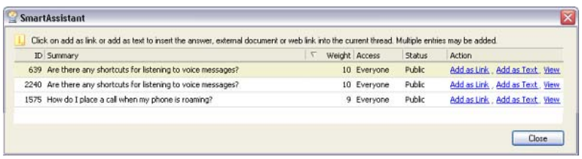
❖ [Searching for records]()

Accessing SmartAssistant suggested answers

While chatting with a customer, you can use **SmartAssistant** to suggest answers for a customer's question. SmartAssistant searches the knowledge base and returns possible answers related to the chat history text. A new window opens containing links to the suggested answers. If an answer is pertinent, you can add the answer text or the answer link to the Compose section and send it to the customer.

To access SmartAssistant suggested answers

1 Click the SmartAssistant button on the Compose section. The SmartAssistant window opens.



2 To add the answer link to your response, click Add as Link.

3 To add the answer text to your response, click Add as Text.

4 Click the Close button to close the SmartAssistant window.

Searching the knowledge base

As you respond to a customer's question, you might remember answers that address similar issues. Rather than conducting a time-consuming hunt of the **knowledge base** to find the relevant answers, Service lets you search for specific answers. Using any of four text searching techniques, you can quickly identify answers to resolve a customer's question. Refer to Appending answer content.

Inserting standard text

Frequently used responses and URLs can be prepared in advance so that you can quickly send them to customers. These tools not only help you assist customers more quickly, but they also eliminate typographical errors.

Your administrator can also define shortcut IDs for standard responses and URLs. Then, you can type an ID in the Shortcut field and press **Enter** to automatically insert the response or URL in the message text box in the Compose section.

To insert standard text

1 Click the Standard Text button on the Compose section. The Standard Text window opens.

Tip To search for standard text, click Find in List above the left column.

2 Click a standard text item to add it to the Preview section of the Standard Text window.

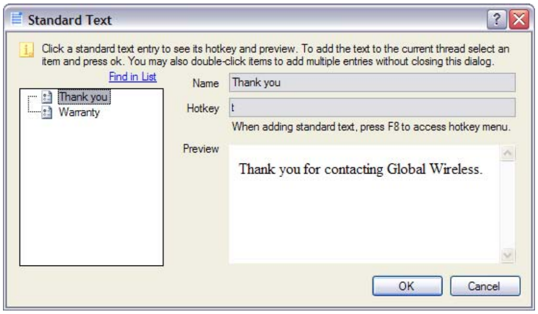
Or

Drag the standard text item from the left column into the Compose section of the response.

Or

Copy the text in the Preview section and paste it into the response.

Tip If an HTML version of the standard text item is available, it displays by default in the Preview section of the window. Otherwise, the plain text version displays.



3 Click the OK button or press **Enter** to add the standard text to your response. The standard text is now ready to send to the customer.

Tip If you send a URL to the customer, it will display as an active link on the Chat page.

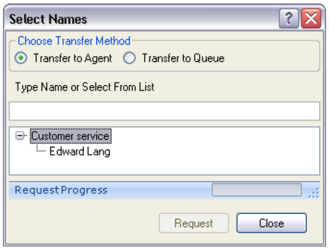
Also, if your organization uses variables in standard text, such as *contacts.first_name*, you can type (or copy and paste) the variable inline when responding to a customer. The variable is then replaced with the appropriate data before you send your response to the customer. If a variable entry does not have a value associated with it, you must type the value before sending your response to the customer.

Transferring chats

When necessary, you can transfer a chat to another agent during a chat session. This feature is helpful when another agent has more experience with a specific topic than you do.

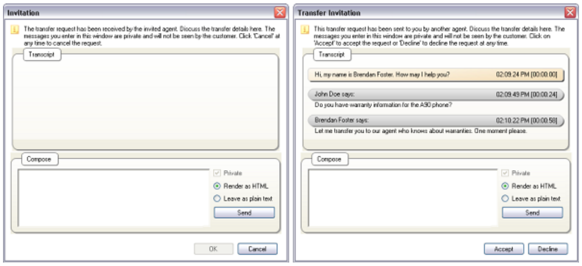
To transfer a chat to another agent

1 At any point during your chat session, click the Transfer button on the **ribbon**. The Select Names window opens.



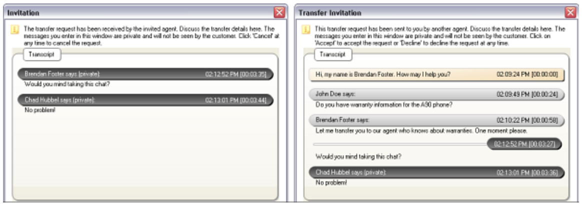
Tip Select the Transfer to Queue radio button if you are not aware of a specific agent who can accept the transfer. Chat will then route the chat to an agent in the queue.

2 When you see the agent you want to transfer the chat to, select the agent's name and click the Request button. The agent receives a toast notification to view or decline the transfer request. When the agent clicks View, the toast invitation closes, the Invitation window opens on your workstation, and the Transfer Invitation window opens on the agent's workstation.



You and the agent can chat before the other agent accepts or declines the transfer request. The customer cannot view text on the Invitation and Transfer Invitation windows because the Private check box is selected by default.

Caution If you clear the Private check box, all internal chat correspondence is displayed to the customer.



The agent clicks the Accept button to accept the transfer. A message notifies you that the transfer has been accepted. Both windows close, the associated contact and incident are automatically saved, and the chat is transferred to the agent. Once the transfer is made, the customer is notified of the transfer and the new agent's name appears in the chat transcript instead of your name.

Tip If the agent declines the transfer, the chat remains with you.

3 Click the OK button to complete the transfer, which removes the active chat from the **content pane**.

❖ Conferencing another agent into your chat

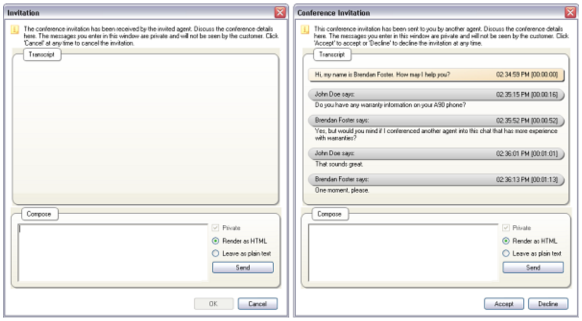
Conferencing another agent into your chat

Agent conferencing is another way Service helps you provide superior service to your customers. Conferencing can be useful when you want to include another agent in your chat session to help you solve a customer's problem.

To conference another agent into your chat

1 At any point during your chat session, click the Conference button on the **ribbon**. The Select Names window opens.

2 When you see the agent you want to conference into the chat, select the agent's name and click the Request button. The agent receives a toast notification to view or decline the conference request. When the agent clicks View, the toast invitation closes, the Invitation window opens on your workstation, and the Conference Invitation window opens on the agent's workstation.



You and the agent can chat before the other agent accepts or declines the conference request. The customer cannot view text on the Invitation and Conference Invitation windows because the Private check box is selected by default.

Caution If you clear the Private check box, all internal chat correspondence is displayed to the customer.

The agent clicks the Accept button to accept the conference. A message notifies you that the conference has been accepted. Both windows close, the associated contact and incident are automatically saved, and the new agent is conferenced into the chat session. If the agent declines the conference, the chat remains with you.

3 Click the OK button to complete the conference request.

Once the conference starts, you and the customer are notified. Each person can send text and all those in the conference can see the message text and the name of the person who sent it.

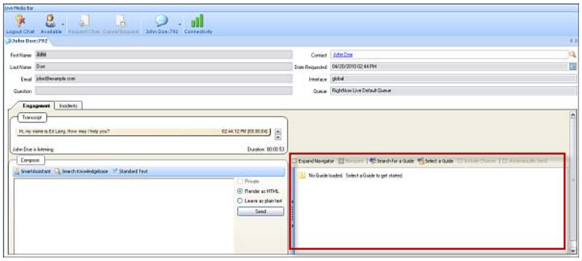
Tip The Leave button is disabled on the ribbon because you initiated the conference. The agent you conferenced in must click the Leave button on the ribbon to exit the conference. Refer to Chat ribbon.

❖ Transferring chats

Accessing guided assistance guides

The Guided Assistance **control** can be added to custom chat sessions workspaces so **guides** are available when you chat with customers. At any point during a chat session, you can search for a guide or select a guide to resolve difficult questions.

Note Guided assistance must be enabled before you can access guides on the chat sessions workspace. Contact your Oracle account manager.

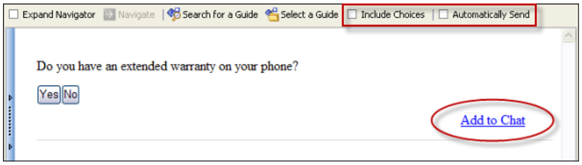


To access a guide during a chat session

1 While chatting with a customer, click the Search for a Guide or Select a Guide button on the Guided Assistance control. The Search for a Guide or the Select a Guide window opens. Refer to Finding answers using guided assistance.

2 To insert a question into the guide, click Add to Chat. Add to Chat is available for all questions and text explanations in guides.

Important If the Leave as Plain Text option is selected, all HTML tags and other code that is entered in the reply (including the code in guides) will display as unrendered.



Note The Include Choices check box controls how chat message text is formed from questions when you click Add to Chat. When the Include Choices check box is selected, the chat message text that is added to the Compose section includes both the question and its choices. When it is not selected, it includes only the question.

The Automatically Send check box controls what happens to the chat message text when you click Add to Chat. When this check box is selected, the chat message text is automatically sent to the customer. When it is not selected, it is added to the Compose section of the chat and is not sent to the customer until you click the Send button.

Co-browsing with customers

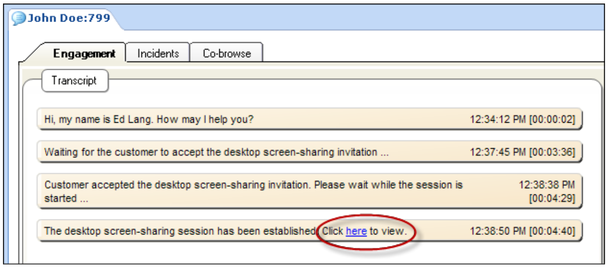
With co-browse, you can guide a customer through a web page using your mouse or other pointing device to demonstrate actions. In effect, you take control of the customer's web browser to show the customer how to complete an action. Co-browse helps eliminate the confusion that can arise when giving instructions to customers through dialog or text. Co-browse is also effective for assisting customers in filling out forms or completing a sale.

Note Co-browse must be enabled before you can begin a session with a customer. In addition, you can engage in only one co-browse session at a time.

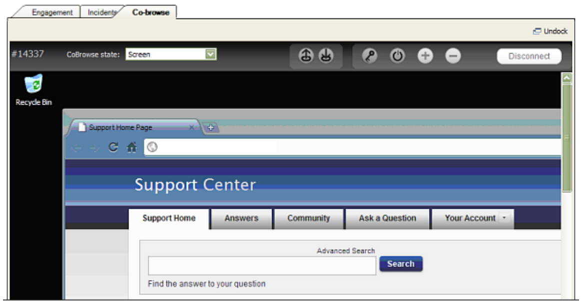
To co-browse with a customer

1 While chatting with a customer, click the Screen Sharing button on the **ribbon**. A message informs you that an invitation is being sent to the customer to start a co-browse session.

After the customer accepts the co-browse request, the chat transcript is updated with a link so you can view the customer's desktop. (Co-browse is also available for customers using mobile devices.)



2 Click the link to view the customer's desktop. Focus shifts from the Engagement tab to the Co-browse tab, where the customer's desktop displays.



The co-browse toolbar allows you to control the co-browse session. The following table describes the buttons and fields on the co-browse toolbar.

Table 403: Co-Browse Toolbar Description

Button/Field	Description
CoBrowse State	Click this drop-down menu to select a co-browse state, which specifies how much control you have over the customer's desktop.
Screen	Select this option to view the customer's desktop. **Note:** This option is selected by default.
+ Pointer	Select this option to view the customer's desktop and control the movement of the mouse or other pointing device. **Note:** With this option selected, mouse-click functionality does not work on the customer's desktop.

Table 403: Co-Browse Toolbar Description (Continued)

Button/Field	Description
+ Full Mouse	Select this option to view the customer's desktop, control the movement of the mouse or other pointing device, and control mouse-click functionality.
+ Full Mouse/Keyboard	Select this option to view the customer's desktop, control all mouse or other pointing device functions (pointer and mouse clicks), and use your keyboard to enter information on the customer's desktop (for instance, to help the customer fill out a form).
Send File	Click this button to send a file to the customer's desktop.
Receive File	Click this button to receive a file from the customer's desktop.
Credentials	Click this button to open a window on the customer's desktop that requests their Windows user name and password. **Note:** If a contact provides credentials for you, you can reboot the contact's workstation without knowing their user name and password.
Reboot	Click this button to reboot the customer's workstation.
Zoom In	Click this button to zoom in on the customer's desktop.
Zoom Out	Click this button to zoom out on the customer's desktop.

3 Click the Disconnect button to disconnect from the co-browse session. Both you and the customer are notified when the co-browse session has ended.

Note The customer can also disconnect from the co-browse session at any time. Although co-browse information is not recorded to the chat transcript, it is recorded to the knowledge base and can be viewed using standard co-browse reports. Refer to Co-browse session reporting.

❖ Configuring co-browse on chat workspaces
❖ Co-browse session reporting

Creating incidents from chat sessions

By default, when you terminate a chat session, you are prompted to save the chat as an **incident** for tracking and reporting purposes. If you choose to create an incident, it is assigned to you with a **status** and **status type** set by your administrator. The dialog from the chat session is inserted as a response thread. Refer to Adding incidents.

Note If your administrator configured chat to create an incident at the beginning of a chat session, an Incident field displays as a key field and contains the incident's reference number. To edit the incident while chatting with a customer, right-click the reference number and select Open.

To create an incident from a chat session

1 When the customer ends the chat session, a message asks if you want to create an incident from the chat session. Click the Yes button to open the incident on the content pane.

The Subject field populates with "Chat Session" and the chat transcript is inserted as a response thread on the Messages tab. The party that initially disconnected from the chat (customer or agent) is also identified in the response thread.

Note In the event the chat transcript is converted to an incident and emailed to the customer, private chat messages that took place between you and other agents during the chat are hidden to prevent customers from seeing them.

You can edit this incident in the same manner as any other incident, including changing the incident subject. Refer to Editing incidents.

2 Click the Save and Close button to save and close the incident.

- ❖ Adding incidents
- ❖ Editing incidents

Chat for supervisors

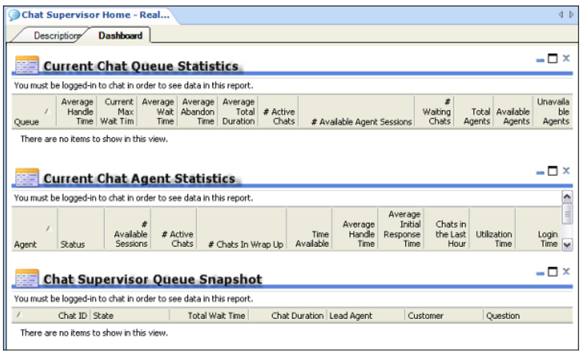
Through real-time reporting, Chat makes it easy to manage a group of agents. From the Chat Supervisor Queue Snapshot **dashboard**, you can view all agents and their active chat sessions, the number of customers waiting to chat, the average wait time, and the average time duration of chats. If you think it is necessary to intervene in a chat session, you can do so at any time by joining the chat and **monitoring** it.

- Chat for agents
- Chat for customers

Chat supervisor overview

As a chat supervisor, your main role is to **monitor** agents who are involved in active chat sessions. It is important to familiarize yourself with the Chat Supervisor Home–Real Time dashboard before monitoring agents.

Note For information about agents and the standard workspace they work in, refer to Chat sessions workspace overview. What you see may be different if your administrator has created a custom workspace.



The following reports display on the Chat Supervisor Home–Real Time dashboard.

- **Current Chat Queue Statistics**—Shows the service statistics for each chat queue.
- **Current Chat Agent Statistics**—Shows the service statistics for each chat agent.

- **Chat Supervisor Queue Snapshot**—Shows all current chat engagements, which includes customers who are waiting to chat with agents. From this report, you can monitor chats. Refer to Monitoring chats.

Tip The Chat Supervisor Home–Real Time dashboard refreshes every fifteen seconds or less, depending on server load.

❖ Monitoring chats

Monitoring chats

If you notice a chat duration that is unusually long, you can monitor the chat to see if there are any problems. By making sure chats flow through the system without interruption, you are increasing customer satisfaction.

When you monitor a chat session, the chat automatically opens on the Engagement tab. The look and feel of the Engagement tab is the same for both supervisors and agents. Refer to Chat sessions workspace overview.

Note When monitoring a chat, you might want to disable auto scrolling on the chat sessions workspace so the Transcript window does not automatically scroll to the newest thread every time an agent or customer updates the chat session. For information about the Auto Scroll Control Position property, refer to Options properties.

To monitor a chat session

1 Click the Login Chat button to log in to Chat. Refer to Logging in to Chat.

2 From the Chat Supervisor Queue Snapshot report, right-click the chat you want to monitor. The chat session opens on the Engagements tab and you can view all correspondence between the agent and customer. At this point, the agent does not know the chat is being monitored.

3 To join the chat you are monitoring, click the Join button on the ribbon. The Compose section is activated and the agent is notified that you joined the chat.

4 To send a message to the agent, type your message in the Compose section.

Important The Private check box is selected by default to ensure that the customer does not see your message to the agent and does not know you are monitoring the chat. If you want the customer to see your message to the agent and to be notified that you are participating in the chat session, clear the Private check box.

5 Click the Send button to send your message to the agent.

6 To leave the chat you are monitoring, click the Leave button on the ribbon. You are disconnected from the chat and the monitoring session ends. The agent is notified that you left the chat. If you cleared the Private check box during the monitoring session, the customer is also notified that you left the chat.

Chat for customers

The Chat page is the customer interface where customers chat with agents. Because the Chat page is integrated with the **customer portal**, it can be customized to suit your customers' needs.

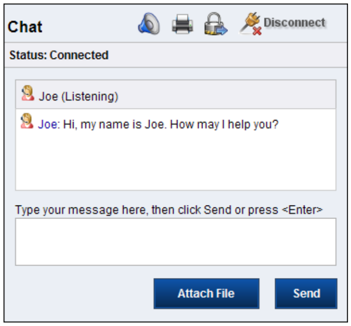
❖ Chat for agents

❖ Chat for supervisors

Chatting with an agent

After customers submit a chat from the Live Help page on the customer portal, the Chat page opens. This page displays a wait time and queue position when customers are waiting to chat. In addition, customers can search the **knowledge base** for answers to their questions while they are waiting to chat with an agent.

The following figure shows the Chat page after an agent accepts a customer's request to chat. What your customers see may be different if your administrator has customized this page.



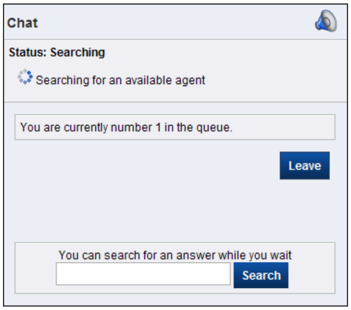
The following table describes the options available on the Chat page.

Table 404: Chat Page Description

Button	Description
Mute	Customers click this button to mute incoming sound notifications.
Print	Customers click this button to print the chat correspondence at any time.
Send an Off the Record Message	Customers click this button to send unrecorded messages during the chat session. **Note:** This button appears only during a chat session. Agents cannot send unrecorded messages to customers. If the chat session is saved as an incident, the unrecorded message displays as "<username>: Message Removed."
Disconnect	Customers click this button to disconnect from the chat session. **Note:** This button appears only during a chat session.
Close	Customers click this button to close the Chat page. **Note:** This button appears only after a chat session is disconnected.
Attach File	Customers click this button to send file attachments during the chat session. **Note:** This button appears only during a chat session.
Send	Customers click this button to send messages to an agent. **Note:** This button appears only during a chat session. Customers can also press **Enter** to send messages.

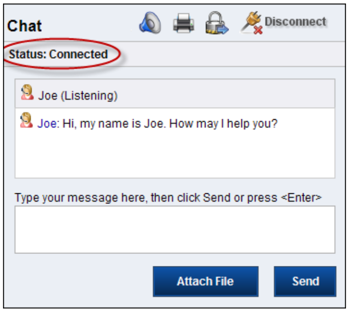
To chat with an agent

1 From the Live Help page, the customer fills in the required information and clicks the Submit Request button. The Chat page opens.



While Chat searches for an available agent, the customer is placed in the wait queue and is provided with the estimated wait time and position in the queue.

After an agent accepts the chat request, the status section changes from Searching to Connected, and the Chat Dialog section opens with a greeting from the agent.



2 The customer types a question and presses **Enter** or clicks the Send button. The customer's question is added to the Chat Dialog section.

3 The agent responds to the customer. The agent's response is added to the Chat Dialog section.

4 After receiving an answer to the question, the customer clicks the Disconnect button to terminate the chat session. The agent is notified that the customer has disconnected.

5 The customer clicks the Close button to close the Chat page and return to the Live Help page.

Chat customer reconnect

In the case of a crashed browser or otherwise improperly terminated chat session, the chat reconnect feature allows customers to reconnect to their previous chat session. When customers are unintentionally disconnected from a chat and attempt to chat again, they receive a message stating that an existing chat session was found and are given the option of resuming that session. Upon reconnecting to the chat session, the Chat page is populated with all chat correspondence that was present before the chat became disconnected, and customers can resume the chat session where they left off without having to wait in a **chat queue**.

Outreach and Feedback

The following sections are intended for administrators and staff members and contain information and procedures for configuring and using areas specific to Oracle RightNow Outreach Cloud Service and Oracle RightNow Feedback Cloud Service.

- Explorers
- Audiences
- Content Library
- External Suppression List
- Outreach Mailings
- Outreach Campaigns
- Feedback Questions
- Feedback Surveys

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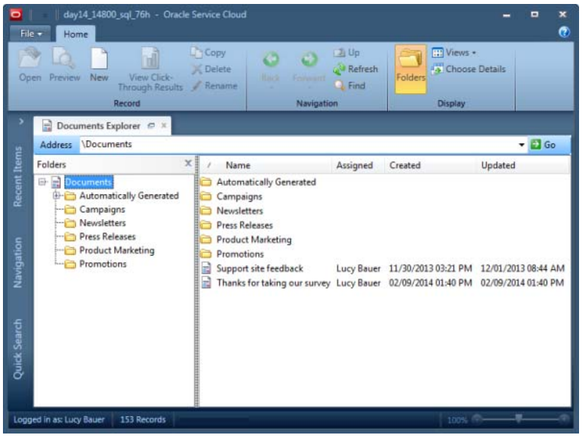
Explorers

Explorers are used to access and manage **mailings**, **campaigns**, **questions**, **surveys**, **audiences**, and **content library** items that have been created in Oracle RightNow Outreach Cloud Service (Outreach) and Oracle RightNow Feedback Cloud Service (Feedback). With these explorers, you can browse, search, and organize items in hierarchical folders on the content pane using functions similar to Windows Explorer.

Opening explorers

Like Windows Explorer, each Oracle Service Cloud explorer consists of a set of hierarchal folders and a detailed list of available items. Explorers display items of their associated type. For instance, documents are listed in the Documents explorer.



While each explorer generally resides in its associated **navigation list**, it is important to remember that explorers can be added to (or removed from) any navigation list, just like a report. For example, the Mailings explorer can be added to the Mailings navigation list or to a different navigation list. If you are unable to locate a specific explorer in any of your navigation lists, contact your administrator.

The following table describes how to open each Outreach and Feedback explorer from its most common location on the navigation pane. For more detailed information about using explorers, refer to Explorers.

Table 405: Outreach and Feedback Explorers

Explorer	Description
Outreach Explorers	These explorers are used to manage mailings and campaigns.
Mailings	Click the Mailings button on the navigation pane and double-click Mailings Explorer. Refer to Outreach Mailings.
Campaigns	Click the Campaigns button on the navigation pane and double-click Campaigns Explorer. Refer to Outreach Campaigns.
Feedback Explorers	These explorers are used to manage questions and surveys in Feedback.
Questions	Click the Questions button on the navigation pane and double-click Questions Explorer. Refer to Feedback Questions.
Surveys	Click the Surveys button on the navigation pane and double-click Surveys Explorer. Refer to Feedback Surveys.
Audience Explorers	These explorers are used to manage audiences in both Outreach and Feedback.
Contact Lists	Click the Audiences button on the navigation pane and double-click Contact Lists Explorer. Refer to Adding contact lists.
Segments	Click the Audiences button on the navigation pane and double-click Segments Explorer. Refer to Creating segments.
Content Library Explorers	These explorers are used to manage content library items in both Outreach and Feedback.
Documents	Click the Content Library button on the navigation pane and double-click Documents Explorer. Refer to Creating documents.

Table 405: Outreach and Feedback Explorers (Continued)

Explorer	Description
Tracked Links	Click the Content Library button on the navigation pane and double-click Tracked Links Explorer. Refer to Adding tracked links.
File Attachments	Click the Content Library button on the navigation pane and double-click File Attachments Explorer. Refer to Adding files.
Templates	Click the Content Library button on the navigation pane and double-click Templates Explorer. Refer to Creating templates.
Snippets	Click the Content Library button on the navigation pane and double-click Snippets Explorer. Refer to Creating snippets.

Searching in explorers

Explorers contain a number of search functions to help you find mailings, campaigns, segments, contact lists, documents, tracked links, files, templates, snippets, surveys, and questions. The following procedure describes how to search for a document from the Documents explorer, but the steps are the same for searching for other Outreach and Feedback items.

Note You can also search for mailings, campaigns, surveys, and documents from anywhere in the product using Quick Search. Refer to Searching for records with Quick Search.

To find a document

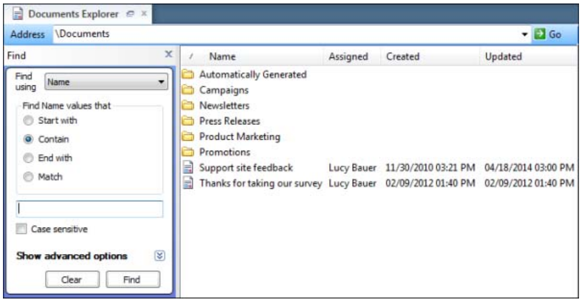
1 Click the Find button on the ribbon. The left side of the content pane displays a Find menu, hiding the folders tree.

2 Enter the following field information.

Table 406: Documents Explorer Search Menu Description

Field	Description
Find Using	This drop-down menu contains the names of all the columns in the documents list. Each column is associated with one of three **data types** that are supported in explorer searches. • Strings—Search for strings that start with, contain, end with, or match the value you enter in the text box. • Dates—Search for dates before, on, or after today's date. You can also click the calendar in the search text box to display the current month's calendar and select another day, or click the arrows at the top of the calendar to change months. • Integers—Search for values that are less than, equal to, or greater than a number. You can also click the up and down arrows in the search text box to increase or decrease the search value. **Note:** The data type of the column you select determines the available search criteria. For example, if you select Created (a date data type), you can search for dates before, on, or after a selected date.
Search text box	Type your search text in this field.
Case Sensitive	When searching a string column, select this check box to match the case.
Show Advanced Options	Click this text or the down arrow to display the following advanced search options.
Search globally, replace results	Select this radio button to remove the results from the previous search and replace with results from this search. This method is selected by default.
Search within results, replace results	Select this radio button to search only the current results and keep only those that match this search.
Search globally, append to results	Select this radio button to keep results from the previous search and add results from this search.
Return Non-matching Items	Select this check box to return all documents that do *not* match your search criteria.

3 Click the Find button. The search results replace the explorer's document list.



4 To clear the value from the search text box, click the Clear button.

5 To replace the search results with the original documents list, click the Refresh button on the ribbon.

For additional information about explorer search functionality, click here.

Editing in explorers

The following procedures describe how you can edit, copy, and delete items from Outreach and Feedback explorers. Items include the following:

- Mailings
- Campaigns
- Contact lists
- Segments
- Documents
- Tracked links
- Files
- Templates
- Snippets
- Surveys
- Questions

To edit an item

1 Select the item you want to edit and click the Open button on the ribbon. The item opens on the content pane.

2 Edit the necessary fields and click the Save button.

To copy an item

1 Select the item you want to copy and click the Copy button on the ribbon. The Copy As window opens.

2 Select the folder you want to save the item in and type the name of the item in the Name field.

3 Click the OK button to save the item.

To delete an item

Select the item you want to delete and click the Delete button on the ribbon.

Caution If you attempt to delete an item that is being used in a document, mailing, survey, or campaign, a **dependency** warning will list each location where the item is used and provide you with an option to cancel the deletion. If you choose to continue deleting the item, all references to the item become invalid and you must manually update each reference appropriately. For example, if you delete a tracked link used in a survey, you must edit the survey and either remove the tracked link or replace it with a valid link.

Automatically generated folders

The Documents explorer contains a folder for content that is automatically created when a document is saved or copied in a mailing or survey. The system creates a copy of each document that is inserted in a mailing message or a survey invitation message, and each page that is added to the questionnaire in a survey. Each copy is stored in the corresponding subfolder in the Automatically Generated folder. You can reuse these documents or use them to track the content you have used in previous mailings or surveys. Additionally, automatically generated copies of each message template can be found in the Automatically Generated folder. However, the message template documents are read-only.

The Tracked Links explorer also contains an Automatically Generated folder that contains all **tracked links** that are created when the tracked link converter runs. Refer to Tracked link conversion.

Important If you modify the content in a mailing or survey, those changes are also made to the automatically generated copy and impact all other instances of that copy. For example, if you create a mailing and insert an existing document on the Message tab, a copy of that document is automatically generated and stored in the Automatically Generated folder. Each time you modify the content in that mailing, the copy is also modified, but the original document is not modified. However, if you share a document with a mailing or survey, every time the content is updated, all occurrences of the document are also updated.

The following table describes each automatically generated folder and its corresponding contents.

Table 407: Automatically Generated Folders Description

Folder	Description
Documents explorer	The Documents explorer contains the following automatically generated folders.
Mailing Messages	This subfolder contains a copy of every document created on the Message tab in a mailing once the mailing is saved. The new document is named "YYMMDDHHMM <mailing name>" where YYMMDDHHMM is the year, month, day, hour, and minute of the first save, and the mailing name corresponds with the name of the original mailing. If more than one message is used (for example, the same document is reused in multiple mailings), the new document is named "YYMMDDHHMM <mailing name>: <message name>" where "message name" corresponds with the message defined on the Message tab of the mailing. **Note:** The document name is limited to 80 characters.
Message Templates	This subfolder contains a copy of every administrator notification, administrator email, and contact email for this interface. The documents are named the same as the corresponding message. **Note:** These documents are read-only.

Table 407: Automatically Generated Folders Description (Continued)

Folder	Description
Survey Invitation Messages	This subfolder contains a copy of every document created on the Invitation Message tab in a survey. The new document is named "YYMMDDHHMM <survey name>" where YYMMDDHHMM is the year, month, day, hour, and minute of the save, and the survey name corresponds with the name of the original survey. **Note:** The document name is limited to 80 characters.
Survey Pages	A subfolder is created for each survey created in basic mode and is named the same as the corresponding survey. These folders contain a document for each page in the questionnaire. When you add, edit, or delete a page in the questionnaire, the corresponding document is also modified. **Note:** Documents are read-only if they are created in basic mode but can be edited if they are converted to **advanced mode**.
Survey Reminders	This subfolder contains a copy of every document created on the Reminders tab in a survey. The copy is named "YYMMDDHHMM <reminder name>" where YYMMDDHHMM is the year, month, day, hour, and minute of the save, and the name corresponds with the name of the original reminder. **Note:** The name is limited to 80 characters. You can edit the reminders in this folder as long as they have not been sent.
Tracked Links explorer	The Automatically Generated folder in this explorer contains all of the tracked links that are created every time the tracked link converter runs. The tracked links are organized in subfolders using the YYYY-MM-DD format, which corresponds to the date the tracked links are generated. Refer to Tracked link conversion. **Note:** You can edit or move the tracked links in this folder.

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Audiences

Oracle Service Cloud provides two methods for grouping contacts to create audiences for your broadcast mailings and surveys: contact lists and segments. Contact lists are static lists comprised only of contacts that have been explicitly selected, changing only when you manually add or remove contacts. Segments are dynamic lists comprised of contacts that match one or more **fixed filters** that you specify. Because segments are dynamic, their contents change over time as updated contacts fall in and out of alignment with the filters.

When you create a mailing or survey, contact lists and segments can be used alone or included with (or excluded from) other lists and segments to form your audience. You can include and exclude a total of fifty contact lists and segments, each containing a vast number of contacts. This gives you all the flexibility you need to assemble audiences that are specific, optimized, and efficiently maintained.

Note For information about creating and working with contacts, see Contacts. For information about uploading contacts to your knowledge base, see Adding contacts. For information about adding segments and lists to mailings and surveys, see Defining the broadcast mailing audience and Defining the broadcast survey audience.

- Contacts overview
- Importing data
- Defining the broadcast mailing audience
- Defining the transactional mailing audience

Adding contact lists

Contact lists are static sets of contacts you can use to define audiences for broadcast mailings and surveys. They are static in that you add each contact to a list manually. Otherwise, the list does not change, even when a contact record is modified in the database. Every time a contact list is used, it returns the same set of contacts.

You can create as many lists as you want and update them by manually adding or removing contacts as needed. Once a contact list is created, you can update your audiences to include or exclude it.

Note The following procedure assumes that you access the Contact Lists explorer from the Audiences **navigation list**. However, this explorer may reside in a different navigation list.

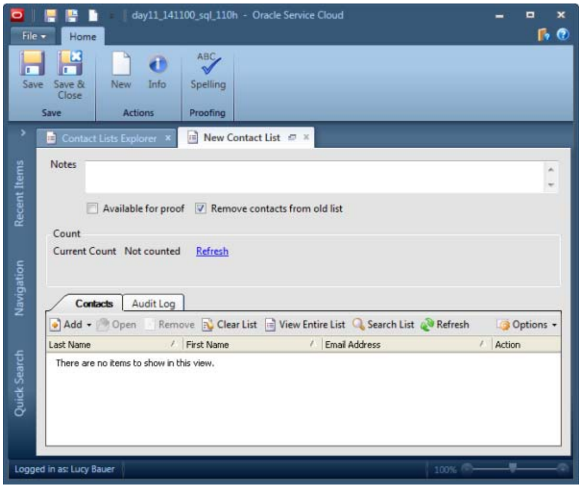
To add a contact list

1 Click the Audiences button on the navigation pane.

2 Double-click Contact Lists Explorer. The Contact Lists explorer opens on the content pane.

3 Click the New button. A new contact list opens on the content pane.

Tip You can also create a contact list from an open contact list by clicking the New button. Additionally, if your navigation set is configured to add contact lists from the file menu, click File and select Audience > Contact List. See To configure the file menu.



4 Enter the following field information.

Table 408: Contact List Description

Element	Description
Notes	Type any notes associated with the contact list in this field.
Available for Proof	Select this check box to let contacts in the list receive **proof** requests. See Sending a proof message.
Remove Contacts from Old List	Clear this check box to let contacts stay in contact lists for longer than the time frame set in the database. When this check box is selected, contact list data is removed according to the value of a database variable that is set, by default, to 400 days. To change this value, submit an incident to our support site. Also see Answer ID 4802 on our support site. **Important:** We recommend leaving this check box selected to ensure your database tables stay at a manageable size.
Count	This field displays the number of contacts in the contact list the last time it was counted and the date and time the count was performed.

Table 408: Contact List Description (Continued)

Element	Description
Details	To view the details of a count, click Details in the Current Count section after the count has been performed. A window opens showing the number of contacts belonging to the contact list, and how many of those contacts have an invalid or duplicate email address or no address. **Note:** A count must be performed before Details are available.
Refresh	To calculate the number of contacts currently in the list, click Refresh. **Note:** The list must be saved before the count is refreshed.

5 To add new and existing contacts to the list on the Contacts tab, see Managing contact lists.

6 To view a list of actions taken on the contact list, click the Audit Log tab. See Audit logs.

7 To check the spelling of any fields that have spell checking enabled, click the Spelling button. See Spell checking.

8 Click the Save and Close button to save the contact list. The Save As window opens.

Note You can click the Save button to save the contact list without closing it.

9 Select the folder you want to save the contact list in and type the name of the contact list in the Name field.

10 Click the Save button to save the contact list.

Managing contact lists

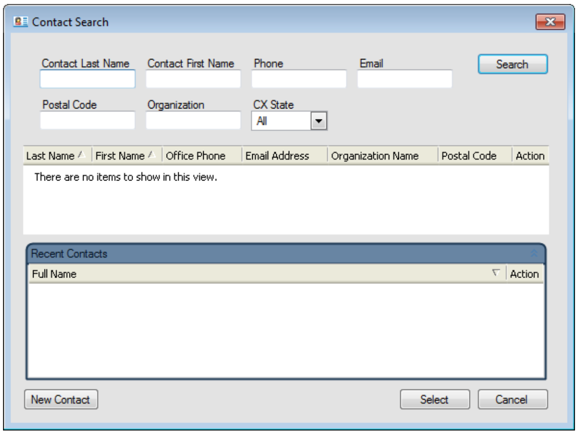
From the Contacts tab of the contact list editor, you can add existing contacts to the list or create new contacts and add them to the list. You can also search your list of contacts, remove contacts from the list, or edit contact records. Refer to Contacts.

Tip Contacts can also be added to lists in large batches using the Data Import Wizard. See Importing data.

Keep in mind that in some cases your contact list may time out before it can show your results. When this happens, a message displays on the Contacts tab of the contact list editor where you have the option to queue your results and then view them in a report. Alternatively, you can refine your search criteria to return less data. See Queuing reports and Viewing queued reports.

To add a contact to the contact list

1 On the Contacts tab of a contact list, click the Add button and select Add Existing. The Contact Search window opens where you can search for the contact you want to add.



2 To search for an existing contact to add to your contact list, enter the search criteria in one or more fields. You can use any of the following fields to define your search criteria.

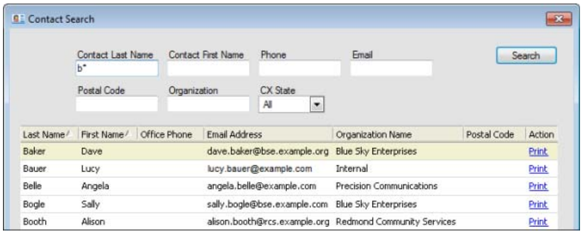
- Contact Last Name
- Contact First Name
- Phone

- Email
- Postal Code
- Organization
- CX State

Tip You can use an asterisk (*) as a wildcard in your search term.

3 To add a new contact, click the New Contact button. See [To create a contact and add it to the contact list](#).

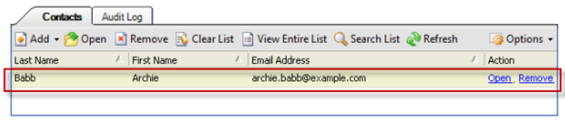
4 Click the Search button. A list of contacts that match the search criteria you entered appears in the grid below the search criteria fields.



5 Click a contact to select it.

Note You can select multiple contacts by pressing **Ctrl** while clicking additional contacts. Selected contacts that are already in the list are not added again.

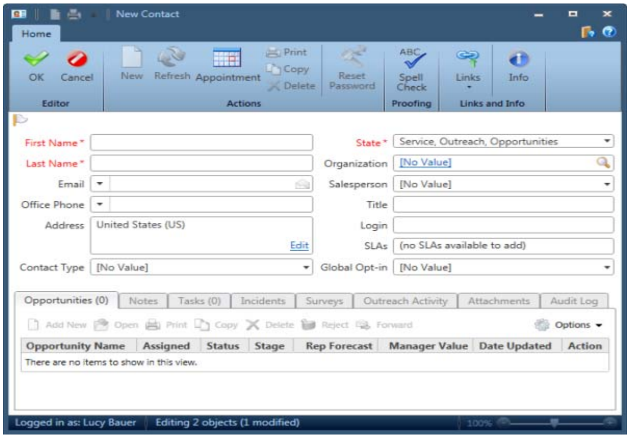
6 Click the Select button to add the selected contact to the list. The contact appears on the Contacts tab with the other contacts in the contact list.



7 Click Save to save the contact list.

To create a contact and add it to the contact list

1 On the Contacts tab of a contact list, click the Add button and select Add New. The New Contact window opens.



2 Enter contact field information. Names of required fields appear in red text and are flagged with asterisks.

3 Click the OK button. The contact appears on the Contacts tab with the other contacts in the contact list.

Important Clicking the OK button on the child window saves the new contact in memory but it is not added to the knowledge base until you save the contact list (the item from which the contact record was created). See Adding contacts from other records.

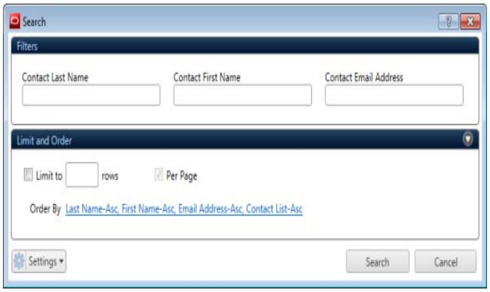
4 Click Save to save the contact list.

Searching the contact list

You can search the list of contacts using several fields and return the results in the grid. Contacts can then be removed from the contact list or a contact record can be edited.

To search the contact list

1 From the open contact list, click the Search List button on the Contacts tab toolbar. The Search window opens.



2 In the Filters section, type the last name, first name, or email address of the contact you are searching for. Partial values can be used.

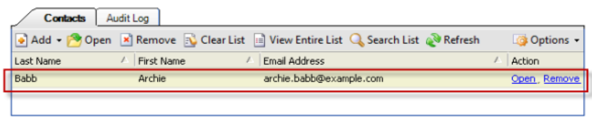
3 In the Limit and Order section, type the maximum number of contact records you want to return.

   a To return all matching contact records, but limit the number of contact records per page, select the Per Page check box.

4 To sort by fields other than last name followed by first name, click the Order By text and select from the available fields.

5 To design your Search window layout and to set, restore, or reset your default filter values, click the Settings drop-down menu. See Settings.

6 Click the Search button. The search results are returned on the Contacts tab.



7 To edit a contact record, click Open next to the contact.

   Or

   Select the contact and click the Open button.

8 To remove a contact from the contact list, click Remove next to the contact.

   Or

Select the contact and click the Remove button.

Note This does not delete the contact from the knowledge base. It only removes the contact from the list.

9 To remove all contacts from the contact list, click the Clear List button.

a Click the Yes button to confirm.

10 To clear the search results and view the entire contact list, click the View Entire List button.

11 To refresh the contact list, click the Refresh button.

12 To access report options, such as sorting and exporting, click the Options button. See Distributing reports and dashboards and Changing output options.

Creating segments

While contact lists are created by manually adding contacts to a static list, segments are dynamic lists of contacts created by defining contact criteria and selecting filters. When you create a segment, you can filter using any field in the Contacts *(contacts)* table, including custom fields, and by joining the Contacts table to other tables.

For example, some segments might include all contacts who live in Montana, all contacts between the ages of 18 and 24, or all contacts who live in Montana *and* are between the ages of 18 and 24. You can also filter contacts by whether they have submitted an incident related to a certain product.

Once you create a segment, it can be used in mailings and surveys and the group of contacts is constantly adjusted and updated as contact data meets or falls outside of the segment's requirements. For example, a segment that selects customers based on their age produces a different result every time it is used for a mailing, assuming that customer contact data changes.

Note The following procedure assumes that you access the Segments explorer from the Audiences **navigation list**. However, this explorer may reside in a different navigation list.

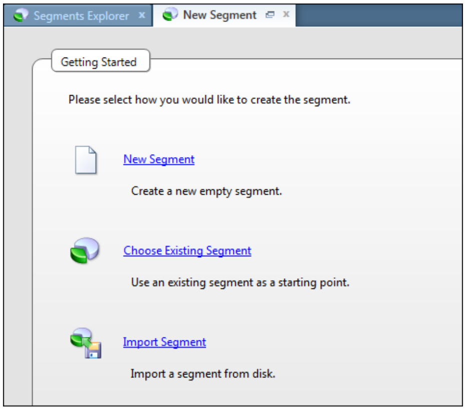
To create a segment

1 Click the Audiences button on the navigation pane.

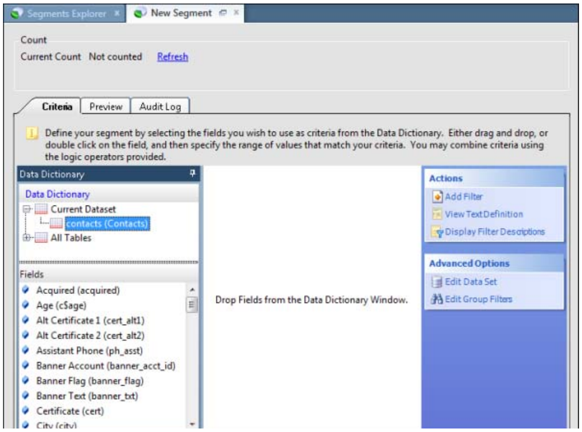
2 Double-click Segments Explorer. The Segments explorer opens on the content pane.

3 Click the New button on the ribbon.

Tip You can also create a segment from an open segment by clicking the New button. Additionally, if your navigation set is configured to add segments from the file menu, click File and select Audience > Segment. See To configure the file menu.



a To create a segment from scratch, click New Segment.



The content pane is divided into sections to group common functions and help make creating the segment easier. At the top is the current count of contacts meeting the segment's criteria. The tabs let you define the segment filters and **data set**, preview a list of contacts belonging to the segment, and view the **audit log**.

b To create a segment by copying an existing segment, click Choose Existing Segment. The Choose Existing Segment window opens where you can select the segment you want to use.

c To import an XML segment, click Import Segment. See To import a segment.

4 Enter field information to define the segment's filters on the Criteria tab. See Adding segment filters.

5 To preview the contacts belonging to the segment, click the Preview tab. See Previewing segments.

6 To refresh the audience count, click Refresh in the Count section.

Note Occasionally, the **replication database** used to process mailings can fall slightly behind the **operational database**. If the system determines that the replication contact data is not current, the audience count is labeled as "Estimated."

7 To view the details of an audience count, click Details in the Count section after the count has been performed. A window opens showing you the number of contacts belonging to the segment, along with how many of those contacts have an invalid or duplicate email address or no address.

8 To view a list of actions taken on the segment, click the Audit Log tab. See Audit logs.

9 Click the Save and Close button to save the segment. The Save As window opens.

Note You can click the Save button to save the segment without closing it.

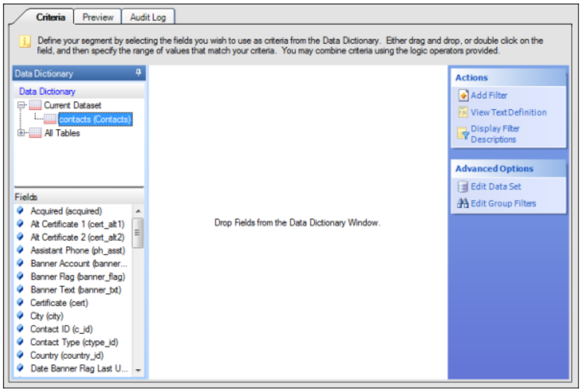
10 Select the folder you want to save the segment in and type the name of the segment in the Name field.

11 Click the Save button to save the segment.

Adding segment filters

Filters determine which contacts are returned when the segment is applied to contact data. You can use expressions and operators to determine a **data set**, and you can also use SQL-type functions (such as aggregate, string, date, logical, and math functions) to define expressions when creating a filter.

From the Criteria tab, you can define the filters used by your segment and the database tables used to create the filters.



The Data Dictionary section lists the database tables that can be accessed by the segment. You can also join tables to columns in other tables, such joining the Contacts *(contacts)* table to the Incidents *(incidents)* table See Editing the data set.

The Fields section shows the fields (database columns) associated with the table selected in the Data Dictionary section. You can drag and drop fields from the Fields section to the Filters section to filter contacts by that field. For example, you could select the Contacts table in the Data Dictionary section and drag and drop the State/Province field from the Fields section to the Filters section to filter contacts by the state in their address. For a description of the available tables and columns, see the Data dictionary.

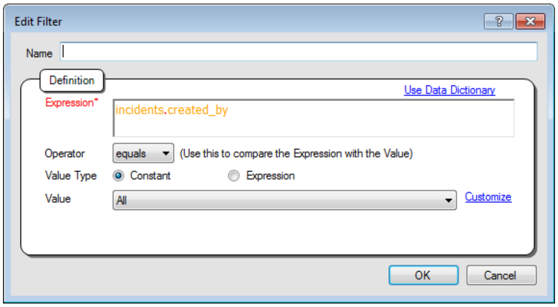
In addition to drag-and-drop functionality, you can click Add Filter in the Actions section to add a filter. Once filters are added, you have additional options in the Actions section to edit and delete filters and change the logical expression used for multiple filters. See Defining logical expressions.

To add filters to a segment

1 Select a table in the Data Dictionary section. The table's columns appear in the Fields section.

2 Drag and drop a column name from the Fields section to the center of the Criteria tab. The Edit Filter window opens.

Note You can also add a filter by clicking Add Filter in the Actions section or double-clicking a column name in the Fields section.



3 Type the name of the filter in the Name field. The name appears in the Filters section of the Criteria tab.

4 Enter the following field information.

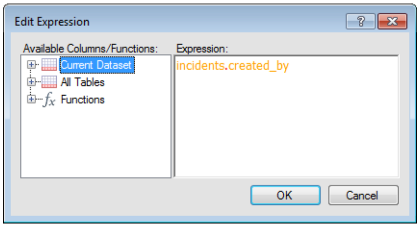
Table 409: Edit Filter Window Description

Field	Description
***Expression**	Type the expression you want to use to limit the data set in this field. The syntax is <table_name>.<column_name>. As you type an entry in the Expression field, a drop-down menu displays a list of database tables that begin with the letters you type. You can type the complete expression or select a table and field from the drop-down menu. You can also select a table and column or function (see Adding functions) by right-clicking in the field. **Note:** If you drag and drop a column name from the Fields section, the field contains the table and column name.
Operator	Select the operator to use in comparing the expression to the value. The available operators vary depending on the expression. See Selecting filter operators.
Value Type	Select the type of value to match with the expression from these radio buttons.
Constant	Select this radio button to type the value to complete the filter or select the value from a drop-down menu or calendar (depending on the expression).
Expression	Select this radio button to type an expression to complete the filter, using the syntax <table_name>.<column_name>.
Value	Type the value that the expression is compared to. The available options in the Value field change depending on the type of field, the operator you select, and the value type. For example, when the field type is menu, you select it from a drop-down menu, but when the field type is date, you select if from a calendar.

5 To customize the list of values that display in the Value field, click Customize.

Note The Customize link is available only when you select equal or list values from the Operator drop-down menu *and* when the Value field displays as a drop-down menu.

6 To select an expression or expression value from a list of database fields and functions, click Use Data Dictionary. The Edit Expression window opens.



a Enter the expression by dragging and dropping columns and functions from the Available Columns/Functions section to the Expression section.

Table 410: Edit Expression Window Description

Expression	Description
Current Dataset	Select a table and column from the tables currently used in the segment. The Contacts table is available by default.
All Tables	Select a table and column from the available tables.
Functions	Select a function to filter contacts in the segment. See Adding functions.

b Click the OK button to save the expression and return to the Edit Filter window.

7 Click the OK button to save the filter.

Note If there is an error in the expression, the Expression field changes to orange and an error exclamation point appears. Hover over the exclamation point for more information about the error. You must either correct the error or click the Cancel button to exit the window.

8 To edit a filter, select the filter and click Edit Filter in the Actions section.

Or

Right-click the filter in the Filters section and select Edit Filter.

9 To display the filter's expression in the Filters section instead of the name you defined, click Display Filter Descriptions. To toggle back to the filter name, click Display Filter Names.

10 To delete a filter, select the filter and click Delete Filter in the Actions section.

Or

Right-click the filter in the Filters section and select Delete Filter.

11 To define the logical expression used when multiple filters are included in the segment, see Defining logical expressions.

12 To define the tables and joins used in the segment, click Edit Data Set in the Advanced Options section. See Editing the data set.

13 To apply group filters to the segment, click Edit Group Filters in the Advanced Options section. See Creating group filters.

Adding functions

Functions let you apply standard mathematical operators to your segment. You can also combine different functions and database fields in an expression. After you drag a function to the expression on the Edit Expression window, you must enter the variables used in the function. You can either type the variables in the Expression field or, if the variable is an item listed in the Available Columns/Functions field, you can drag the item into the function's expression.

Prerequisite

Before you can add a function, you must add a filter. See To add filters to a segment.

The following table describes the functions you can use in segments.

Table 411: Functions Description

Expression	Description
Aggregate Functions	Select from the following to use an aggregate function in the expression. **Note:** Aggregate functions are available only when defining group filters. See Creating group filters.
avg(expr)	This function computes an average value for the data set *expr*.

Table 411: Functions Description (Continued)

Expression	Description
count(expr)	This function returns the number of rows included in the data set *expr*.
first(expr, sort column1[, sort column2][,...])	This function returns the first value of data set *expr* based on the order of the specified sort columns. For example, the expression `first(threads.note, threads.entered, threads.seq)` returns the first thread note in the data set based on time entered and thread sequence.
group_concat(expr, separator[, sort column 1, ASC|DESC][, sort column 2, ASC|DESC][,...])	This function lets you combine multiple values from data set *expr* into a delimited list in a single row. The list is delimited by *separator* and ordered by the specified sort columns. For example, the expression `group_concat(threads.note, ',', threads.entered, ASC)` returns a comma-delimited list of thread notes ordered by time entered ascending.
last(expr, sort column1[, sort column2][,...])	This function returns the last value of data set *expr* based on the order of the specified sort columns. For example, the expression `last(threads.note, threads.entered, threads.seq)` returns the last thread note in the data set based on time entered and thread sequence.
max(expr)	This function returns the largest numerical value, the last string in alphabetical order, or the latest date in the data set *expr*.
min(expr)	This function returns the smallest numerical value, the first string in alphabetical order, or the earliest date in the data set *expr*.
sum(expr)	This function returns the sum of the values in the data set *expr*.
sum_distinct(expr, reference)	This function returns the sum of distinct values in an expression for a particular record (reference) rather than for all records of the same type in a table. For example, if you want to calculate the sum of all quotas for a particular sales person, you could add a function of `sum_distinct(sa_period2accts.quota, sa_period2accts.acct_id)`.
stddev(expr)	This function returns the standard deviation of *expr*. For example, the expression `stddev(answers.solved_count)` returns the standard deviation of all the values in the *solved_count* column of the Answers *(answers)* table.

Table 411: Functions Description (Continued)

Expression	Description
String Functions	Select from the following to use a string function in the expression.
concat(str1,str2)	This function combines input character strings from multiple expressions into a single output string. Two or more expressions can be appended with this function. For example, the expression `concat('www.','global','.com')` returns the value `www.global.com.`
instr(str, substr)	This function returns the numeric position (in characters) of the initial occurrence of string *substr* within string *str*. For example, the expression `instr('globalcellphones.com','cell')` returns the value `7`.
length(str)	This function returns the length (in characters) of the string. For example, the expression `length('cell phones')` returns the value `10`.
lower(str)	This function returns string *str* in all lowercase characters. For example, the expression `lower('Global.COM')` returns the value `global.com.`
ltrim(str)	This function returns the string *str* without leading spaces. For example, the expression `ltrim(' Cell phone')` returns the value `Cell phone.`
lpad(str1, X, str2)	This function returns *str1* padded on the left with *str2* until *str1* is *X* characters long. For example, the expression `lpad('phone', 10, '@')` returns the value `@@@@@phone`.
rpad(str1, X, str2)	This function returns *str1* padded on the right with *str2* until *str1* is *X* characters long. For example, the expression `rpad('phone', 10, '@')` returns the value `phone@@@@@`.
rtrim(str)	This function returns the string *str* without trailing spaces. For example, the expression `rtrim('agarfield@global.com ')` returns the value `agarfield@global.com`.
substr(str, start_pos, [length])	This function returns a portion of the string *str* starting at the character defined by *start_pos* (an integer) and ending at the character defined by *length* (an integer). If *length* is not indicated, it returns the remainder of the string.

Table 411: Functions Description (Continued)

Expression	Description
to_char(expr)	This function converts the numeric *expr* to a character string.
to_number(str)	This function converts the character string *str* to a numeric. If the *str* is not numeric, this function returns zero. If *str* is a combination of numbers and other characters and begins with a number, this function returns only the initial numeric portion. For example, `to_number('123ABC')` returns 123.
upper(str)	This function returns string *str* in all uppercase characters. For example, the expression `upper('global.COM')`returns the value `GLOBAL.COM.`
Date Functions	Select from the following to use a date function in the expression.
date_add(date, units, interval, round)	This function returns the value of *date* plus a specified amount of time where date is a datetime type column or a literal string in the format YYYY-MM-DD or YYYY-MM-DD HH:MI:SS. The amount of time to add is specified by *units* and *interval,* where *units* must be an integer specifying the number of intervals to add, and *interval* can be SECONDS, MINUTES, HOURS, DAYS, WEEKS, MONTHS, or YEARS. To round the result to the beginning of the specified interval, set the *round* argument to 1. Otherwise, set *round* to 0 and the result is not rounded. For example, the expression `date_add('2003-11-25 22:35:00', 48, HOURS, 1)` returns the value `2003-11-27 22:00:00`.

Table 411: Functions Description (Continued)

Expression	Description
to_date(str, format)	This function converts the string *str* in the format specified by *format* to a date value. For example, the function `to_date('19981231', 'YYYYMMDD')` returns a date of 12/31/1998. **Note:** Unlike date_format, the to_date function supports only the following date formats. DD MM YYYY HH24:MI:SS DD MM YYYY HH:MI:SS AM DD MON YY DD MON YYYY DD-MM-YY DD-MM-YYYY DD.MM.YY DD.MM.YYYY DD/MM/YY DD/MM/YYYY DD/MM/YYYY HH:MI:SS AM MM-DD-YY MM-DD-YYYY MM/DD/YY MM/DD/YYYY MON DD YY MON DD YYYY MON DD YYYY HH:MI AM MON DD YYYY HH:MI:SS AM YY.MM.DD YY/MM/DD YYMMDD YYYY-MM-DD YYYY-MM-DD HH24:MI:SS YYYY-MM-DDTHHH24:MI:SS YYYY.MM.DD YYYY/MM/DD YYYYMMDD

Table 411: Functions Description (Continued)

Expression	Description
date_format(date, format)	This function converts *date* from a datetime data type to a string and reformats *date* to match the format specified by *format,* where date is a datetime type column or a literal string in the format YYYY-MM-DD or YYYY-MM-DD HH:MI:SS. For example, the expression `date_format('2003-11-25 22:25:00', 'DAY, MONTH DD, YYYY, HH12:MI PM')` returns the value `Tuesday, November 25, 2003 10:25 PM.`
date_diff(date, date)	This function returns the number of seconds occurring between two dates. For example, the expression `date_diff('2009-11-26 22:25:00', '2009-11-25 10:30:00')` returns the value `129300`. Another example is `date_diff(sysdate(),incidents.updated)`. This expression returns the number of seconds between the current time and the time that incidents were last updated. **Note:** To change the format of the output, use the time_format function. For example, `time_format(date_diff('2009-11-26 22:25:00', '2009-11-25 10:30:00'), 'HH24h MIm SSs')` returns the value `35h 55m 00s`.
date_trunc(date, units)	This function truncates *date* to the unit specified by *units*. For example, the expression `date_trunc('2003-11-25 22:25:10', HOURS)` returns the value `2003-11-25 22:00:00`.
sysdate()	This function returns the current system date in the format YYYY-MM-DD HH:MI:SS.
time_format (seconds, format)	This function converts *seconds* to the specified time format. For example, the expression `time_format(86610,'HH24 MI SS')` returns the value `24 03 30.`

Table 411: Functions Description (Continued)

Expression	Description

date_group(expr, format)	This function groups records together according to a date range that you specify, and includes rows for date ranges that have no associated records. If you do not want to return rows for date ranges with no records, you could use date_format instead.
	For example, if you have incidents created in January and March, but none in February, and create a report with the expression for column A set to *date_group(incidents.created, 'YYYY-MM')*, and the expression for Column B set to *count(*)*, the report would output:
	`2006-01 10`
	`2006-02 0`
	`2006-03 15`
	If you changed Column A's expression to *date_format(incidents.created, 'YYYY-MM')* to use the date_format function instead of date_group, the report would output similar data, but would not return a row for February.
	Note: This function can be used only when defining group filters. See Creating group filters.

Logical Functions	Select from the following to use a logical function in the expression.
if(expression, then result, else result)	This function returns the then result if expression is true, or returns the else result if expression is false. For example, the expression `if(incident.c$field=1, 'Yes', 'No')` returns Yes for incidents where the value of c$field is 1. Otherwise, No is returned. **Note:** You can use IS NULL and IS NOT NULL as part of the expression. For example, you could use the expression `if(incident.c$field IS NOT NULL, 'Yes', 'No')`.
decode(expression, test_value_1, result_1[, test_value_2, result_2][, default])	This function compares *expression* to each *test value* in order and returns *result* for the first *test value* that *expression* matches. If *expression* does not match any *test value*, *default* is returned. If *default* is undefined, a null value is returned. **Note:** The decode function can perform table lookups, letting you use text strings as test values rather than requiring coded values. For example, you can use Review as a test value for the expression *faqs.status* even though the table contains code value in the *status* column.

Table 411: Functions Description (Continued)

Expression	Description
nvl(expr1, expr2)	If the value *expr1* is null, this function returns the value *expr2*. However, if the value *expr1* is not null, then the value *expr1* is returned. The value of *expr2* must match the data type of *expr1*.
Math Functions	Select from the following to use a math function in the expression.
bitand(X, Y)	This function returns the bitwise AND of two integers, *X* and *Y*.
ceiling(X)	This function returns the smallest integer value greater than or equal to *X*.
floor(X)	This function returns the largest integer less than or equal to *X*.
power(X, Y)	This function returns the value of *X* to the power of *Y*. For example, `power(2,3)` would return `8`.
rand()	This function returns a random number between 0 and 1, containing up to nine decimal places.
round(X, D)	This function returns the value *X* rounded to the nearest number with *D* decimals. For example, `round(5.55555, 2)` returns the value `5.56`.
truncate(X, D)	This function returns the value *X* truncated to the *D* decimal places. For example, the expression truncate`(5.55555, 2)` returns the value `5.55`.
Currency Functions	Select the following to use a currency function in the expression.
to_currency(expr, str)	This function converts *expr* to a value in *str* currency. The value is returned as an amount in the staff member's default currency. The conversion rate used for this function is the exchange rate defined in the Exchange Rates *(exchange_rates)* table. For example, for a staff member with a default currency of USD, `to_currency(opportunities.mgr_value, 'EUR')` returns an amount in USD that is equal to the number in the `mgr_value` converted to Euros.

Selecting filter operators

The operator you select when creating filters greatly impacts the data that is returned, so it is important to understand the functionality of each operator. Filters can use the following operators

Table 412: Filter Operators Description

Operator	Description
equals	The expression matches the value exactly (including case).
not equals (exclude No Value)	The expression does not match the value exactly (including case), and does not contain a null value.
less than	The expression is less than the value.
less than or equals	The expression is less than or equal to the value.
greater than	The expression is greater than the value.
greater than or equals	The expression is greater than or equal to the value.
between	The expression is between two specified values. The between operator is available to use with date, currency, and numeric (integer and float) expressions. **Note:** When using this operator with a date expression, records matching the beginning value's date and time are returned, but those matching the ending value's date and time are not. This prevents records from being displayed twice on a report that is run once to view records created between 9:00 AM and 10:00 AM, and run again to view records created between 10:00 AM and 11:00 AM, for example.
like	The expression matches any part of the value. When using this operator, you should use the % wildcard symbol to offset your value. For example, to include values containing "all," type `'%all%'` in the Value field.
not like	The expression does not match any part of the value. The % character may be used as a wildcard. For example, to exclude values containing "all," type `'%all%'` in the Value field.

Table 412: Filter Operators Description (Continued)

Operator	Description
in list	The expression values you want to search for are specified by selecting check boxes in a menu. The selected options are displayed in a separate Selected Items list to assist you when selecting from menus with a large number of options. **Note:** When using this operator with integer fields, the numbers in the Value field must be comma-separated. When using this operator with text fields, the text strings in the Value field must be comma-separated and each text string must be offset by single quotes. For example, `'red','green','orange'`. Spaces between entries are ignored.
not in list	The expression values you do not want to search for are specified by selecting check boxes in a menu. The selected options are displayed in a separate Selected Items list to assist you when selecting from menus with a large number of options. This operator is available only with menu field expressions. **Note:** When using this operator with integer fields, the numbers in the Value field must be comma-separated. When using this operator with text fields, the text strings in the Value field must be comma-separated and each text string must be offset by single quotes. For example, `'red','green','orange'`. Spaces between entries are ignored.
is null	The expression contains a null value.
is not null	The expression does not contain a null value.
not equals (include No Value)	The expression does not match the value exactly (including case), or contains a null value.
not like or null	The expression does not match any part of the value, or contains a null value.
Complex Expression	The expression matches any part of the value. This operator allows wildcard searching using an asterisk (*) at the end of a word or partial word and a tilde (~) before a word to perform a similar phrases search on that word only. Refer to Using special characters when searching.

Table 412: Filter Operators Description (Continued)

Operator	Description
Not Complex Expression	The expression does not match the complex expression in the value. The Not Complex Expression operator is available only with text field expressions.

Defining logical expressions

When you add multiple filters to a segment, the filters are automatically joined together with a logical expression. This defines how the filters should work together to return data. By default, the logical expression uses Boolean AND logic. For example, if you have a filter of *contacts.prov_id = MT*, and a filter of *contacts.ma_state = Yes*, the logical expression is *contacts.prov_id = MT* AND *contacts.ma_state = Yes*. This expression would result in the report returning only contacts that are from Montana *and* are in the Outreach state.

You can edit logical expressions to limit your data set by using different Boolean operators to connect your filters.

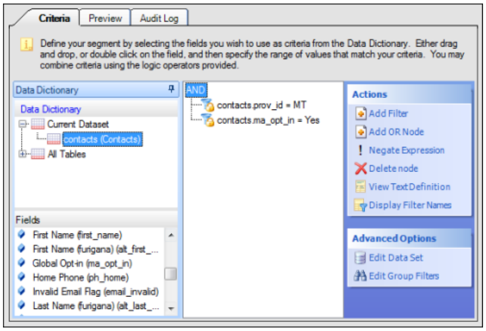
- The AND operator retrieves data matching *all* of the filters.
- The OR operator retrieves data matching *any* of the filters.
- The NOT operator (represented by an exclamation point) excludes matching data.

When you add nodes to the expression, the nodes are displayed in a tree structure, with filters displayed either under an AND node or an OR node. Filters under the same AND node are joined to each other using AND logic, and filters under the same OR node are joined to each other using OR logic.

NOT logic is achieved by negating a filter, which displays in the Filters section preceded by an exclamation point. For instance, if you negate the filter description *contacts.prov_id = MT*, the description appears as *!contacts.prov_id = MT* (equivalent to *NOT contacts.prov_id = MT*).

To edit a logical expression

1 From an open segment, add more than one filter to the Filters section.



The filters you add are automatically joined with AND logic and are displayed in an AND tree.

2 To add a filter joined with OR logic to the logical expression:

a Click Add OR Node in the Actions section. The node is added to the logical expression.

b Click the filter that should be joined with OR logic and drag it to the new OR node.

3 To negate a filter, select the filter and click Negate Filter in the Actions section.

4 To view a text definition of the current filters' logical expression, click View Text Definition.

a Click the OK button to close the Text Definition window.

5 To display the filter description instead of the filter name, click Display Filter Descriptions. The filter description includes the field name, operator, and value. For example, a filter named Contacts in MT could be described as *contacts.prov_id = MT*.

Editing the data set

The data set consists of the database tables the segment is referencing. The Contacts *(contacts)* table is automatically added to the data set when you create a segment. When you add fields from different database tables as filters or add more than one table to the data set, the tables that contain the fields are automatically joined together. This lets you use data from tables related to contacts (for example, incidents).

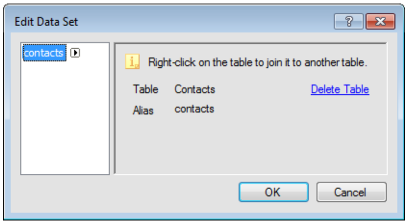
Tables can be joined using two methods, or join types:

- **Inner join**—Inner joins select records from the joined tables on the condition that the value in the specified column of the primary table is equal to the value in the specified column of the secondary table. For example, if the Incidents table is joined to the Contacts table with an inner join, contacts without an associated incident are not included.
- **Outer join**—Outer joins select rows from two tables regardless of whether the specified columns contain corresponding values. An outer join returns all rows from the primary table and any rows from the secondary table where the value in the specified column of the primary table is equal to the value in the specified column of the secondary table. For example, if the Incidents table is joined to the Contacts table with an outer join, contacts without an associated incident are included.

Note Tables are automatically added to the data set when you select columns to filter by in the segment.

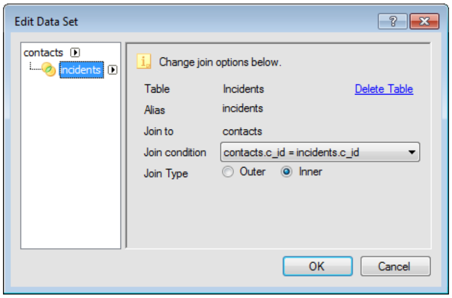
To edit the data set

1 Click Edit Data Set in the Advanced Options section. The Edit Data Set window opens, listing the tables in your segment and their relationships.



2 To add another table, right-click the table you want to join to, select Join To, and select the table and columns you want to join (for example, Incidents >*contact.c_id=incidents.c_id*). Repeat this step for each table you want to add.

3 To edit table join information, click the table that is joined to the parent table.



a Enter the following field information.

Table 413: Edit Data Set Window Description

Field	Description
Table	This field displays the database name of the table you have selected.
Delete Table	Click Delete Table to remove the table you have selected from the segment. If the table acts as a parent to other tables in the segment, the child tables are also removed.
Alias	This field displays the alias name of the table you have selected. The alias allows for multiple instances of the same database table to the same segment. For example, the first instance of the Contacts *(contacts)* table would have an alias of "contacts," and the second instance would have an alias of "contacts2" to distinguish it from the first instance.
Join To	This field displays the table that the selected table is joined to.
Join Condition	If more than one field relationship is available to join the tables, click this drop-down menu to select the fields on which to join. **Note:** If only one field relationship is available, the menu displays only that option.
Join Type	Select the Inner radio button to use an inner join and the Outer radio button to use an outer join. **Note:** To change the join type, you can also right-click the joined table in the Data Set tree and select Toggle Join Type.
Join Filters	If you select the Outer join type, the option to add join filters becomes available. See [Creating outer join filters]().

4 Click the OK button to save changes to the data set.

Creating outer join filters

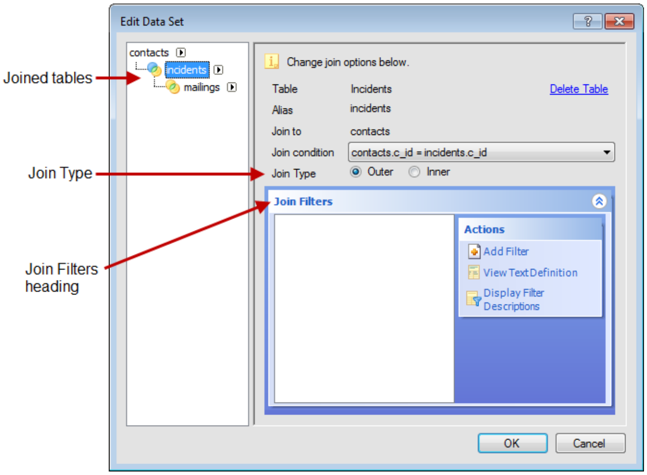
When you create an outer join, you can add join filters to filter the data returned from the secondary table without filtering the data from the primary table. Join filters are similar to segment filters in that they limit the records that can be returned by the report, but they apply to the table join rather than to the data returned by the query on the database.

To create outer join filters

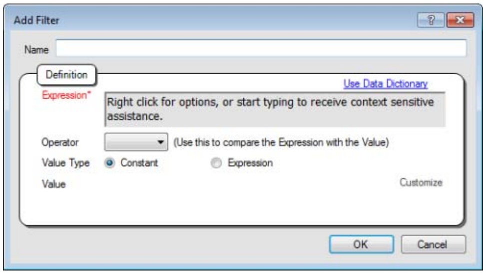
1 Select a joined table in the data set tree.

2 Select the Outer radio button in the Join Type field. The Join Filters heading displays.

3 Click the Join Filters heading on the Edit Data Set window. The Edit Data Set window displays the Join Filters section.



4 Click Add Filter to open the Add Filter window.



5 Enter field information described in the following table.

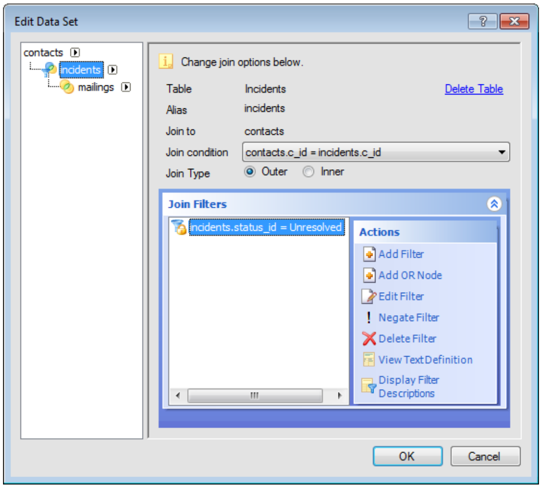
Table 414: Add Filter Window Description

Field	Description
Name	Type the name of the filter. If you leave this field blank, the database name displays.
***Expression**	Type the expression you want to use to limit the data set in this field. The syntax is <table_name>.<column_name>. As you type an entry in the Expression field, a drop-down menu displays a list of database tables that begin with the letters you type. You can type the complete expression or select a table and field from the drop-down menu. You can also select a table and column or function (see Adding functions) by right-clicking in the field. **Note:** If you drag and drop a column name from the Fields section, the field contains the table and column name.
Operator	Select the operator to use in comparing the expression to the value. The available operators vary depending on the expression. See Selecting filter operators.
Value Type	Select the type of value to match with the expression from these radio buttons.
Constant	Select this radio button to type the value to complete the filter or select the value from a drop-down menu or calendar (depending on the expression).
Expression	Select this radio button to type an expression to complete the filter, using the syntax <table_name>.<column_name>.

Table 414: Add Filter Window Description (Continued)

Field	Description
Value	Type the value that the expression is compared to. The available options in the Value field change depending on the type of field, the operator you select, and the value type. For example, when the field type is menu, you select it from a drop-down menu, but when the field type is date, you select if from a calendar.

6 Click the OK button to save the join filter. The Edit Data Set window is updated to display the filter, along with additional actions.



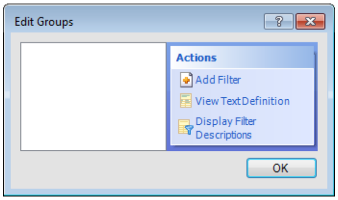
The additional actions that become available are identical to those used when creating logical expressions for segment filters. These actions let you edit your filter, create additional filters, add OR logic to the join filters, negate filters, and view a text definition of the join filters' logical expression. For procedures on using these actions, see Defining logical expressions.

Creating group filters

You can create group filters to specify the filters to use on grouped data. Group filters are applied to the data after the grouping is completed and must be aggregate functions. For example, if you join the Contacts *(contacts)* table to the Marketing Activities *(ma_trans)* table, create a fixed filter for *ma_trans.type* of Email Sent, group by *contacts.c_id*, and use the group filter *count(*) > 10*, then only those contacts that have been sent more than ten emails will be selected in the segment.

To create a group filter

1 From the Criteria tab, click Edit Group Filters. The Edit Groups window opens.



2 Click Add Filter to open the Add Filter window.

3 Enter field information. See Adding segment filters.

4 Click the OK button to save the group filter.

The additional actions that become available are identical to those used when creating logical expressions for segment filters. These actions let you edit your filter, create additional filters, add OR logic to the join filters, negate filters, and view a text definition of the join filters' logical expression. See Defining logical expressions.

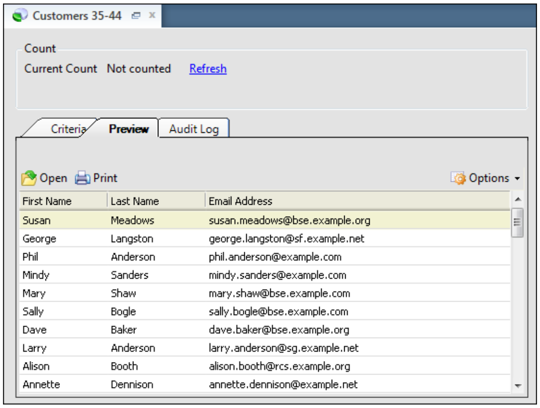
5 Click the OK button to save the filters.

Previewing segments

After defining your filters, you may want to see which contacts meet the segment's criteria. You can preview the segment to see a list of up to 1,000 contacts.

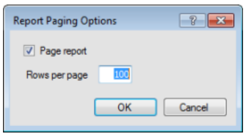
To preview a segment

1 Click the Preview tab.



The contacts' first name, last name, and email address display. If any contact fields are used to filter the segment, they are also included as output columns in the list.

2 To change the number of contacts that display per page, click the Options button and select Paging.



3 Type the number of rows you want to display per page and click the OK button.

4 To edit a contact record, select the contact and click the Open button. See Editing contacts.

5 To print a contact record, select the contact and click the Print button.

6 To access report options, such as sorting and exporting, click the Options button. See Distributing reports and dashboards.

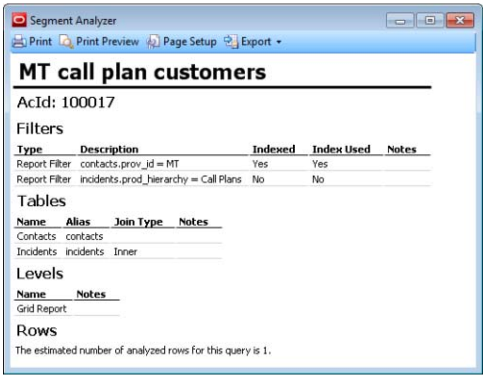
Analyzing segments

After you create or edit a segment, we recommend that you run the segment analyzer to check the segment's database queries. This lets you fine-tune your segments to ensure they run as quickly and efficiently as possible. The segment analyzer examines your segment and provides suggestions as to how you can improve the segment by removing database tables, adding filters, and making other changes. The analyzer also shows you the estimated number of rows the segment's query may need to access so you know if the segment can run without encountering row limits.

To analyze a segment

1 Open the segment you want to analyze.

2 Click the Analyze button on the ribbon's Home tab. The Segment Analyzer window opens.



The segment analyzer lists the segment's filters, tables, output levels, and the estimated number of rows the segment's query will examine when it runs. If the analyzer finds potential issues with the segment's query, it lists the issues in the Notes column next to the applicable segment component.

The following table describes the four segment components included on the Segment Analyzer window and lists the messages you may see in the Notes column when potential issues are found.

Table 415: Segment Analyzer Window Description

Segment Component	Potential Issue
Filters	This section lists the expressions used for each segment and level filter and identifies whether the filters' fields are indexed in the database and whether the index is used. Custom fields can be indexed for faster queries, though too many indexes can slow down queries. Only the following message can be returned in this section. • The filter contains a custom field that does not have an index. To improve the performance of this query, consider adding an index on the custom field.
Tables	This section lists the tables that are used in the segment, along with the types of joins used to link the data in the tables. Two messages can be returned in this section. • This table is in an outer join but there are one or more filters on fields in this table. Make sure this is by design. If not, consider changing the join type to inner or changing these filters to join filters to prevent an implicit inner join. • This table is not used in the report. Consider removing the table from the data set. If you need to filter out rows in the parent table that do not have rows in this table, consider adding a not null filter on the join field in the parent table.
Levels	This section does not apply to segments even though it displays in the report.

Table 415: Segment Analyzer Window Description (Continued)

Segment Component	Potential Issue
Rows	This section lists the estimated number of rows that will be examined by the query. Messages are displayed if the number of rows exceeds the threshold values for the operational and report databases. Three messages can be returned in this section. The messages vary depending on whether your site has a report database in addition to the operational database. • The estimated number of analyzed rows for this query is *X*. This value exceeds the threshold of 2,000,000 for the operational database. Consider using the report database for this report. Otherwise, it is likely this will occur automatically. • The estimated number of analyzed rows for this query is *X*. This value exceeds the threshold of 2,000,000 for the operational database. Since you have specified the operational database for this report, it is unlikely the report will execute. Consider using the report database for this report. • The estimated number of analyzed rows for this query is *X*. This value exceeds the threshold of 5,000,000 for the report database. Consider adding or refining filters to reduce the number of analyzed rows to below this threshold. Otherwise, it is unlikely the report will execute.

3 Click X on the top right to close the Segment Analyzer window.

4 Click X on the top right to close the segment.

Exporting and importing segments

There may be situations when you want to use the same segment in multiple interfaces, websites, or custom reports. Exporting and importing segments saves you time by letting you reuse your segments. You can export your segments as XML files and then import the files to use again. See Importing reports.

To export a segment

1 Open the segment you want to export.

2 Click the Export button on the ribbon's Home tab.

3 Save the new XML file.

To import a segment

1 On the Segments explorer, click the New button on the ribbon.

2 Click Import Segment.

Tip You must have exported an XML segment and saved it to a location where you can access it before it can be imported. See To export a segment.

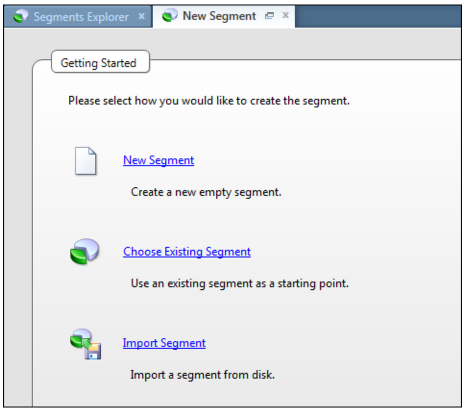
3 Select the XML segment file you want to import and click the Open button. The segment displays on the Data Dictionary window.

Segment example

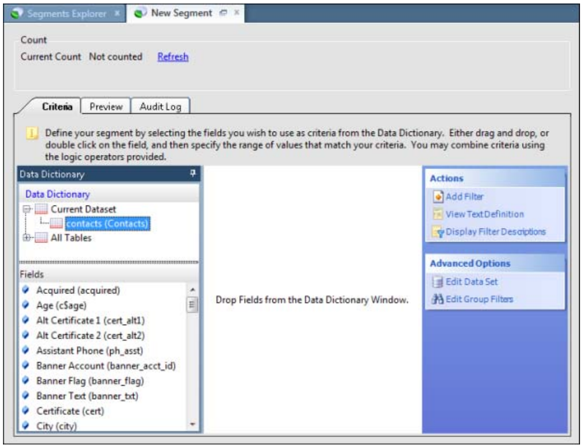
In the following example, a segment is created to return a data set of contacts who live in the state of Montana and have submitted an incident assigned to a certain product. The example works under the premise that there is a product named Call Plans. For information about creating products, see Adding and editing products, categories, and dispositions.

To create the example segment

1 From the Segments explorer, click the New button on the ribbon. A new segment opens on the content pane.

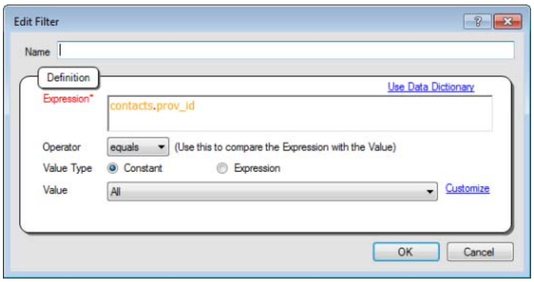


2 Click New Segment.



3 Click Contacts under Current Dataset in the Data Dictionary section on the Criteria tab.

4 In the Fields section, drag State/Province (prov_id) and drop it in the Filters section. The Edit Filter window opens.

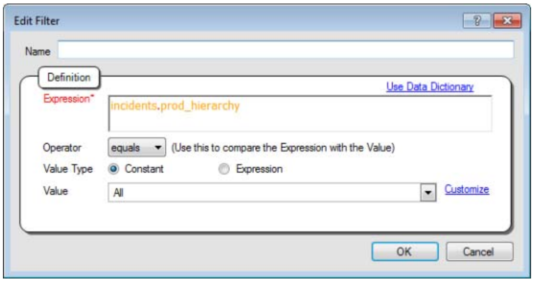


5 Click the Value drop-down menu and select MT.

6 Click the OK button.

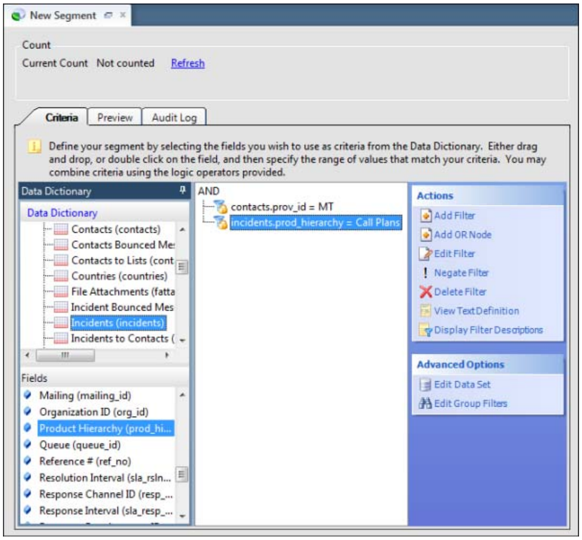
7 Click Incidents under All Tables in the Data Dictionary section.

8 In the Fields section, drag Product Hierarchy (prod_hierarchy) and drop it in the Filters section. The Edit Filter window opens.



9 Click the Value drop-down menu and select Call Plans.

10 Click the OK button.



11 Click the Save button, type the segment name in the Name field of the Save As window, and click the Save button.

The segment can now be used in mailings and surveys to target only those contacts with an address in Montana who have submitted an incident associated with call plans.

Best practices for improving conversion rates

A common myth about sending broadcast email is that—like direct mail—the larger your audience, the more likely your mailing is to be successful. In reality, succeeding with broadcast email depends more on the quality of contacts than the quantity. Sending email to people who have no interest in your product or service not only drags down your conversion rates, it can land you on blacklists and block delivery of future mailings across large swaths of the Internet.

One of the most effective ways to improve conversion rates is to filter your contacts by email viewing history. The system keeps track of each contact's marketing activity in the Marketing Scorecard *(ma_scorecard)* table. When a contact views a mailing, the *ma_scorecard.last_view* field is updated with the date and time that the message was viewed. Knowing whether a contact recently viewed a message provides a reasonable basis for judging contact quality.

There are several reasons a contact might *not* view a message. For example, the message may contain an unfamiliar From address or an ambiguous subject line. It may be filtered as spam, bounced or blocked by the recipient's mail server, or rejected due to the sender's reputation. Whatever the reason, it is safe to assume that a contact who has not viewed a recent mailing is not likely to view one in the future.

Conversely, a contact who recently viewed a message is more likely to view future messages. Therefore, to optimize your conversion rates and protect your reputation, we recommend that you add the following filter to all segments.

> *ma_scorecard.last_view* greater than -90 Days Exactly (Relative)

This filter limits your segment to a list of contacts who have viewed at least one mailing within the past ninety days.

Tip Once you have added this filter to a segment and included the segment in an audience, be sure to perform an audience count. If the segment returns too small an audience, adjust the date value defined by the *ma_scorecard.last_view* filter to be less restrictive. But remember—the longer contacts go without viewing a mailing, the more likely they are to lower your conversion rates.

The contacts in the resulting list will be more likely to view future messages than contacts who are not listed. You can also assume that their email addresses are valid and that they are not marking your messages as spam. Therefore, the quality of these contacts is high.

Another way to improve conversion rates is to track your contacts' engagement score. Based on historical contact interactions within Oracle Service Cloud, the system evaluates each contact and assigns a contact engagement score on a scale from 0 to 100. This statistic is based on each contact's hourly transaction history, such as content viewed, links clicked, web form and survey submittals, marketing emails forwarded, SmartSense ratings, and service transactions. Score value is stored in the *ma_scorecard.score* field, which is available for reports (for example, the Engagement Scorecard report), segments, and campaign decisions.

Important Data older than 400 days is automatically truncated from the following tables: Marketing Activities *(ma_trans)*, Bounced Messages *(bounced_msgs)*, Mailing Exclusions *(exclude_trans),* and RNMD Event Log *(rnmd_event_log)*.

The Marketing Stats *(ma_stats)* table summarizes records in the Marketing Activities *(ma_trans)* table that share a unique combination of *mailing_id, format_id, doc_id, flow_id, flow_web_page_id,* and *type* values. This ensures that summary marketing transaction statistics remain available indefinitely, even after the originating *ma_trans* records have been truncated. All transactions related to unsubscribe, including list-unsubscribe header, feedback loop unsubscribe, and unsubscribe, will remain in the Marketing Activities table.

To ensure optimal conversion rates and protect your reputation, you should adopt a regular contact evaluation process to ensure that all contacts are valid and active. See *Best Practices for Email Marketing*.

Managing contact opt-ins

Although many of your customers may want to be included in your mailings or survey invitations, it is not uncommon for some to decline. In fact, anti-spam legislation in most countries requires that you provide a way for your contacts to easily opt out of all mailings (see CAN-SPAM compliance in mailings). However, an effective opt-in process can also provide numerous benefits, including:

- Affirming contact receptiveness to your messages.
- Targeting the interests of your valued prospects and customers to provide more pertinent information without overwhelming their inboxes.

- Optimizing your contact data to improve conversion rates.
- Protecting your company's reputation among ISPs.

Note For an overview of these topics, see *Best Practices for Email Marketing*.

To help track your customers' messaging preferences, Oracle Service Cloud provides two types of opt-in fields.

- **Global Opt-in** is a contact database field that describes the willingness of your contacts to receive any form of bulk mailing.
- **Custom opt-in fields** are contact custom fields of an opt-in data type that can be used to more precisely describe the willingness of contacts to receive bulk mailings about specific topics or products.

Opt-in fields are often made visible on the Account Settings page of the customer portal so that customers can set their own preferences for accepting bulk email. Opt-in fields are also commonly paired with unsubscribe links in mailings and survey invitations to provide contacts with a simplified means of opting out. See Inserting unsubscribe links.

Contacts that are globally opted in are considered fully active and willing to receive your communications. Alternately, contacts that are globally opted out should be regarded as though they have explicitly stated that they do not want to receive bulk email from your company—they should be excluded from all mailings and surveys. Global exclusions are enabled by default by the Honor Global Opt-in check box on the Audience tab of mailings and surveys. See Defining the broadcast mailing audience.

Exclusions based on custom opt-in fields are manually enabled by adding a filter to your segments, such as *contacts.<opt-in_field_name>* not equals No, or by adding a special segment to your audience as described in the following procedure.

To exclude contacts based on a custom opt-in field

1 Click the Audiences button on the navigation pane. Double-click Segments Explorer. The Segments explorer opens on the content pane.

2 Click the New button on the ribbon. A new segment opens on the content pane.

Tip You can also exclude a segment based on a custom opt-in field from an open segment by clicking the New button. Additionally, if your navigation set is configured to add segments from the file menu, click File and select Audience > Segment. See Configuring the file menu.

a To create a segment from scratch, click New Segment.
b To create a segment by copying an existing segment, click Choose Existing Segment. The Choose Existing Segment window opens where you can select the segment you want to use.
c To import an XML segment, click Import Segment. See To import a segment.

3 Click Add Filter.

4 In the Expression field, type the opt-in field name.

5 In the Value field, select No.

6 Click the OK button and then click the Save and Close button to save the segment.

7 From the Audience tab of an open mailing, click Add Segment in the Excluded section.

8 Select the segment you created and click the OK button.

9 Click the Save button to save your changes.

Contact opt-out tracking

Oracle Service Cloud records transactions for global opt-ins and opt-outs in the contact **audit log**. While global opt-outs are generally performed by contacts themselves, there are many methods by which a contact can be opted out, including the following.

Table 416: Contact Opt-Out Methods

Method	Description
Contact Record	A staff member set the Global Opt-in field to No in the contact record.
Account Settings	The contact set the Global Opt-in field to No on the Account Settings page on the customer portal.
Unsubscribe Link	The contact clicked an unsubscribe link that was included in a served web page or delivered email.
Web Page Link	The contact opted out by form submission.
Data Import	The contact was opted out when the contact record was uploaded by the Data Import Wizard.

Table 416: Contact Opt-Out Methods

Method	Description
List-Unsubscribe Header	The contact clicked an opt-out button in the mail client that appeared as a result of the List-Unsubscribe mail header.
Automatic Feedback Loop	The contact clicked a spam notification feature provided by the contact's email service, which relayed a notification to Oracle Service Cloud, and the contact was opted-out by the system.

In addition to the audit log, the system provides the following reports to help you identify the methods responsible for opting out contacts.

- **Mailing Opt-out Details**—Lists all contacts who opted out as a result of a mailing and the opt-out method used.
- **Contact Opt-out Details**—Lists all contacts currently opted out and (if available) the opt-out method used.
- **Outreach Activity**—Includes information about contacts who opted out using the List-Unsubscribe Header or Automatic Feedback Loop methods.
- **Mailing Response Analysis**—Includes the total number of opt-outs that occurred using the List-Unsubscribe Header or Automatic Feedback Loop methods.

Caution Administrators noticing a large number of global opt-outs may be tempted not to include unsubscribe links in mailings. However, you should be aware that in many countries, including the United States, the inclusion of unsubscribe links in marketing email is required by law. See CAN-SPAM compliance in mailings.

If your site is experiencing higher-than-usual opt-out rates, the recommended best practice is to increase the deliverability of your communications. See *Best Practices for Email Marketing*.

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External Suppression List

Using the external suppression list, you can define a list of email addresses that are excluded from **mailings** and **surveys**. When a mailing or survey is sent or launched, the **audience** is automatically checked against the external suppression list and email is not sent to contacts with an email address on the list. This can help you ensure that certain addresses are consistently excluded from marketing and survey communications even if those contacts have not explicitly opted out.

Note Although the external suppression list is honored by default, you can configure individual surveys and mailings to ignore the list and send to all audience members instead. Refer to Defining the broadcast mailing audience and Defining the broadcast survey audience.

Creating and editing the external suppression list

You can create the external suppression list by adding email addresses individually or uploading a list of multiple addresses from a file. You can also replace the current list with a new list or remove specific email addresses from the suppression list if you decide you now want to send mailings or surveys to those addresses.

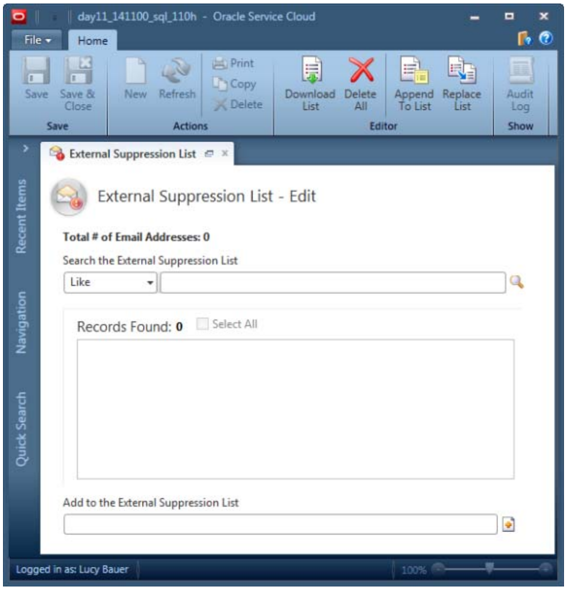
Note The list of email addresses you use to append to the existing external suppression list or to replace it must be a *.txt* document with a separate email address on each line.

The following procedure assumes that the External Suppression List component has been added to your navigation list. See To add items to or remove items from a navigation or configuration list.

To create or edit an external suppression list

1 Click the Configuration button on the navigation pane.

2 Double-click External Suppression List under Outreach. The editor displays on the content pane.



3 To append a list of addresses to the external suppression list, click the Append to List button on the ribbon. A window opens to let you browse to the folder that contains the file you want to append.

a Select the *.txt* file you want to append or type its path and name in the File Name field.
b Click the Open button. A message lets you know that the upload was successful.
c Click the OK button on the message.
d Click the Search button to the right of the Search the External Suppression List field. The email addresses in the file display in the Records Found section.

Note Practical limitations can cause the upload process to time out after five minutes. If you have difficulty uploading a large file, split the data into multiple files and upload them instead. For more about file size limitations, refer to [Answer ID 280](#) on our support site.

4 To add an individual email address to the external suppression list, type the email address in the Add to the External Suppression List field at the bottom of the editor.

   a Click the Add Email button to the right of the field.

   b Click the Search button to the right of the Search the External Suppression List field. The new email address displays in the Records Found section.

5 To replace the existing suppression list with a different list, click the Replace List button on the ribbon. A window opens to let you browse to the folder that contains the file you want to replace the list with.

   a Select the *.txt* file you want to replace the existing list or type its path and name in the File Name field.

   b Click the Open button. A message asks you to confirm that you want to replace the list.

   c Click the Yes button.

   d Click the Search button to the right of the Search the External Suppression List field. The Records Found section now displays only the email addresses in the file you selected.

6 To delete individual email addresses in the external suppression list, search for the addresses you want to delete. Refer to Searching and downloading the external suppression list.

   a Select the check box next to each email address you want to delete.

   b Click the Delete button on the ribbon. A message asks you to confirm that you want to delete the selected addresses.

   c Click the Yes button. The Records Found section is refreshed to remove the addresses you deleted.

7 To delete all email addresses in the external suppression list, click the Delete All button on the ribbon. A message asks you to confirm.

   a Click the Yes button. A message lets you know all email addresses were successfully deleted.

   b Click the OK button to close the message.

Searching and downloading the external suppression list

Before you can remove individual email addresses from the external suppression list, you need to select them, which means you must display them on the editor by searching for them. You might, for example, want to search for and delete all email addresses with a specific domain. You also have the option of downloading your external suppression list and saving it to a text file on your local workstation.

To search the external suppression list

1 Click the Configuration button on the navigation pane.

2 Double-click External Suppression List under Outreach. The editor displays on the content pane.

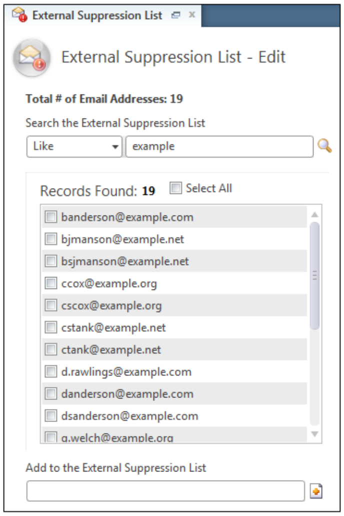
3 Select the type of search you want from the Like drop-down menu. The following options are available.

Table 417: Search Options for the External Suppression List

Search Option	Description
Like	The search returns email addresses that contain the search term you enter. For example, typing and returns the following results: jim.anderson@example.com, sandy_johnson@example.net, and jsmith@example.net.
Ends With	The search returns email addresses that end with the search term you enter. Use this option to find all email addresses at a specific domain, such as example.com.
Exact Match	The search returns email addresses that exactly match the search term you enter.
Starts With	The search returns email addresses that begin with the search term you enter.

4 Type your search term in the text field. Leave this field blank to return all email addresses in the list.

5 Click the Search button. The number of matching records and the returned email addresses display in the Records Found section. In the following figure, the search results include all email addresses that contain “example.”



6 To select one or more email addresses to remove from the external suppression list, select the check box next to each email address. Or select the Select All check box if you want to remove all of the addresses in the Records Found field.

To download the external suppression list

1 Click the Configuration button on the navigation pane.

2 Double-click External Suppression List under Outreach. The editor displays on the content pane.

3 Click the Download List button on the ribbon. A window opens to let you browse to the folder where you want to save the file.

4 Type the file name in the File Name field or select an existing file to overwrite it.

5 Click the Save button. A confirmation message lets you know the download was successful and asks if you want to open the file.

6 Click the Yes or No button to close the download confirmation. If you click Yes, the file opens.

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Content Library

The Content Library is a resource for creating, storing, and organizing custom content such as **documents**, **templates**, **tracked links**, and **snippets**. Once saved, you can access this content whenever you need to include it in a mailing, campaign, web page, or survey. You can use the content as is, or make minor changes once it has been added. You can also upload file attachments once and include them in your content as many times as you like.

The HTML editor can help you create dynamic documents to send to your customers. You can add graphics, hyperlinks, tables, and apply text formatting without having any knowledge of HTML. Should you need to modify the source code, the editor provides easy access with a technical interface.

You can also add web forms to documents, templates, and snippets to collect customer data from the web or through email. You can add any database contact field or contact custom field to the web form, enabling you to populate a contact record with data from the submitted form.

Creating documents

You can create unique documents to use in mailings, campaigns, and surveys. Documents can be designed in either HTML or as plain text, and are easily previewed while being created. You can also access tasks and notes associated with the document, and an audit log of actions taken on the document.

Once a document is created, it can be served as a web page in a campaign, sent to contacts in a mailing or survey invitation, or used to form a questionnaire in a survey. Documents can contain templates, web forms, snippets, **merge fields**, **merge reports**, and **conditional sections** based on contact filters. However, mailings and surveys using simpler documents send more quickly than those using documents with many merge fields, merge reports, conditional sections, and web forms.

Note The following procedure assumes that you access the Documents explorer from the Content Library **navigation list**. However, this explorer may reside in a different navigation list.

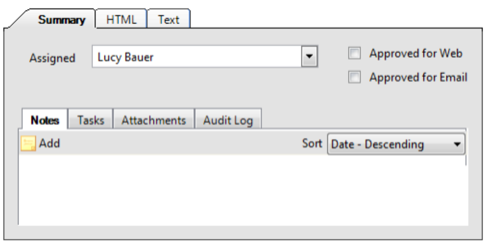
To create a document

1 Click the Content Library button on the navigation pane.

2 Double-click Documents Explorer. The Documents explorer opens on the content pane.

3 Click the New button. A new document opens on the content pane.

Tip You can also create a document from an open document by clicking the New button. Additionally, if your navigation set is configured to add documents from the file menu, click File and select Content Library > Document. See To configure the file menu.



By default, the Summary tab is active when creating a document. From here, you can assign the document to a staff member, as well as manage the document's notes, tasks, and attachments. See Managing documents.

Note The Notes, Tasks, Attachments, and Audit Log tabs are available only when the Summary tab is selected.

4 To assign the document to another staff member (by default, the document is assigned to the staff member who creates it), click the Assigned drop-down menu and select the staff member.

a To search for a staff member, type the staff member's name in the Find field.

Tip Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.

5 To allow staff members to serve this document as a web page, select the Approved for Web check box.

6 To allow staff members to use this document in a mailing or survey, select the Approved for Email check box.

7 To create an HTML version of the document, click the HTML tab and refer to Creating HTML documents.

8 To create a plain-text version of the document, click the Text tab and refer to Creating text content in documents.

9 To spell check the document, click the Spelling button on the ribbon and refer to Spell checking.

10 Click the Save and Close button to save the document. The Save As window opens.

Note You can click the Save button to save the document without closing it.

11 Select the folder you want to save the document in and type the name of the document in the Name field.

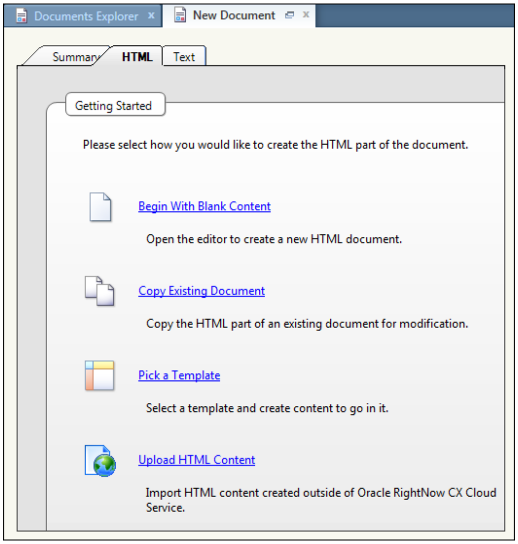
12 Click the OK button to save the document.

Creating HTML documents

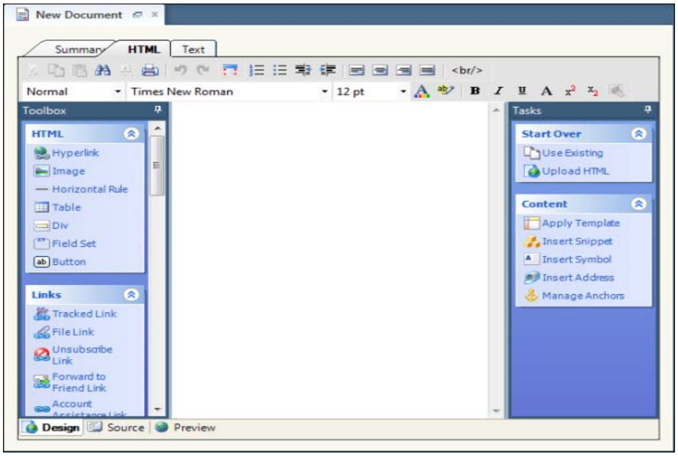
When you create HTML documents, you have the option of starting with a blank document, copying an existing document, using a template (refer to Creating templates), or uploading your own HTML to the document. HTML documents can be modified by editing the source code, or using an HTML editor to add images, formatting or insert special links, such as **tracked links** or links to unsubscribe to mailings. You can also add **conditional sections**, **merge fields**, and **merge reports** to your HTML documents.

To create an HTML document

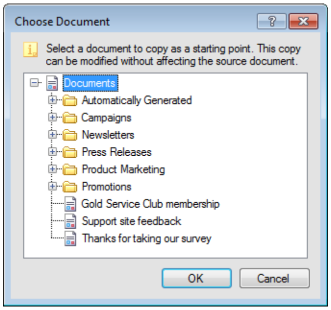
1 Click the HTML tab.



2 To create an HTML document from scratch, click Begin with Blank Content. The HTML editor opens. See [Using the HTML editor](#).



3 To create an HTML document by copying an existing document, click Copy Existing Document. The Choose Document window opens.

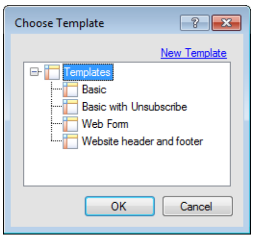


a Select the document you want to copy.

b Click the OK button to add the content to your document.

Note Changes to the document content do not affect the original document.

4 To create an HTML document by uploading a template, click Pick a Template. The Choose Template window opens.



a Select the template you want to use.

b To create a template, click New Template and refer to Creating templates.

c Click the OK button to use the template in your document.

5 To create an HTML document by uploading an HTML file from your workstation, click Upload HTML Content.

a Select the HTML file you want to upload.

b Click the Open button. The HTML is inserted in your document.

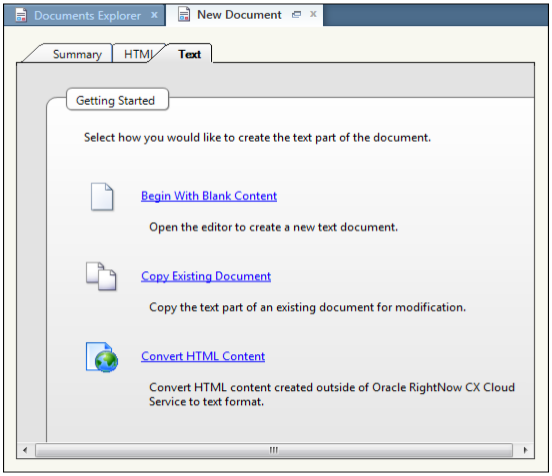
6 Click the Save button on the ribbon to save the document.

Creating text content in documents

You may want to create a text version of your document if certain customers can receive only plain text emails. When you create text documents, you can start with a blank document, upload the text portion of an existing document, or convert an HTML file.

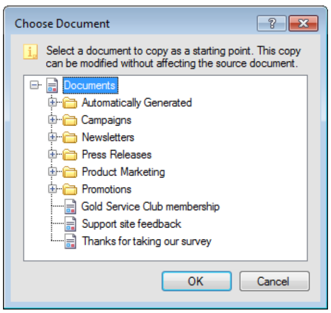
To create text content

1 Click the Text tab.



2 To create text content from scratch, click Begin with Blank Content. The text editor opens. See Creating and editing text.

3 To create text content by copying an existing document, click Copy Existing Document. The Choose Document window opens.

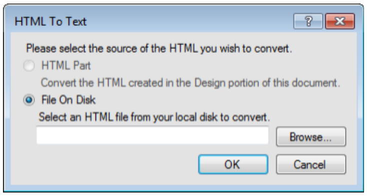


a Select the document you want to copy.

Note Only the text content from the document is copied. The HTML content of the document is not affected.

b Click the OK button to add the content to your document.

4 To create a text document by converting an HTML page to text, click Convert HTML Content.



a To convert the HTML content to text, select the HTML Part radio button. This option is not available if no HTML content exists in the document.

Note You should finalize your HTML content before converting it to text.

b To convert an HTML file to text, select the File On Disk radio button and browse for the file.

c Click the OK button to insert the converted HTML in the text part of your document.

5 Click the Save button on the ribbon to save the document.

Managing documents

You can view click-through results for a document and add notes, tasks, and file attachments to your documents. You can also view the **audit log** to see when a document was created and edited. The following sections describe how to view click-through results and add notes and tasks. To add file attachments and view the audit log, refer to Working with records.

Viewing click-through results

Documents can be viewed with click-through results for **tracked links**, web page links, file links, unsubscribe links, and forward to friend links. Following each link, inline statistics display the number of times the link was clicked, the number of total link clicks in the document, and the percentage of times the link was clicked when compared to total clicks. The links are also color coded so you can immediately see how they are performing. Links that perform well appear in green, underperforming links appear in red, and all other links appear in yellow.

To view click-through results

From the Documents explorer, right-click the document and select View Click-Through Results.

Or

Click the View Click-Through button on the Documents explorer ribbon.

Adding notes

You may want to add notes to a document to provide additional information to staff members as they are working with the document.

To add a note

1 From your open document, click the Summary tab. The Notes tab is selected by default.

2 Click the Add button.

3 Type the text of the note.

4 To sort the notes by either ascending or descending date, click the Sort drop-down menu and select a sort option.

5 To edit an existing note, click Edit next to the note.

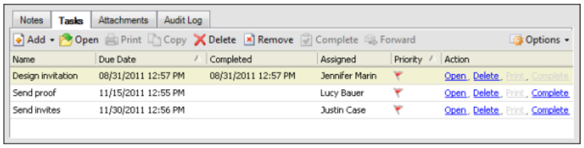
6 To permanently delete a note, click Delete next to the note.

Adding tasks

From the Summary tab, you can assign new or existing tasks to documents and edit, delete, and forward tasks to other staff members. You can also view each task associated with the document. See Adding tasks.

To add a task

1 From your open document, click the Tasks tab.



2 Enter the following field information.

Table 418: Tasks Tab Toolbar Description

Button	Description
Add	Click this button to display a drop-down menu containing the following options.
Add New	Select this option to add a new task. See Adding tasks for the procedure to complete the fields on this window.
Add Existing	Select this option to add an existing task. After finding and selecting a task, the task is added to the task list for the document. See To search for a task from an open record for information about the Task Search window.
Open	Click this button to open the selected task for editing.
Print	Click this button to print the task.

Table 418: Tasks Tab Toolbar Description (Continued)

Button	Description
Copy	Click this button to copy the task.
Delete	Click this button to permanently delete the task.
Remove	Click this button to remove the task from the document (without deleting the task).
Complete	Click this button to set the task status to Completed.
Forward	Click this button to open the Forward Task window and send the task to the selected recipients.
Options	Click this button to select an option for managing the output and display of information on the tab, such as print, forward, or export. See Report Management, Forwarding reports, and Exporting report output. For information about other options, see Changing output options.

Creating templates

Templates are used to standardize the design of the headers and footers of your documents. When you apply a template to a document, the template design appears as part of the document layout. However, the template design cannot be edited from the document editor—you can edit only the contents of the document, indicated by a red outline. To make changes to the template, you must open it in the template editor.

Templates are sometimes referred to as “living” content. When a template is edited and saved, all documents using the template automatically display the updated content. For instance, if you design a template containing a standard header and apply it to multiple documents, any changes made to that template appear automatically in every document that the template was applied to.

Important Templates are best used for applying a common look and feel to a group of documents that will be published to the web (using the Serve Web Page campaign element, for instance). For documents used in a mailing or survey invitation, it is better to add design elements using **snippets**.

For example, if a template is applied to a document used by a mailing, and the template is later edited, the mailing is updated in Oracle Service Cloud to reflect the edits. This occurs even if the mailing has already been sent and the RNM_-MOD_SENT_DOCS setting is set to disable the editing of sent documents. If the template is edited after the mailing is sent, and a staff member views the mailing from the mailing editor or the Outreach Activity tab of a recipient’s contact record, the mailing no longer appears as it did when it was sent. This can cause confusion and ambiguity about the mailing’s effectiveness.

When you insert a snippet, its contents are copied to the layout and can then be edited freely with the rest of the design. You can also edit the snippet at any time without affecting the appearance of layouts to which the snippet was previously applied. See Creating snippets.

Another alternative to using templates is to store your design in an HTML file outside of Oracle Service Cloud and then upload it when you create your mailing or survey. See Uploading HTML content.

If you need to update a template that has been applied to a document, you can click the Info button on the Home tab to display the template ID. You can then search for the template in the Templates explorer by clicking the Find button and selecting ID from the Find Using drop-down menu. See Searching in explorers.

Tip To see a list of documents that are using a template, you can create a report from the Documents *(documents)* table that uses the *live_rc_id* filter. For example, using the Documents table, you could add columns, such as Name, Date Created, Date Updated, and Assigned, and then add the *live_rc_id* filter to the report to see which templates are returned in the list. See Creating reports.

Document templates are not applied when surveys are viewed on mobile devices because templates are not optimized for mobile. However, if you want to create an appropriately sized template to be used for mobile, you could add HTML content with a conditional section for mobile runtime that includes a smaller image. See Customizing surveys for use on mobile devices.

- Creating snippets
- Uploading HTML content

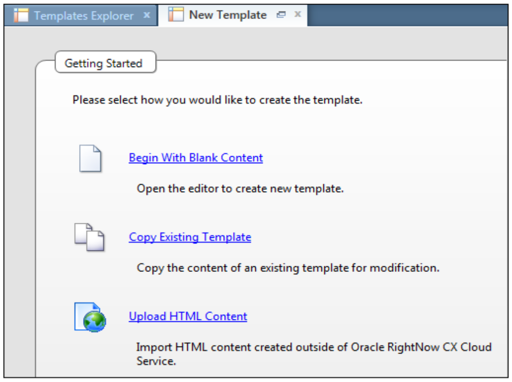
To create a template

1 Click the Content Library button on the navigation pane.

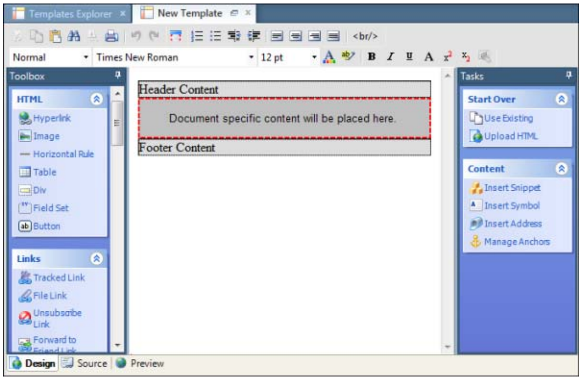
2 Double-click Templates Explorer. The Templates explorer opens on the content pane.

3 Click the New button. A new template opens on the content pane.

Tip You can also create a template from an open template by clicking the New button. Additionally, if your navigation set is configured to add templates from the file menu, click File and select Content Library > Template. See To configure the file menu.



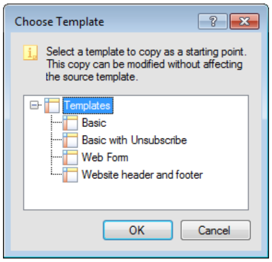
4 To create the template from scratch, click Begin with Blank Content.



In the middle of the HTML editor is a placeholder for document content when the template is used. You can insert HTML above and below the placeholder, including in the header and footer. See Using the HTML editor.

Note The template must include the content placeholder.

5 To create a template by copying an existing template, click Copy Existing Template. The Choose Template window opens.



- **a** Select the template you want to copy.
- **b** Click the OK button to add the content to your template.

6 To create a template by uploading an HTML file from your workstation, click Upload HTML Content.

- **a** Browse to the location of the HTML file you want and select it.
- **b** Click the Open button. The HTML is inserted in your template.

Important After uploading your HTML, you must insert the placeholder by clicking the Content Placeholder button in the toolbox.

7 To spell check the template, click the Spelling button on the ribbon and refer to Spell checking.

8 Click the Save and Close button to save the template. The Save As window opens.

Note You can click the Save button to save the template without closing it.

9 Select the folder you want to save the template in and type the name of the template in the Name field.

10 Click the Save button to save the template.

Creating snippets

Snippets are small pieces of commonly used content that can be inserted into the layout of a document, mailing message, survey, or survey invitation. Creating a snippet is helpful if you want to make certain design elements available to any document, mailing, or survey. Snippets can be accessed easily and reused as many times as needed.

When you insert a snippet, its contents are copied to the layout and can then be edited freely with the rest of the design. Changes made to a snippet in the snippet editor do not alter the appearance of layouts to which the snippet was previously applied.

Tip If you want to apply design elements that can be updated automatically across multiple documents, you might consider using a **template** instead of a snippet. When a template is edited and saved, all documents using the template automatically display its updated content. However, templates are best used when working with groups of documents that will be published to the web (using the Serve Web Page campaign element, for instance). When designing documents that are used for mailings or survey invitations, it is better to use snippets.

You can also store your design in an HTML file outside of Oracle Service Cloud and then upload it when you create your mailing or survey. See Uploading HTML content.

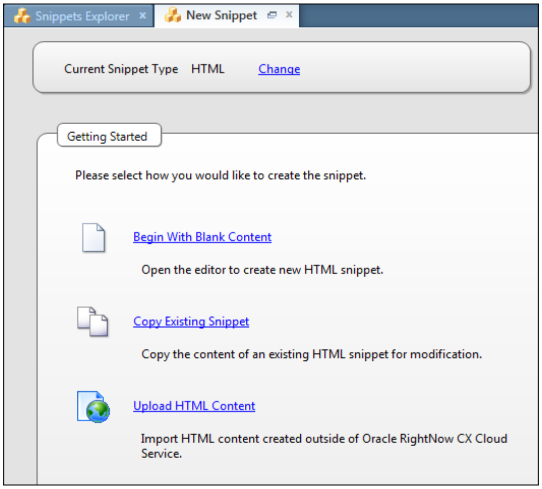
To create a snippet

1 Click the Content Library button on the navigation pane.

2 Double-click Snippets Explorer. The Snippets explorer opens on the content pane.

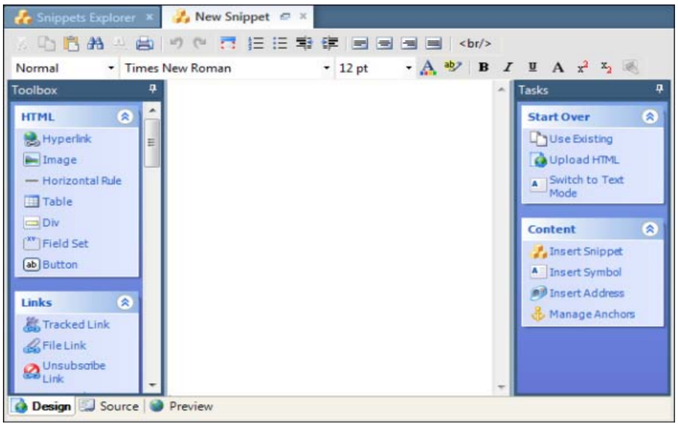
3 Click the New button. A new snippet opens on the content pane.

Tip You can also create a snippet from an open snippet by clicking the New button. Additionally, if your navigation set is configured to add snippets from the file menu, click File and select Content Library > Snippet. See To configure the file menu.

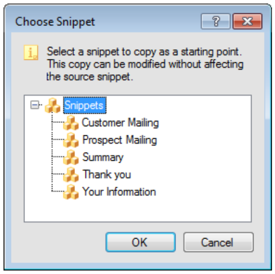


By default, the snippet type is HTML. You can also create plain text snippets. See [Creating text snippets](#).

4 To create an HTML snippet from scratch, click Begin with Blank Content. The HTML editor opens so you can design the HTML in your snippet. See [Using the HTML editor](#).



5 To create an HTML snippet by copying an existing snippet, click Copy Existing Snippet. The Choose Snippet window opens.



- **a** Select the snippet you want to copy.
- **b** Click the OK button to add the content to your snippet.

6 To create an HTML snippet by uploading an HTML file from your workstation, click Upload HTML Content.

- **a** Browse to the location of the HTML file you want and select it.
- **b** Click the Open button. The HTML is inserted in your snippet.

7 To spell check the snippet, click the Spelling button on the ribbon and refer to Spell checking.

8 Click the Save and Close button to save the snippet. The Save As window opens.

Note You can click the Save button to save the snippet without closing it.

9 Select the folder you want to save the snippet in and type the name of the snippet in the Name field.

10 Click the Save button to save the snippet.

Creating text snippets

You may want to create a text version of your snippet to insert in text documents. Text documents are used if certain customers can receive only plain text emails.

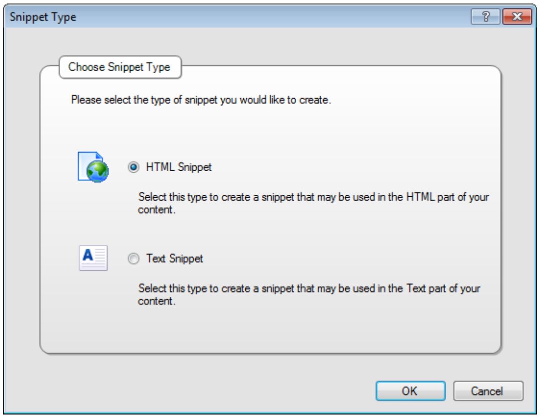
To create a text snippet

1 From the Snippets explorer, click the New button. A new snippet opens on the content pane.

Tip You can also create a snippet from an open snippet by clicking the New button. Additionally, if your navigation set is configured to add snippets from the file menu, click File and select Content Library > Snippet. See To configure the file menu.

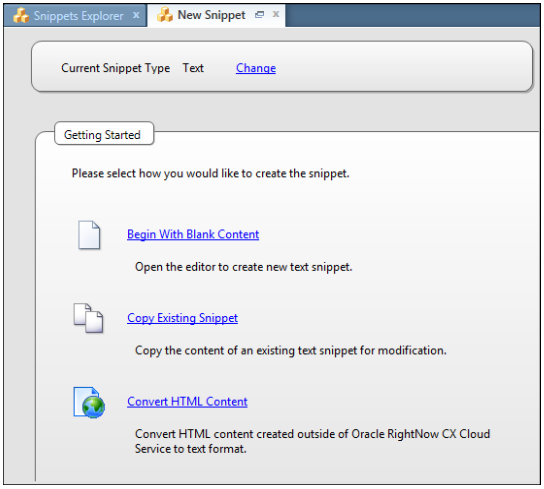
2 Click Change in the Current Snippet Type section.

Note You can also change to a text snippet while creating an HTML snippet by clicking the Switch to Text Mode button.



3 Select the Text Snippet radio button.

4 Click the OK button. The snippet type changes to Text.



5 To create a text snippet from scratch, click Begin with Blank Content. The text editor opens where you can define the plain-text version of your snippet. See Creating and editing text.

6 To create a text snippet by copying an existing snippet, click Copy Existing Snippet. The Choose Snippet window opens.

 a Select the snippet you want to copy.
 b Click the OK button to add the content to your snippet.

7 To create a text snippet by converting an HTML page to text, click Upload HTML Content.

 a Browse to the HTML file you want to convert and select it.
 b Click the Open button to insert the converted HTML in the snippet.

8 Click the Save button to save the snippet.

Adding tracked links

You can add links that are tracked and reported on for statistical purposes. The number of times a link was clicked through is reported when editing the mailing or survey (refer to Viewing mailing results) and through analytics.

After you have added tracked links to your system, they can be inserted in documents, templates, or snippets (refer to Inserting tracked links). Tracked links can also be inserted in several of the standard system-generated contact email messages (refer to Customizing messages). Adding tracked links to your contact emails are especially useful in tracking your customer-facing incident responses. See Incident response tracking.

Important Due to the volume of tracked links that accumulates as new content is created, the **Agedatabase** utility regularly purges the database of orphaned tracked links. That is, links that have been defined but not used in any campaign, document, or mailing. The PURGE_TRACKED_LINK_DAYS configuration setting specifies the number of days after which an orphaned tracked link is purged from the database. The default value is 30 days. Set to 0 to turn off tracked link purging.

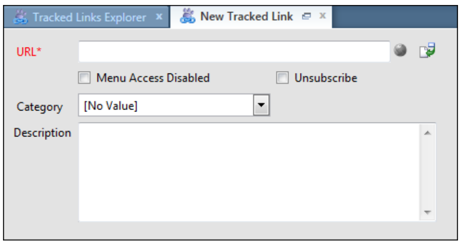
To add a tracked link

1 Click the Content Library button on the navigation pane.

2 Double-click Tracked Links Explorer. The Tracked Links explorer opens on the content pane.

3 Click the New button. A new tracked link opens on the content pane.

Tip You can also create a tracked link from an open tracked link by clicking the New button. Additionally, if your navigation set is configured to add tracked links from the file menu, click File and select Content Library > Tracked Link. See To configure the file menu.

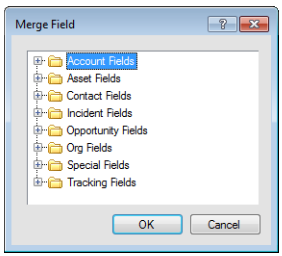


4 Enter the following field information.

Table 419: Tracked Link Description

Field	Description
URL	Type the full URL of the tracked link in this field.
Open URL	Click this button to open the URL.
Merge Field	Click this button to add a contact, incident, opportunity, or tracked link merge field to the URL.
Menu Access Disabled	Select this check box to make the tracked link unavailable. Staff members cannot insert the link in a document.
Unsubscribe	Select this check box to increment the unsubscribed count when this link is clicked in a mailing or survey. **Note:** Clicking the link does not change the contact's opt-in status. Select this check box if you want to manage opt-in information outside of Oracle Service Cloud.
Category	Click this drop-down menu and select a category to associate with the link. See [Tracked link categories](#).
Description	Type a description for the tracked link in this field. The description is for internal use only and is not seen by contacts who receive a mailing or survey with the link.

5 To add a merge field to the URL, click the Merge Field button.



a Select the database field you want to merge. Merge fields are populated with data from the contact record, account data or an associated incident, asset, opportunity, organization, or tracked link. You can also use the special fields that are available. The value of this field is appended to the URL as a parameter. For example, if you wanted to pass the login field value from the contact record, specifying http://www.global.example/regform.php?user=$contacts.login would return a URL such as http://www.global.example/regform.php?user=jsmith.

b Click the OK button to append the field to the URL.

6 To spell check the tracked link description, click the Spelling button on the ribbon and refer to Spell checking.

7 Click the Save and Close button to save the tracked link. The Save As window opens.

Note You can click the Save button to save the tracked link without closing it.

8 Select the folder you want to save the tracked link in and type the name of the tracked link in the Name field.

9 Click the Save button to save the tracked link.

Adding files

You can add files to your system that can be viewed by contacts who receive your mailings and surveys. Links to the files can be inserted in documents, templates, and snippets as a link (refer to Inserting unsubscribe links). After your files are added, you can use them as many times as you want.

Important Certain practical limitations exist that restrict the size of files that can be uploaded to Oracle Service Cloud. See Answer ID 280 on our support site.

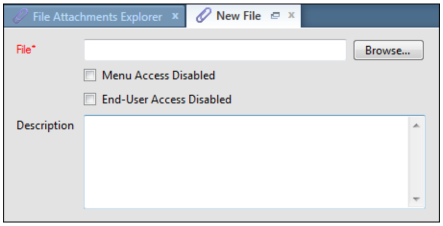
To add a file

1 Click the Content Library button on the navigation pane.

2 Double-click File Attachments Explorer. The File Attachments explorer opens on the content pane.

3 Click the New button. A new file opens on the content pane.

Tip You can also add files from an open file by clicking the New button. Additionally, if your navigation set is configured to add files from the file menu, click File and select Content Library > File. See To configure the file menu.



4 Enter the following field information.

Table 420: File Description

Field	Description
*File	Type the full path name to the file you want to upload in this field or click the Browse button to browse for the file. Click the text in this field when editing a file to preview the file.
Menu Access Disabled	Select this check box to make the file unavailable. Staff members cannot select the file to insert in a document.
End-User Access Disabled	Select this check box to make the file unavailable in mailings and surveys sent to contacts. Contacts will receive a message indicating that access is denied.
Description	Type a description of the file in this field. The description is for internal use only. It is not seen by contacts who receive a mailing or survey with the file.

5 To spell check the file description, click the Spelling button on the ribbon and refer to Spell checking.

6 Click the Save and Close button to save the file. The Save As window opens.

Note You can click the Save button to save the file without closing it.

7 Select the folder you want to save the file in and type the name of the file in the Name field.

8 Click the Save button to save the file.

Using the HTML editor

When creating a document, template, or snippet, you add HTML content using an HTML editor built into the system. The HTML editor contains many of the same options available in basic word processing applications and also has specialized operations such as adding **web forms**, **conditional sections**, **incident threads**, **merge fields**, and **merge reports**.

You can create content in design or source mode. Using design mode, you can create dynamic, well-formatted content even if you do not have previous HTML experience. You can include special formatting in your text and add graphics, links, and other HTML features. You can also add links to existing content.

Note For design mode to be available in Outreach and Feedback, the HTML Design Mode permission must be selected for both Outreach and Feedback in your profile. See Outreach permissions and Feedback permissions.

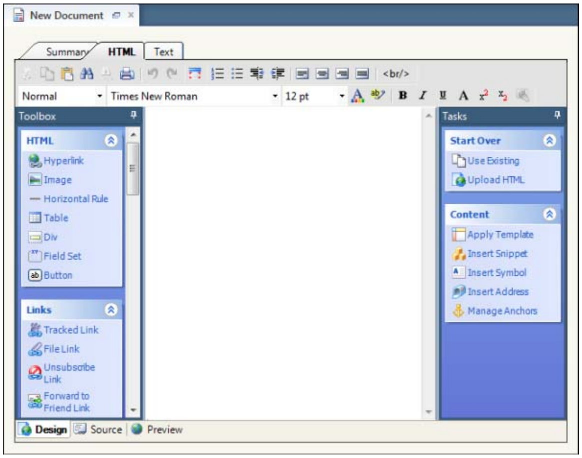
Using source mode, you can create content using HTML source code. Regardless of which mode you use to create content, you can preview how it appears to customers from the Preview tab. See Adding HTML in source mode.

Adding HTML in design mode

Oracle Service Cloud contains an HTML editor for creating dynamic content. If your profile includes the HTML Design Mode permission, you begin in design mode. Otherwise, only source mode is available. See Adding HTML in source mode, Outreach permissions and Feedback permissions.

When in design mode, you can use word processing functions to create HTML, as well as dynamic content, such as adding a **conditional section** or a **merge field**.

You can add several types of links to your content. Links appear as clickable text when the document is used in a mailing or survey or as a web page. When a link is added, you have the option of defining certain attributes depending on the type of link. Links, as well as forms and dynamic content elements, are located in the toolbox.



Tip You can define style and class properties on most toolbox and tasks elements (or options) by right-clicking the element after you add it to the canvas. Keep in mind that style and class must be defined in a CSS file that is available on your web server and linked to in the `<head>` tag of a survey template. See [To edit style and class](#).

Using the toolbar, you can create HTML using many of the same options available in basic word processing applications. Functions include:

- Cut, copy, and paste
- Find and replace text
- Print the document
- Undo and redo changes
- Switch to full screen
- Format text in numbered or bulleted lists
- Adjust indentation
- Center, left-justify, or right-justify text and images on the page
- Insert line breaks
- Change font size and style attributes (such as bold, italic, and underline)
- Apply special text formatting (such as color, highlighting, superscripts, and subscripts)
- Copy text formatting using the style applier

Additional functions available in Oracle Service Cloud are accessed through the Toolbox and Tasks sections described in the following tables. Within the Toolbox, there are HTML, Links, and Dynamic Content sections. In Outreach and Feedback, there is also a Forms section. Within the Tasks, there are Start Over and Content sections.

Tip You can insert HTML by clicking a button in the Toolbox or Tasks section, or by dragging and dropping the button to a specific location on the canvas.

Table 421: Toolbox Section Description

Button	Description
HTML	Buttons in this section are used to insert standard HTML elements in your content.
Hyperlink	Click this button to insert a hyperlink. See Inserting hyperlinks.
Image	Click this button to insert an image. See Inserting images.
Horizontal Rule	Click this button to insert a horizontal line.
Table	Click this button to insert a table. See Inserting tables.
Div	Click this button to insert a DIV block, which you can use to group other elements, such as buttons.
Field Set	Click this button to insert a field set.
Button	Click this button to insert a button. Double-click the button on the canvas to edit the button text.
Links	Buttons in this section are used to insert links in your content. **Note:** Some buttons apply only to message templates and are noted as such.
Account Assistance Link	Click this button to insert a link to the Account Assistance page on your customer portal. See Inserting account assistance links.
Answer Link	Click this button to insert a link to any answer you specify. See Inserting links to answers. **Note:** This button is available only in message templates. See Customizing messages.
Browser Link	Click this button to insert a browser link. See Inserting browser links.

Table 421: Toolbox Section Description (Continued)

Button	Description
Chat Link	Click this button to insert a link to the Live Help page on the customer portal. See Inserting chat links. **Note:** This button is available only if Oracle RightNow Chat Cloud Service (Chat) is enabled.
Cloud Link	Click this button to insert a link to a social media service. See Inserting cloud links.
File Link	Click this button to insert a file link. See Inserting unsubscribe links.
Forward to Friend Link	Click this button to insert a forward to friend link. See Inserting forward to friend links.
Incident Link	Click this button to insert a link to any incident you specify. See Inserting links to incidents.
Profile Link	Click this button to insert a link to the Account Settings page on your customer portal. See Inserting profile links.
Proof Comments Link	Click this button to add more than one comment field to the Survey Proof message template that is sent to proofreaders of website link surveys. See Inserting proof comments links. **Note:** This button is available only in message templates. See Customizing messages.
Proof Survey Link	This button is included, by default, on the Survey Proof message template and links to the website link survey you want your proofreaders to review. See Inserting proof survey links. **Note:** This button is available only in message templates. See Customizing messages.
Reset Password	Click this button to insert a reset password link. See Inserting reset password links.
Setup Password	Click this button to insert a link to the Finish Account Creation page on your customer portal. See Inserting setup password links.
Survey Link	Click this button to insert a link to a survey. See Inserting links to surveys.

Table 421: Toolbox Section Description (Continued)

Button	Description
Survey Results Link	This button is included, by default, on the Survey Notification message template and links to a web page that shows the survey's responses. See Inserting survey results links. **Note:** This button is available only in message templates. See Customizing messages.
This Answer Link	Click this button to insert a link to the incident that triggered the message being sent. See Inserting links to answers. **Note:** This button is available only in message templates. See Customizing messages.
This Incident Link	Click this button to insert a link to the incident that triggered the message being sent. For example, the standard Question Receipt email sends a confirmation message after a customer submits a question through the Ask a Question page, an email, or a chat session. By adding a This Incident Link to your Question Receipt message template, you can provide your customers with easy access to the incident created from their question. See To insert a this incident link.
Tracked Link	Click this button to insert a tracked link. See Inserting tracked links.
Unsubscribe All Answers Link	Click this button to insert a link that lets contacts who receive answer notifications unsubscribe from future communications. See Inserting unsubscribe all answers links. This button is available only in message templates. See Customizing messages.
Unsubscribe Link	Click this button to insert an unsubscribe link. See Inserting unsubscribe links.
Unsubscribe This Answer Link	Click this button to insert an unsubscribe link to a specific answer that's been returned as the result of a repeatable answer section. See Inserting unsubscribe this answer links. **Note:** This button is available only on the Answer Update Notification message template. See Customizing messages.
Web Page Link	Click this button to insert a web page link. See Inserting web page links.

Table 421: Toolbox Section Description (Continued)

Button	Description
Forms	Buttons in this section are used to insert web forms and survey questions in your HTML.
Web Form	Click this button to insert a web form to collect customer data. Documents can contain only one web form. See Inserting web forms.
Form Field	Click this button to insert a database field in the web form. Your web form must contain at least one form field. See Inserting web forms.
Survey Question	Click this button to insert a survey question in the web form. See Inserting web forms.
Submit Button	Click this button to insert a button for submitting the web form. See Inserting web forms.
Dynamic Content	Buttons in this section are used to insert dynamic content in your HTML.
Answer Section	Click this button to add any repeatable answer details on your answer update notification messages. See Inserting answer sections. **Note:** This button is available only in message templates. See Customizing messages.
Case Section	Click this button to add a case section to your conditional text. See Inserting case sections.
Conditional Section	Click this button to insert a section of conditional text. See Inserting conditional sections.
Content Placeholder	Click this button to add a content placeholder to your template. When you create a template by uploading an HTML file, you must add a content placeholder because templates cannot be saved without a content placeholder. See To create a template. **Note:** This button is available only for templates. For message templates, this button displays under the HTML section of the toolbox.
Incident Thread	Click this button to insert an **incident thread** that displays all communication between the parties associated with the message. See Inserting incident threads.
Merge Field	Click this button to insert a merge field. See Inserting merge fields.
Merge Report	Click this button to insert a merge report. See Inserting merge reports.

Table 422: Tasks Section Description

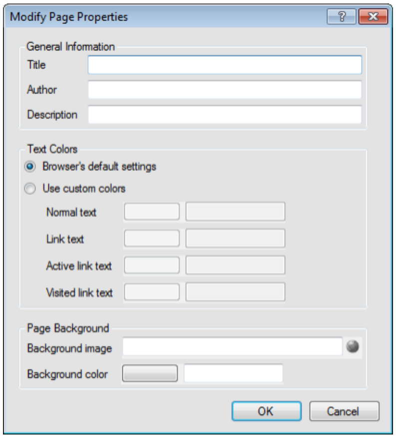
Button	Description
Start Over	Buttons in this section are used to clear all HTML content and start over.
Use Existing	Click this button to clear all HTML elements and start over with an existing document.
Upload HTML	Click this button to clear all HTML elements and start over with content uploaded from an HTML file.
Content	Buttons in this section are used to insert snippets and symbols and manage HTML anchors.
Apply Template	Click this button to select a template to apply to a document. You cannot apply a template to templates or snippets. See Creating templates. **Note:** Once a template has been applied to a document, it can be cleared by clicking the Apply Template button, then clicking the Clear Template button on the Choose Template window.
Insert Snippet	Click this button to insert a snippet. See Creating snippets.
Insert Symbol	Click this button to insert a special symbol. A symbol map opens. Double-click the symbol you want to insert.
Insert Address	Click this button to insert a physical address. See Inserting physical addresses. **Note:** The CAN-SPAM Act of 2003 requires that commercial email messages contain the sender's valid physical postal address.
Manage Anchors	Click this button to add or remove an anchor or go to an anchored site. See Inserting anchors.
Test CAN-SPAM	Click this button to test the document for CAN-SPAM compliance. See CAN-SPAM compliance in mailings. **Note:** This button is available only when editing a document in a mailing message or survey invitation message.

Modifying page properties

You can modify the document's HTML properties to change colors of the text and links, insert a background image or color, and change the document's title.

To modify page properties

1 Right-click in the document and select Page Properties.



2 Enter the following field information.

Table 423: Modify Page Properties Window Description

Field	Description
General Information	Define the web page's general information in this section.
Title	Type the title of the web page.
Author	Type the name of the web page's author.
Description	Type a description for the web page.
Text Colors	Define the colors used for text and links in this section.
Browser's default settings	Select this radio button to use the web browser's default color settings.
Use custom colors	Select this radio button and click the color boxes to define the colors used for plain text, links, active links, and visited links.
Page Background	Define the background image or color used in the document.
Background image	Type a URL to an image to use as the background in this text box.

Table 423: Modify Page Properties Window Description (Continued)

Field	Description
Open URL	Click this button to open the URL in a web browser.
Background color	Click this color box to choose a color to use as the background or type the HTML hexadecimal value of the color in the field to the right of the color box.

3 Click the OK button to save your changes.

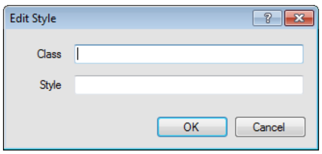
Editing style and class attributes

You can define style and class attributes for most toolbox and tasks elements by right-clicking the element after you add it to the canvas. Keep in mind that style and class must be defined in a CSS file that is available on your web server and linked to with the `<head>` tag of a survey template.

To edit style and class

1 Right-click an element after you add it to the canvas.

2 Select Edit style for <element type> element.



3 Enter the following field information.

Table 424: Edit Style Window Description

Field	Description
Class	Type any class name you want to assign to the element in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings or surveys.
Style	Type any style attributes you want to assign to the element in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).

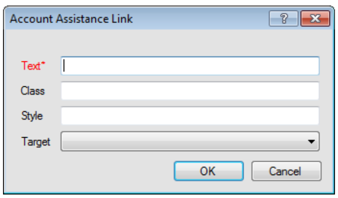
4 Click the OK button to apply the attributes.

Inserting account assistance links

Account assistance links let you link to the Account Assistance page on your customer portal. From this page, your recipients can get help if they do not have or have forgotten their user name or password.

To insert an account assistance link

1 Click the Account Assistance button. The Account Assistance Link window opens.



2 Enter the following field information.

Table 425: Account Assistance Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

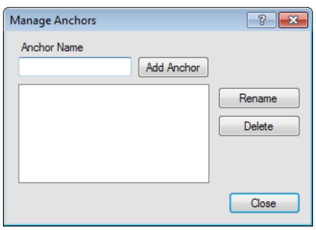
3 Click the OK button to insert the account assistance link.

Inserting anchors

Within the HTML editor, you can add and remove anchors. Anchors are placed at designated locations within a document as a destination for a hyperlink. When you place an anchor in your content, it is invisible when you are in design mode. The anchor code, sometimes referred to as a bookmark, displays only in source mode.

To manage anchors

1 Click the Manage Anchors button. The Manage Anchors window opens.



2 Type the anchor name in the Anchor Name field.

3 Click the Add Anchor button to add the anchor at the insertion point.

4 To delete an anchor, select it and click the Delete button. The anchor is deleted from the list.

5 To rename an anchor, select it, click the Rename button, and type a new name for the anchor.

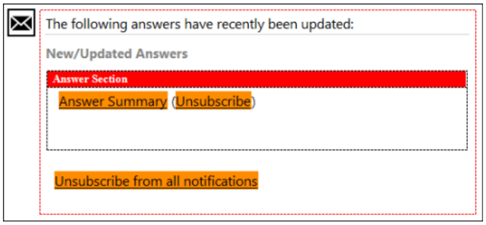
  a Click the OK button to save the new name.

6 Click the Close button to close the Manage Anchors window.

Inserting answer sections

You can use an answer section to display repeatable answer details on your answer update notification messages when more than one answer is sent in the same email. Any content that you include inside the answer section will be repeated. Content outside of the answer section will *not* be repeated.

Let's say you want your message to include the contact's name and you want to show the answer ID for each answer. In this case, you would insert the Answer ID merge field *inside* your answer section and the Contact Name merge field *outside* of the answer section. By inserting Answer ID inside the answer section, this merge field will repeat when more than one answer is sent. Since Contact Name is outside of the answer section, it will not repeat.



An answer section is included, by default, on the Answer Update Notification and Answer Update Notification Expired message templates. You can customize both of these templates in message templates. See Customizing messages.

To insert an answer section

1 Click the Answer Section button. An answer section is inserted into your template.

2 Insert the cursor inside the answer section and click Merge Field to add any fields you want to repeat when more than one answer is sent in the email.

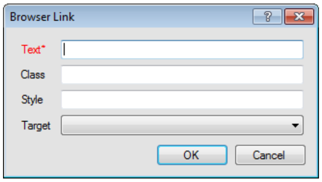
Important Keep in mind that any content outside of the answer section will *not* be repeated when more than one answer is sent in the same notification email. Therefore, if you have content you do not want repeated, add those merge fields outside of the answer section.

Inserting browser links

Browser links let you add a hyperlink to an email message that opens a browser-based version of the same content. This is useful for messages to contacts whose email clients disable image rendering by default.

To insert a Browser link

1 Click the Browser Link button. The Browser Link window opens.



2 Enter the following field information.

Table 426: Browser Link Window Description

Field	Description
*Text	Type the text you want to appear as the hyperlink text.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings.

Table 426: Browser Link Window Description (Continued)

Field	Description
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the browser link.

Inserting case sections

Case sections help you make your content even more relevant to your target audience than by using independent conditional sections. You can specify a logical group of conditions where one, and only one, condition displays to your customer. In a case section, as soon as the first condition is matched, the content for that condition is added and any other conditions are ignored. If no condition within a case section is matched, the content in the default section displays (as long as you have defined it).

For example, you could create a case section that displays information to customers based on their location. The first condition within the case section might be specific to postal codes. If none match, the next condition could be more general, such as states. If neither match, then the default section (if present) displays.

You can add as many conditional sections to your case section as you need to make your content relevant.

Tip Case sections and conditional sections can also be helpful when designing surveys for use on mobile devices. See Customizing surveys for use on mobile devices.

When to use case sections vs. conditional sections

Understanding the difference between case sections and independent conditional sections is essential to be sure your conditional content works the way you expect. Simply stated, a case section shows one, and only one, condition out of a group of conditions. This makes case statements a great tool for setting up OR statements. In contrast, a conditional section can be used to show one or more conditions at the same time. Which one to use depends entirely on your goal.

Show or hide one section—Let's say you want to show a toll-free support number to customers in the U.S. In a straight-forward scenario such as this, when the answer is either "yes" or "no," a simple conditional section does the job. Just define the content you want to display for your single condition and when it matches, your content displays. When the condition does not match, nothing displays.

Show more than one section—In another scenario, you might want to show a toll-free support number to U.S. customers and a list of store locations to customers in Colorado. You can do this by defining two conditional sections—one showing the phone number based on country and another showing locations based on state. For customers who live in Colorado, both the toll-free number and the store locations will display.

Show 1 of 2 sections—If you would rather list only store locations for customers in Colorado and show a toll-free support number to other customers, but you don't want to show both, this is where a case section comes in handy. In your conditional section, list the locations and define your condition based on state. In the default section, define the toll-free number. For customers with a Colorado address, only the locations display. For all other customers, the phone number displays.

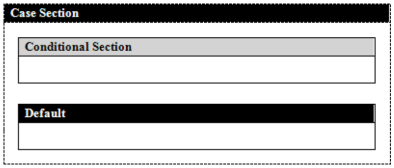
Show 1 of 3 sections—Building on the previous scenario, let's define a case section with multiple conditions where your default section will show an international number to customers living outside of the U.S. Again, you want to show only one condition to each segment of customers. Base the first condition on the state of Colorado, the second condition on the country being the U.S., and define the international number in the default section. Remember, in a case section, the first condition that matches is the only one that displays.

In action, here's how the last scenario plays out.

- If the contact record indicates a Colorado address, the store locations display.
- If the contact record indicates a U.S. address outside of Colorado, the second condition matches and the toll-free U.S. number displays.
- If the contact record has no address or if it does not match Colorado or U.S., the international number you defined for the default section displays. **Note:** If you do not define the default section and the first two conditions do not match any criteria, nothing displays.

To insert a case section

1 Click the Case Section button. The case section displays.



2 Double-click the Conditional Section inside the Case Section.

Or

3 Right-click and select Add Conditional Section. See To insert a conditional section.

Tip You can apply style and class attributes by right-clicking an element after you add it to the canvas. See Editing style and class attributes.

4 If you want to add another conditional section to your case section, repeat step 2.

5 If you want to add content to the Default section, type it in the field below the default section header.

Tip If you add a conditional section after the default section, it will not be evaluated. Therefore, we recommend that you do not add anything after the default section.

Inserting conditional sections

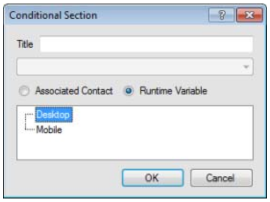
You can add conditional content that displays only when specific criteria is met. For example, you could add conditional sections to a document used in a mailing for segment of customers in a specific postal code. See Creating segments.

In the system-generated message templates (administrator notifications, administrator emails, and contact emails), you can insert conditional sections that display content based on contact, profile, runtime variable, or record type. These options are also available when you insert a conditional section within an incident thread. For example, you could add a conditional section that displays a coupon based on the product specified in the incident. See Editing messages and Inserting incident threads.

If you add more than one conditional section, each condition evaluates separately and if more than one condition matches, content is shown for each matched condition. If you want to display content from only one condition, consider using a **case section** instead of independent conditional sections. See Inserting case sections.

Customizing surveys for use on mobile devices

Case sections and **conditional sections using runtime variables** can be added to the HTML content of your survey's questionnaire if you want to show different content for mobile devices from what you show for desktop mode. For instance, you might want to use a smaller image at the top of your survey for mobile devices than the one you use for surveys viewed on desktops. In another situation, you could use a case section to hide a lengthy matrix question that might not be effective when viewed on a small mobile device. See Inserting case sections and Using matrix questions in mobile surveys.



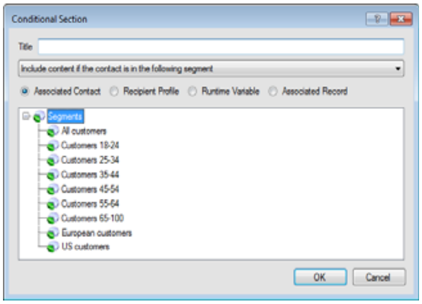
When using conditional and case sections with runtime variables, it's important to remember the following.

- Mobile conditional sections are honored on a mobile device even if mobile optimization is disabled in your survey.
- When using desktop and mobile runtime variables, we recommend that you create content for both variables on one page. You can do this either with a conditional section for each variable, or by adding content that appears for both variables. Otherwise, the runtime variable for which no content is defined will display a blank page.
- If the mobile user selects the Switch to Desktop Mode link, available on the first survey page, all content that displays will be desktop content, even if a mobile device is being used. (Switch to Desktop Mode is available only on the first page of a survey.)
- Test and preview your survey in both mobile and desktop modes to ensure your conditional sections work the way you intend them to.

See Mobile surveys.

To insert a conditional section

1 Click the Conditional Section button. The Conditional Section window opens.



Note The available options are context-sensitive and depend on what type of content you are customizing. For example, in certain message templates or if you've added a conditional section within an incident thread in a mailing or survey, you could add a conditional section that displays a coupon based on the product specified in the incident.

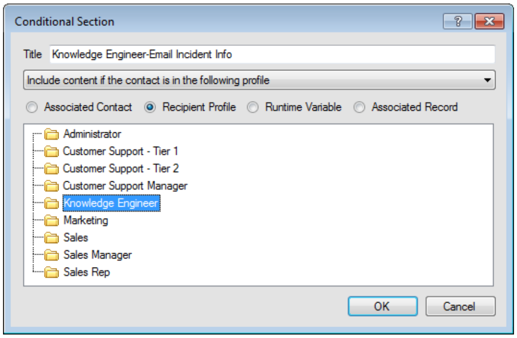
2 Type a title for the conditional section in the Title field.

3 Select an option from the drop-down menu to include content based on whether the contact is in or not in the selected segment.

4 Select a segment from the Segments menu. Segments are created when you define audiences.

5 To create a segment, click New Segment. See Creating segments.

6 For message templates or conditional sections inserted within incident threads in mailings and surveys, select the Associated Contact, Recipient Profile, Runtime Variable, or Associated Record radio button. These options are context-sensitive based on the type of content you are customizing.



a To display text based on contact, see steps 3-4.

b To display text based on recipient profile, select an option from the drop-down menu to include content based on whether the recipient is in or not in the selected profile, and then select a profile.

c To display text based on runtime variable, select Include Contact Information Section. This option is available only in the Email Incident Information (administrator email) message template. It lets the agent decide whether contact information will be sent in the email. See Editing messages.

d To display text based on a record type, select an option from the drop-down menu to include content based on whether the condition is true or false, and then select a record. Next, select an operator to use in comparing the record to the data's value, and then type a value that the record is compared to. See Selecting filter operators.

7 Click the OK button to insert the conditional section.

Tip You can apply style and class attributes by right-clicking an element after you add it to the canvas. See Editing style and class attributes.

For message templates or conditional sections inserted within incident threads in mailings and surveys, style and class attributes are applied on the incident type thread properties. See Inserting incident threads.

8 Type the content you want to display to your audience in the text box below the conditional section header.

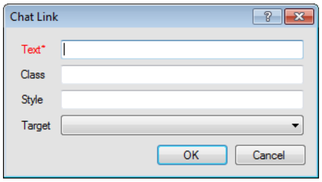
Important Due to the volume of conditional sections that accumulate as new content is created, the **Agedatabase** utility regularly purges the database of orphaned conditional sections (those that have been defined but not used in any campaign, document, or mailing). The PURGE_COND_SECTION_DAYS configuration setting specifies the number of days after which an orphaned conditional section is purged from the database. The default value is 7 days. Set to 0 to turn off conditional section purging.

Inserting chat links

If you have Chat enabled, you can insert a link to the Live Help page for your customers to chat with an agent. For information about enabling Chat, contact your Oracle account manager.

To insert a link to chat

1 Click the Chat Link button. The Chat Link window opens.



2 Enter the following field information.

Table 427: Chat Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.

Table 427: Chat Link Window Description (Continued)

Field	Description
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the chat link.

Inserting cloud links

Cloud links let your contacts track or post your communications on several leading social media sites. You can include cloud links in documents, templates, snippets, mailings, campaigns, surveys, and survey invitation messages.

When a contact clicks a cloud link, the specified service opens in a web browser and prompts the contact for confirmation. The action taken upon confirmation depends on the service being used and the type of link you provided.

Note Most social media services use cookies to identify contacts and automatically log them in to private accounts. As a result, a cloud link's transition to the confirmation page is often seamless. However, if a contact has not created or logged in to an account before clicking a cloud link, the service usually prompts the contact to do so before forwarding for confirmation.

When you create a cloud link, you can select from several leading services and link types. You may also be required to enter the key that is used to identify your organization on the service you have selected.

Table 428: Cloud Link Types and Keys

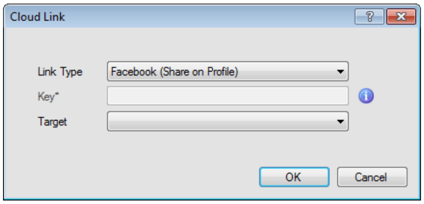
Link Type	Description/Key
Facebook (Share on Profile)	Clicking this link lets contacts share your communication as a message to their Facebook friends, or post a link to a web browser version of your message on their Facebook profile. No key is required.
Facebook (Find Us)	Clicking this link takes contacts to your Facebook group page, where they can join your Facebook group. When this option is selected, you must type your Facebook group ID in the Key field. For example, if your Facebook group URL is http://facebook.com/group.php?gid=0123456789, the key would be "0123456789."
Flickr	Clicking this link takes contacts to your Flickr group page, where they can join your Flickr group. When this option is selected, you must type your Flickr group ID in the Key field. For example, if your Flickr group URL is http://flickr.com/groups/companyname, the key would be "companyname."
Twitter (Tweet)	Clicking this link lets contacts post a link to a web browser version of your message on their Twitter account. No key is required.
Twitter (Follow)	Clicking this link takes contacts to your Twitter page, where they can follow your organization with their Twitter account. When this option is selected, you must type your Twitter group ID in the Key field. For example, if your Twitter URL is http://twitter.com/companyname, the key would be "companyname."
YouTube	Clicking this link takes contacts to your YouTube channel page, where they can join your YouTube channel. When this option is selected, you must type your YouTube group ID in the Key field. For example, if your YouTube group URL is http://youtube.com/companyname, the key would be "companyname."
LinkedIn	Clicking this link takes contacts to your LinkedIn group page, where they can join your LinkedIn group. When this option is selected, you must type your LinkedIn group ID in the Key field. For example, if your LinkedIn group URL is http://linkedin.com/groupRegistration.php?gid=012345, the key would be "012345."

Table 428: Cloud Link Types and Keys (Continued)

Link Type	Description/Key
MySpace (Share on Profile)	Clicking this link lets contacts post a link to a web browser version of your message on their MySpace profile. When this option is selected, you must type a title for your posted link in the Key field.
Community	Clicking this link takes contacts to your community page. No key is required. **Note:** This link type is available only when communities have been enabled for Oracle RightNow Social Experience.

To insert a cloud link

1 From the HTML editor's HTML or Text tab, click the Cloud Link button. The Cloud Link window opens.



2 Enter the following field information.

Table 429: Cloud Link Window Description

Field	Description
Link Type	Click this drop-down menu to select the type of cloud link you want to insert. You can select from the following options. • Facebook (Share on Profile) • Facebook (Find Us) • Flickr • Twitter (Tweet) • Twitter (Follow) • YouTube • LinkedIn • MySpace (Share on Profile) • Community

Table 429: Cloud Link Window Description (Continued)

Field	Description
*Key	Type the unique key value associated with the selected link type. **Note:** This field is inactive when the link type is Facebook (Share on Profile), Twitter (Tweet), or Community.
Hint	Hover over this button for information about the key required for the selected link type.
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. **Note:** This field displays only when inserting cloud links in the HTML editor.
*Link Text	Type the text you want to appear as the link in this field. **Note:** This field displays only when inserting cloud links in the Text editor.

3 Click the OK button to insert the link.

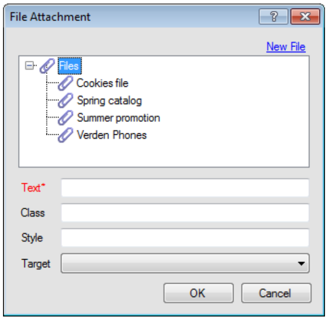
Important The social media services described in this procedure, with the exception of Oracle RightNow Social Experience, are not provided by or affiliated with Oracle. To obtain support or information about terms and conditions for the services mentioned, contact the service provider.

Inserting file links

After files have been defined, you can add them to your HTML as links. See Adding files.

To insert a file link

1 Click the File Link button. The File Attachment window opens.



2 Enter the following information.

Table 430: File Attachment Window Description

Field/Option	**Description**
*Files	Select a file from this list. See Adding files.
New File	Click this text to add a file. The file is selected in the menu after being added. See Adding files.
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

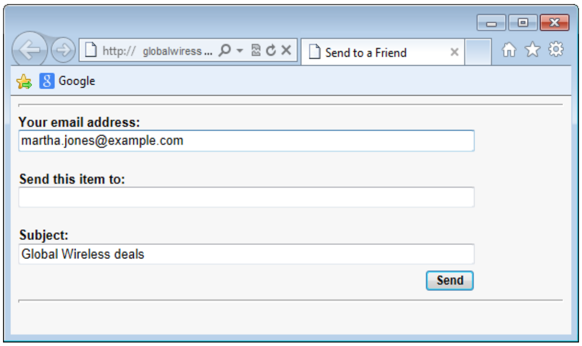
3 Click the OK button to insert the file.

Tip You can also apply style and class attributes by right-clicking an element after you add it to the canvas. See Editing style and class attributes.

Inserting forward to friend links

Forward to friend links let your customers forward your mailing or survey to additional addresses. The addresses receive a copy of the mailing or survey, but are not added to your contact list.

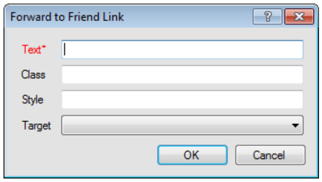
When contacts click the link, a page opens asking them for the email addresses of the friends they want to forward the mailing or survey to. The following figure shows the page that appears to contacts when they click the link.



Note The Subject field of the Send To A Friend form contains the subject from the forwarded message and cannot be edited. Contacts sending to multiple recipients must separate email addresses with a comma or semicolon. Also, recipients of messages sent through the Forward to Friend link see the message, “This message was sent to you by <email_address>,” regardless of whether the sender includes comments when forwarding the message.

To insert a forward to friend link

1 Click the Forward to Friend Link button. The Forward to Friend Link window opens.



2 Enter the following field information.

Table 431: Forward to Friend Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

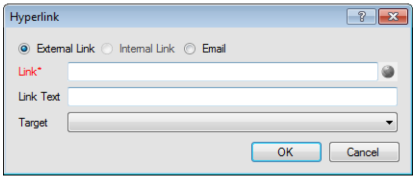
3 Click the OK button to insert the link.

Inserting hyperlinks

You can insert hyperlinks in your HTML content and then define the hyperlink's properties. You can also choose whether to link to an external site or an anchor in this or another document. See Inserting anchors.

To insert a hyperlink

1 Click the Hyperlink button. The Hyperlink window opens.



2 Enter the following field information.

Table 432: Hyperlink Window Description

Field	Description
External Link	Select this radio button to insert a link to a website outside of Oracle Service Cloud.
*Link	Type the full URL of the hyperlink in this field.
Open Hyperlink	Click this button to open the hyperlink in a web browser.
Link Text	Type the text you want to appear as the link in this field.
Target	Select a target from this drop-down menu: • New Window—The URL opens in a new browser. • Same Window—The URL opens in the same frame. • Parent Window—The URL opens in the same frameset. • Browser Window—The URL opens in the same window.
Internal Link	Select this radio button to insert a link to an internal anchor. **Note:** This radio button is available only if an anchor has been added to the document. See Inserting anchors.
Anchor	Click this drop-down menu to select an anchor to link to.
Link Text	Type the text you want to appear as the link in this field.
Email	Select this radio button to insert a link to an email address.
*Address	Type the email address in this field. For example, type lucybauer@example.com to create a link to Lucy Bauer's email address. **Note:** You do not need to prepend the email address with the "mailto:" tag. The system adds the "mailto:" tag when you type the email address in the field.

Table 432: Hyperlink Window Description (Continued)

Field	Description
Link Text	Type the text you want to appear in this field.

3 Click the OK button to insert the link.

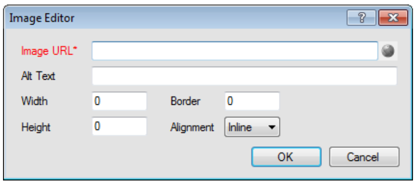
Tip You can also apply style and class attributes by right-clicking an element after you add it to the canvas. See [Editing style and class attributes](#).

Inserting images

You can insert an image that is accessible through a URL in your HTML. You can also define the size of the image, its border properties, and alignment.

To insert an image

1 Click the Image button. The Image Editor opens.



2 Enter the following field information.

Table 433: Image Editor Description

Field	Description
***Image URL**	Type the URL where the image is located.
 Open URL	Click this button to open the URL in a web browser.
Alt Text	Type the alternative text for the image.
Width	Type the width, in pixels, you want the image to appear as.
Height	Type the height, in pixels, you want the image to appear as.

Table 433: Image Editor Description (Continued)

Field	Description
Border	Type the width, in pixels, of the image's border.
Alignment	Click this drop-down menu to select the image's alignment: Inline, Left, Middle, Right, Top, or Bottom. The default alignment is Inline.

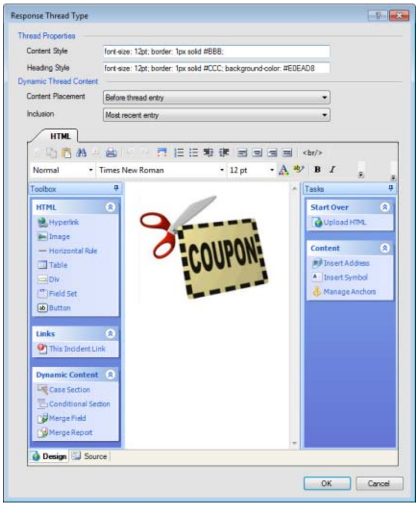
3 Click the OK button to insert the image.

Inserting incident threads

You can add an incident thread to your HTML so that all communication regarding an incident displays in your content. The incident thread lists all activity about an incident, including the original question, responses and updates from agents, customer updates, records of conversations, and internal notes about the incident (which are not visible to the customer). You can filter by author, channel, entry date, entry text, and entry type.

You can also define thread properties, which apply to the entire thread entry, and dynamic thread content, which lets you dynamically add content for a specific thread type. In addition, you can customize the look of your incident thread by defining style and class attributes and sort the display order and limit the number of threads (up to 99) that display in your messages.

In addition to defining style and display attributes for the entire thread entry, you can define where to include your dynamic content—either before or after the thread entry. You can also choose whether your content displays only in the most recent entry, in all entries, or in all entries except the most recent one. In the sample shown here, the response thread type offers customers a coupon before the thread entry and only in the most recent thread.

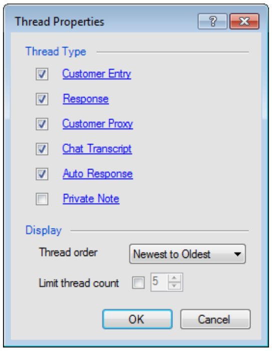


Important While content added from thread type windows is included in the email that is eventually sent, it is not stored in the database. Therefore, it cannot be retrieved later.

To insert an incident thread

1 Click the Incident Thread button. The incident thread displays.

2 To edit the thread properties, double-click the incident thread. The Thread Properties window displays.



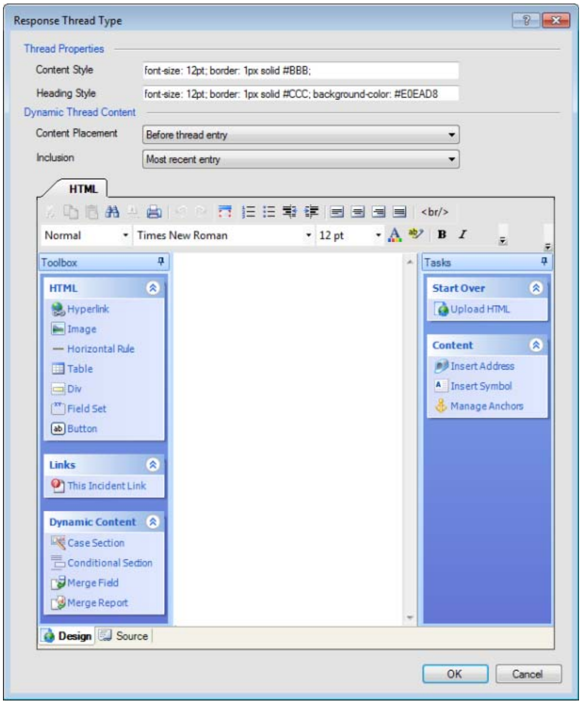
Thread properties display by incident thread type.

3 To define the types of threads that display in your content, clear or select the check boxes in the Thread Types section.

Note In Outreach and Feedback, all thread types, except for the Private Note thread type, are selected by default. In message templates, whether or not the Private Note check box is selected by default depends on the message type. For example, message templates that are designed for agents will have the Private Note check box selected by default. However, on message templates that are designed for customers, the check box will be cleared.

4 To apply formatting styles for your thread content and headings, click the link on the Thread Properties window that is specific to the type of thread you want to edit. For example, clicking the Response link opens the Response Thread Type window.

Click to view



5 Enter the following field information.

Table 434: Thread Type Window Description

Field/Option	Description
Thread Properties	Enter information in this section to define how the content and heading of your incident thread will display. Thread properties apply to the entire thread entry. **Note:** Thread properties are not available when using the text editor. See Creating text content in documents.
Content Style	Type any HTML style and class attributes you want the content of your incident thread to display. **Note:** By default, font-size: 12pt; border: 1px solid #BBB.

Table 434: Thread Type Window Description (Continued)

Field/Option	Description
Heading Style	Type any HTML style and class attributes you want the heading of your incident thread to display. **Note:** By default, font-size: 12pt; border: 1px solid #CCC: back-ground-color: #EOEAD8.
Dynamic Thread Content	This section is used to define the placement of your content and in which thread entries to include the content. **Note:** The options in this section apply only to the content for the specific thread type.
Content Placement	The options in this drop-down menu define the placement of your content—either Before Thread Entry, which is selected by default, or After Thread Entry.
Inclusion	The options in this drop-down menu define where in the incident thread your content displays. Options include the following. • **Most Recent Entry**—Displays your content in only the most recent thread. (Default) • **All Entries**—Displays your content in every thread. • **All Entries Except Most Recent**—Displays your content in every thread except the most recent one.

6 Define the content of your incident thread and other formatting options using the HTML editor. See Using the HTML editor.

7 Click the OK button to save your content and close the window. Notice that the Thread Properties window is still open.

8 To change the thread sort order to display the oldest threads first, select Oldest to Newest in the Thread Order drop-down menu. By default, the most recent threads display.

9 To limit the number of threads that display, select the Limit Thread Count check box.

Note The Limit Thread Count check box is available only if the thread order is set to Newest to Oldest.

a Type the number of threads you want to display (up to 99) in the field next to the Limit Thread Count check box.

Tip You may also want to consider showing conditional content based on the number of threads that are included within the sent message. See Conditional content based on message thread count.

10 Add any other links or dynamic content you need to customize your message.

If an incident is triggered, all communication regarding the incident displays in your message.

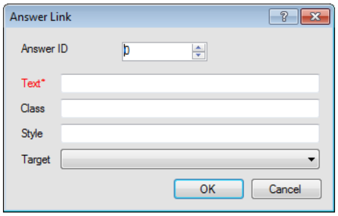
Inserting links to answers

There are two ways you can link to answers from Oracle Service Cloud. Inserting an Answer Link lets you link to any answer you need to reference in the email message sent to your customer. Inserting a This Answer Link lets you link to the answer that triggered the message being sent.

Both the Answer Link and This Answer Link are included, by default, on any answer-related message template. See Customizing messages.

To insert an answer link

1 Click the Answer Link button. The Answer Link window opens.



2 Enter the following field information.

Table 435: Answer Link Window Description

Field	Description
Answer ID	Type the answer ID for the answer you want to link to in this field.
*Text	Type the text you want to appear as the link in this field.

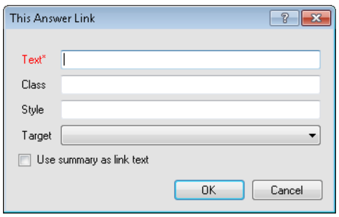
Table 435: Answer Link Window Description (Continued)

Field	Description
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the answer link.

To insert a this answer link

1 Click the This Answer Link button. The This Answer Link window opens.



2 Enter the following field information.

Table 436: This Answer Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.

Table 436: This Answer Link Window Description (Continued)

Field	Description
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.
Use Summary As Link Text	Select this check box to use the answer's summary as the text you want to appear as the link.

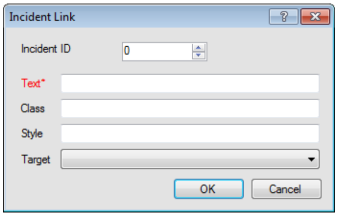
3 Click the OK button to insert the this answer link.

Inserting links to incidents

There are two ways you can link to incidents from Oracle Service Cloud. Inserting an Incident Link lets you link to any incident you need to reference in the email message sent to your customer. Inserting a This Incident Link lets you link to the incident that triggered the message being sent. For instance, the standard Question Receipt email sends a confirmation message after a customer submits a question through the Ask a Question page, an email, or a chat session. By adding a This Incident Link to your Question Receipt message template, you can provide your customers with easy access to the incident created from their question. See Customizing messages.

To insert an incident link

1 Click the Incident Link button. The Incident Link window opens.



2 Enter the following field information.

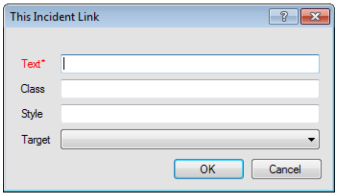
Table 437: Incident Link Window Description

Field	Description
Incident ID	Type the incident ID for the incident you want to link to in this field.
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the incident link.

To insert a this incident link

1 Click the This Incident Link button. The This Incident Link window opens.



2 Enter the following field information.

Table 438: This Incident Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the this incident link.

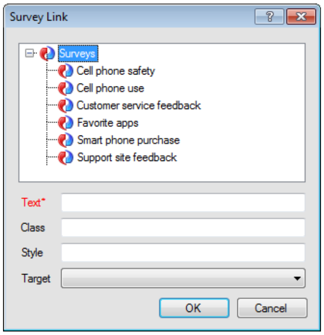
Inserting links to surveys

There are two ways you can link to surveys from Oracle Service Cloud. From mailings, documents, and certain message templates, you can insert a Survey Link that lets you add a link to any existing survey listed in your Surveys explorer. See Creating mailings, Creating documents, and Editing messages.

From a survey, you can insert a Link to This Survey that adds a link to the survey you have open. The Link to This Survey is included, by default, on the survey's invitation message when you create a new survey. See Creating surveys.

To insert a survey link

1 From a document, mailing or message template, click the Survey Link button. The Survey Link window opens.



2 Enter the following information.

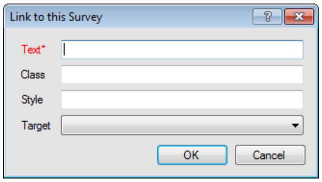
Table 439: Survey Link Window Description

Field/Option	Description
*Surveys	Select a survey from this list. See [Creating surveys]().
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the survey link.

To insert a link to this survey

1 Click the Link to This Survey button. The Link to This Survey window opens.



2 Enter the following information.

Table 440: Link to This Survey Window Description

Field/Option	**Description**
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the link to this survey.

Inserting merge fields

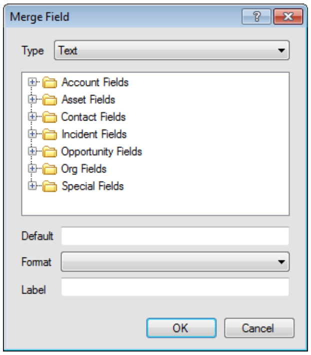
Merge fields allow you to look up account, asset, contact, incident, opportunity, organization, or tracked link information and insert it in the text. For example, you could insert a merge field for the first name field and have contacts' first names appear in their mailing. You could also insert a number of incident fields for documents that are sent as a result of an incident rule or in a campaign that uses an incident action. In the case where a merge field value does not exist, you can specify a default value. Additionally, you can add merge fields to a URL parameter. See [Inserting merge fields to URL parameters](#).

Another category of merge field includes those that do not logically align with any of the other categories. These merge fields are found in the Special Fields folder. Some let you insert merge fields related to certain configuration settings, such as the number of hours an incident set to Waiting stays open or the amount of time in which an incident can be reopened after it is solved. There are also special fields that let you personalize the Subject field of the survey's invitation message by displaying the survey's expiration date or the number of days until the survey expires. Other special fields include interface name, generation time, and SLA name. As with all merge fields, those found in the Special Fields folder are context-sensitive to the type of content you are creating.

There are two types of merge fields: text and image. When you insert a text merge field, you insert the text from part of the record, such as a contact email address. When you insert an image merge field, you insert the URL to an image based on a text or text area contact custom field. The custom field should contain the absolute or relative path to the image you want to display in the document.

To insert a merge field

1 Click the Merge Field button. The Merge Field window opens.



2 To insert a text merge field, click the Type drop-down menu and select Text.

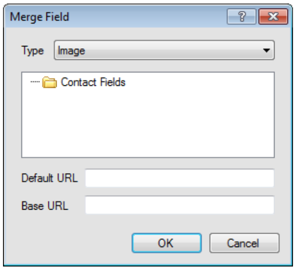
a Enter the following information.

Table 441: Text Merge Field Window Description

Field/Option	Description
*Merge Fields	Select a database column from this list.
Default	Type the default value of the merge field in this field. The default value is used if a value does not exist for the field in a contact record or incident. If you want to include the field only when a value exists, put the merge field in a conditional section. **Note:** This field is not available when adding merge fields to a URL parameter.
Format	Click this drop-down menu to select the format. The options that display are dynamic based on the type of merge field you select. **Note:** This field is not available when adding merge fields to a URL parameter.
Label	Type a label that will display next to the merge field in this field. **Note:** This field is not available when adding merge fields to a URL parameter.

b Click the OK button to insert the merge field.

3 To insert an image merge field, click the Type drop-down menu and select Image.



a Enter the following information.

Table 442: Image Merge Field Window Description

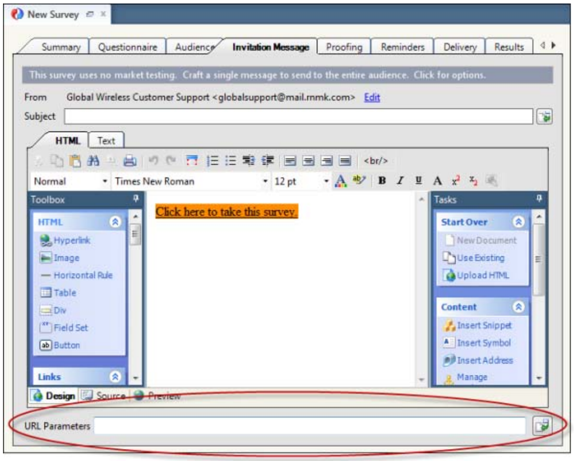
Field/Option	Description
*Merge Fields	Select a text or text area contact custom field from this list. **Note:** The values in the custom field should contain the names of images stored on your web server.
Default URL	Type the default value of the merge field. The default value is used if a value does not exist for the custom field in a contact record. The value should be an absolute URL to an image (for example, http://www.company.com/images/logo.gif).
Base URL	Type the base URL for the merge field if you use relative URLs in the contact custom field. The value of the contact custom field is appended to this URL. For example, if the base URL is http://www.company.com/images/ and the value of the custom field is logo.gif, the result will be http://www.company.com/images/logo.gif. Leave this field blank if the contact custom field uses an absolute URL.

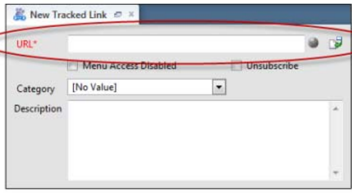
4 Click the OK button to insert the merge field.

Tip You can apply style and class attributes by right-clicking an element after you add it to the canvas. See Editing style and class attributes.

Inserting merge fields to URL parameters

You can add merge fields to URL parameters you want to attach to links in your messages. URL parameters can be defined on a mailing message, a survey invitation message, or a tracked link. In these cases, the value of the merge field is appended to the URL as a parameter. For example, if you wanted to pass the login field value from the contact record, specifying http://www.global.example/regform.php?user=$contacts.login would return a URL such as http://www.global.example/regform.php?user=jsmith.

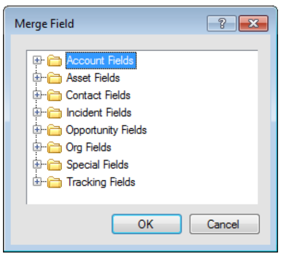




To insert a merge field to a URL parameter

1 Type any parameters you want to append to the links in your message (for example, p1=v1&p2=v2) in the URL Parameters field.

2 Click the Merge Field button to the right of the URL Parameters field.



a Select the database field you want to merge. Merge fields are populated with data from the contact record, account data or an associated incident, asset, opportunity, organization, or tracked link. You can also use the special fields that are available. The value of this field is appended to the URL as a parameter.

b Click the OK button to append the field to the URL.

Inserting merge reports

In addition to merging data into your content one field at a time, you can select and merge full reports, and filter their output and edit their appearance. Merged reports extend data access to your marketing and survey communications so you can develop content that is more dynamic and contextually relevant to your customers.

In most cases, a primary filter is applied to limit the report output so that customers see only their own information. For example, if a report displays a list of all open incidents, customers see only their own open incidents when they view the merged report. Primary filters are automatically applied in the following cases.

- *contacts.c_id*—Primary filter for any mailing (broadcast or transactional) and any survey invitation message. If merging a report on a web page, the contact must be recognized by click-through parameters or cookies.
- *incidents.i_id*—Primary filter for any transactional mailing or survey that is sent using incident rules.
- *opportunities.op_id*—Primary filter for any transactional mailing or survey that is sent using opportunity rules.
- *chats.chat_id*—Primary filter for any transactional mailing or survey that is sent using chat rules.

In certain situations, you may want to disable the primary filter in the merged report, which can be done by clearing the Automatically Apply Primary Filter check box on the Merge Report window. However, special handling is required to ensure that the resulting data is appropriate for your audience. For example, if you want to include a report in a closed incident survey listing each customer's open incidents, the automatic primary filter can restrict the report to show only the incident that triggered the survey. If you disable the primary filter, the report shows all incidents for all contacts. To prevent this, you can manually add a primary filter by editing the report and adding a filter on *contacts.c_id* = ‘’. If you then save the report and send the survey, the merged report filters on individual *c_id* values and displays to customers only incidents associated with their contact record. (Filters can also be performed on *incidents.i_id, opportunities.op_id,* and *chats.chat_id*, as needed.)

Caution Disabling the automatic primary filter removes safeguards intended to restrict the scope of the report to the records related to the recipient. As a result, all data is returned for the report just as it would if opened from the Reports explorer. Depending on how the report is configured, this can be processor intensive and, in some cases, result in contacts receiving information related to other contacts. Unless a primary field filter has been added to the report, we recommend that this check box remain selected.

When merging a report into your content, you must select a preview contact to be used for filtering data on the content editor's Preview tab. This filter limits the data shown in the preview and provides a more accurate representation of the finished content. You can also edit a merged report's display properties and set a default value to be used when no data is returned.

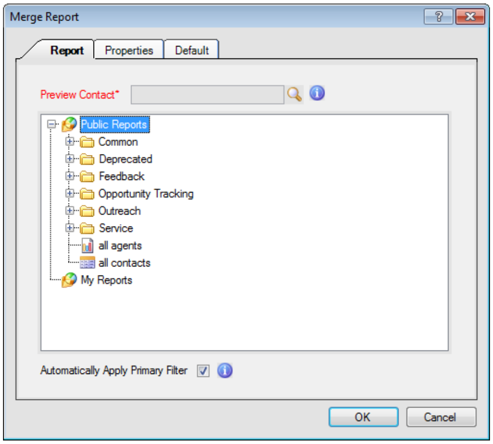
From the Preview tab, you can also use the optional Preview Contact field to filter your preview by a particular contact. This lets you see how your dynamic content, such as merge fields and conditional sections, looks in your content. For example, if you have a conditional section for contacts in a specific postal code, you can preview your message to a single contact who matches the postal code you specify to see if your conditional section works the way you intend it to. This improves the accuracy of your messages and, ultimately, saves you time.

The following procedure describes how to merge a report in the content editor in both HTML and text mode.

To merge a report into content

1 On the Design tab of the content editor, move the cursor to where you want to position the report.

2 Click the Merge Report button. The Merge Report window opens listing all reports available in your **profile**.



3 Click the Search button next to the Preview Contact field. The Contact Search window opens where you can search for a contact to use when the report is previewed on the content editor Preview tab.

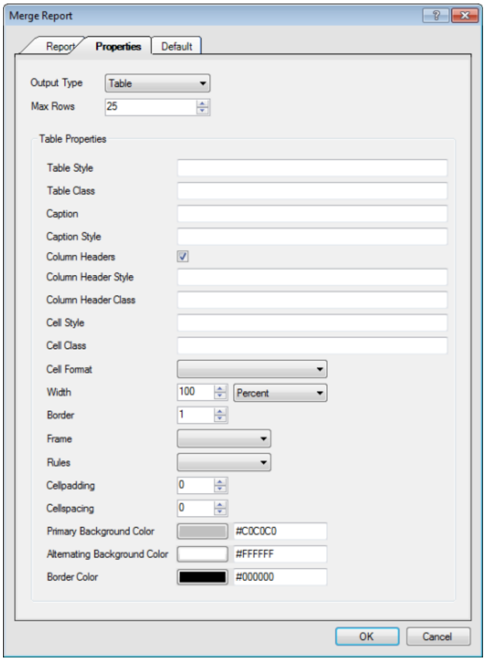
a Select the contact and click the Select button.

4 Select the report you want to merge into your content.

5 To disable the primary filter when the report is run, clear the Automatically Apply Primary Filter check box. The check box is selected by default.

Caution Disabling the primary filter removes the safeguards that restrict the scope of the report to the records related to the recipient.

6 To edit the merge report properties, click the Properties tab and select a report format from the Output Type drop-down menu.



For a description of each merge report property, refer to Setting merge report properties.

7 To specify a default value used when the report returns no information, click the Default tab and enter the default value.

Tip You can also specify a default value once the report is merged by editing the contents of the merge report placeholder.

8 Click the OK button to merge the report. The merge report placeholder is inserted into your content.

9 Click the Preview tab to see how your content looks.

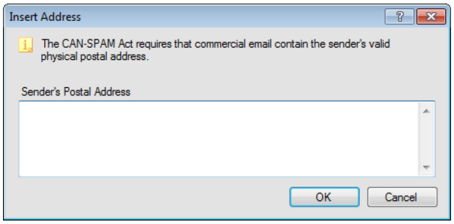
Tip In documents, snippets, and templates, the optional Preview Contact field lets you see how your dynamic content that is specific to a contact looks. For example, if you have a conditional section for customers in a specific postal code, you can preview a contact who matches the postal code you specify to see if your conditional section works the way you intend it to. To preview by contact, repeat step 3.

Inserting physical addresses

You can include a physical address in your HTML so it passes the CAN-SPAM requirement by entering it in a separate area. See CAN-SPAM compliance in mailings.

To add a physical address

1 Click the Insert Address button in the Content section. The Insert Address window opens.



2 Type the physical address of your organization in the Sender's Postal Address field.

3 Click the OK button.

Your address is added to its own section in the document.

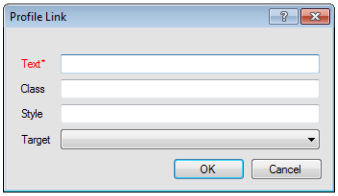
Tip You can apply style and class attributes by right-clicking an element after you add it to the canvas. See Editing style and class attributes.

Inserting profile links

Profile links let you link to the Account Settings page on your customer portal where your customers can change their user name and update their profile information. See Editing the Account Settings page.

To insert a profile link

1 Click the Profile Link button. The Profile Link window opens.



2 Enter the following field information.

Table 443: Profile Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the profile link.

Inserting proof comments links

Inserting a Proof Comments Link lets you add more than one comment field to the Survey Proof message that is sent to proofreaders of website link surveys. For instance, you might want to add comment fields to gather feedback about specific parts of your message rather than the message as a whole. The Survey Proof message template is defined in message templates. See Customizing messages.

To insert a proof comments link

1 Click the Proof Comments Link button. The Proof Comments Link window opens.

2 Enter the following field information.

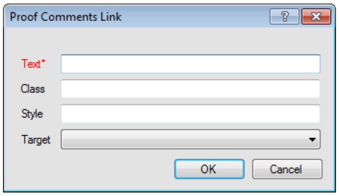


Table 444: Proof Comments Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

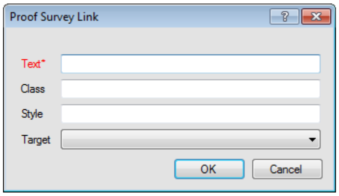
3 Click the OK button to insert the proof comments link.

Inserting proof survey links

Inserting a Proof Survey Link lets you add a link to the website link survey that you want your proofreaders to review. Unlike broadcast and transactional surveys that include a survey link and a comment field in the invitation message sent as part of the proof message, website link surveys rely on the message that is defined by the Survey Proof message template. The Proof Survey Link is included, by default, on the Survey Proof message template. See Customizing messages.

To insert a proof survey link

1 Click the Proof Survey Link button. The Proof Survey Link window opens.



2 Enter the following field information.

Table 445: Proof Survey Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

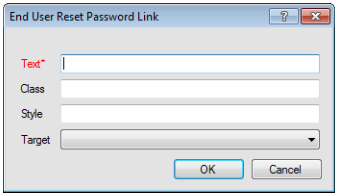
3 Click the OK button to insert the proof survey link.

Inserting reset password links

Reset password links let you link to the Account Assistance page on your customer portal. If any of your recipients do not yet have a password defined in their contact record, providing a reset password link can help them gain access to the customer portal.

To insert a reset password link

1 Click the Reset Password button. The End User Reset Password Link window opens.



2 Enter the following field information.

Table 446: End User Reset Password Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

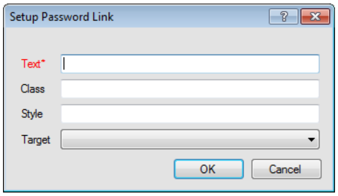
3 Click the OK button to insert the reset password link.

Inserting setup password links

Setup password links let you link to the Finish Account Creation page your the customer portal, which also displays a link to the Account Assistance page.

To insert a setup password link

1 Click the Setup Password Link button. The Setup Password Link window opens.



2 Enter the following field information.

Table 447: Setup Password Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

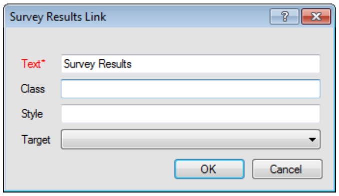
3 Click the OK button to insert the setup password link.

Inserting survey results links

Inserting a Survey Results Link lets you link to a web page showing the survey's responses. The Survey Results Link is included, by default, on the Survey Notification message template. See Customizing messages.

To insert a survey results link

1 Click the Survey Results Link button. The Survey Results Link window opens.



2 Enter the following field information.

Table 448: Survey Results Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

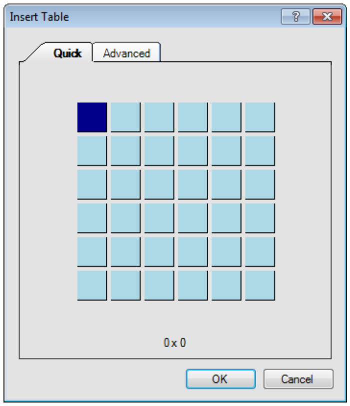
3 Click the OK button to insert the survey results link.

Inserting tables

You can insert a table in your HTML and define the number of rows or columns, and its border properties, cell padding, and cell spacing.

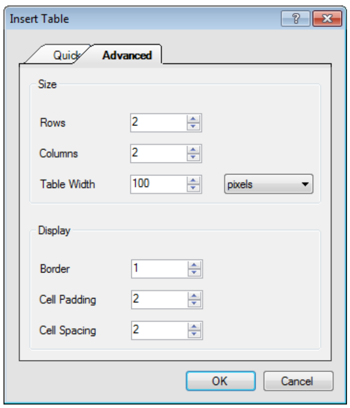
To insert a table

1 Click the Table button. The Insert Table window opens.



2 To insert a table from the Quick tab, hover over and click on the grid to define the number of rows and columns in the table. The table is inserted into your document.

3 To insert a table from the Advanced tab, click the Advanced tab.



a Enter the following field information.

Table 449: Advanced Tab Description

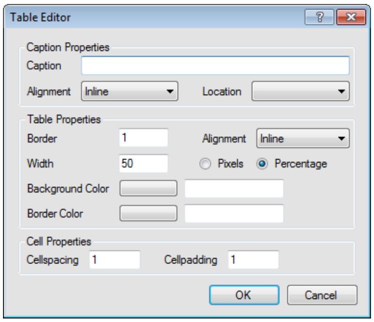
Field	Description
Size	Define the size of the table in this section.
Rows	Enter the number of rows in the table.

Table 449: Advanced Tab Description (Continued)

Field	Description
Columns	Enter the number of columns in the table.
Table Width	Enter the width of the table and select pixels or percent from the drop-down menu.
Display	Define the table’s attributes in this section.
Border	Enter the width, in pixels, of the table’s border.
Cell Padding	Enter the padding, in pixels, of the table’s cells.
Cell Spacing	Enter the spacing, in pixels, of the table’s cells.

b Click the OK button to insert the table.

4 To edit the table properties, right-click the table and select Table Editor > Table Properties.



a Enter the following field information.

Table 450: Table Editor Description

Field	Description
Caption Properties	Define the table’s caption in this section.
Caption	Type the caption of the table.

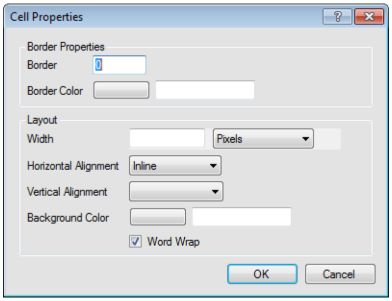
Table 450: Table Editor Description (Continued)

Field	Description
Alignment	Click this drop-down menu and select the alignment of the caption. Your choices are Inline, Left, Centered, and Right. The default alignment is Inline.
Location	Click this drop-down menu and select the location of the caption in relation to the table. Your choices are Top and Bottom.
Table Properties	Define the table's attributes in this section.
Border	Type the width, in pixels, of the table's border.
Alignment	Click this drop-down menu and select the alignment of the table on the page. Your choices are Inline, Left, Centered, and Right. The default alignment is Inline.
Width	Type the width of the table and select the unit from the radio buttons (Pixels or Percentage).
Background Color	Click the color box to select a color for the table's background or type the HTML hexadecimal value of the color in the field to the right of the color box.
Border Color	Click the color box to select a color for the table's borders or type the HTML hexadecimal value of the color in the field to the right of the color box.
Cell Properties	Define the table's attributes in this section.
Cell Spacing	Type the spacing, in pixels, of the table's cells.
Cell Padding	Type the padding, in pixels, of the table's cells.

b Click the OK button.

Tip A list of additional options for adding and removing rows and columns are available by right-clicking the table and selecting Table Editor.

5 To edit a cell's properties, right-click the table cell and select Table Editor > Cell Properties.



a Enter the following field information.

Table 451: Cell Properties Window Description

Field	Description
Border Properties	Define the cell’s border properties in this section.
Border	Enter the width of the cell’s border in pixels.
Border Color	Click the color box to select a color for the cell’s borders or type the HTML hexadecimal value of the color in the field to the right of the color box.
Layout	Define the cell’s layout in this section.
Width	Enter the width of the cell in pixels or as a percentage of the table and select the corresponding unit from the drop-down menu.
Horizontal Alignment	Click this drop-down menu and select the horizontal alignment of the text in the cell. Your choices are Inline, Left, Centered, Right, and Justify. The default alignment is Inline.
Vertical Alignment	Click this drop-down menu and select the vertical alignment of the text in the cell. Your choices are Top, Middle, Bottom, and Baseline.
Background Color	Click the color box to select a color for the cell’s background or type the HTML hexadecimal value of the color in the field to the right of the color box.
Word Wrap	Select this check box to allow text to wrap in the cell.

b Click the OK button to save the cell properties.

Tip Additional options for inserting, merging, splitting, and deleting cells are available by right-clicking the table and selecting Table Editor.

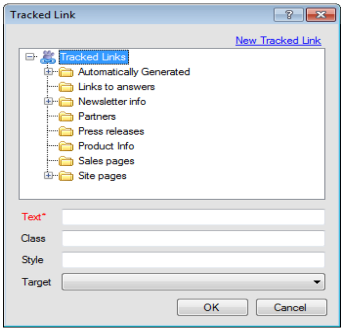
Inserting tracked links

Tracked links let you track the number of link clicks in your survey, mailing, or web page. You can also use tracked links in several of the standard system-generated contact email messages. Adding tracked links to your contact emails are especially useful in tracking your customer-facing incident responses. See Incident response tracking.

After you define your tracked links, you can insert them in your HTML. See Adding tracked links.

To insert a tracked link

1 Click the Tracked Link button. The Tracked Link window opens.



2 Enter the following information.

Table 452: Tracked Link Window Description

Field/Option	Description
*Tracked Links	Select a tracked link from this list. See Adding tracked links.
New Tracked Link	Click this text to create a tracked link. The tracked link is selected in the menu after being added. See Adding tracked links.
*Text	Type the text you want to appear as the link in this field.

Table 452: Tracked Link Window Description (Continued)

Field/Option	Description
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the tracked link.

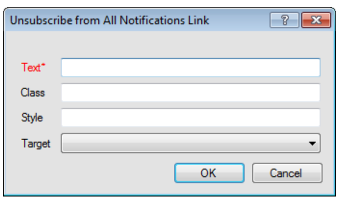
Tip You can also apply style and class attributes by right-clicking an element after you add it to the canvas. See Editing style and class attributes.

Inserting unsubscribe all answers links

Inserting an Unsubscribe All Answers Link lets you add a link that contacts who receive answer notifications can use to unsubscribe from future communications. Answer notification messages are defined in message templates. See Customizing messages.

To insert an unsubscribe all answers link

1 Click the Unsubscribe All Answers Link button. The Unsubscribe From All Notifications Link window opens.



2 Enter the following field information.

Table 453: Unsubscribe From All Notifications Link Window Description

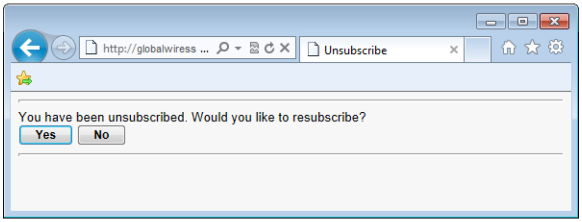
Field	Description
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the unsubscribe all answers link.

Inserting unsubscribe links

Unsubscribe links let your contacts opt out of future mailings and surveys. You can create an unsubscribe link that allows them to globally opt out of all future mailings and surveys, opt out of surveys only, or opt out of audiences defined by a custom opt-in field. See Managing contact opt-ins.

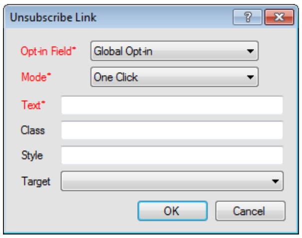
You can unsubscribe contacts with a single click of the link, or direct them to a page to confirm that they want to unsubscribe. When prompting for confirmation, you can choose to set the opt-in field to No either before or after contacts confirm through the Unsubscribe page.



Note All mailings include a List-Unsubscribe mail header which some mail clients use to automatically provide an unsubscribe link when the message is viewed by a recipient. However, because this header is not supported by all mail clients, you should add an unsubscribe link to your message, as described in the following procedure.

To insert an unsubscribe link

1 Click the Unsubscribe Link button. The Unsubscribe Link window opens.



2 Enter the following field information.

Table 454: Unsubscribe Link Window Description

Field	Description
*Opt-in Field	Click this drop-down menu to select a previously defined custom opt-in field, select Survey Opt-in to let contacts unsubscribe from surveys, or select Global Opt-in to let contacts unsubscribe from all mailings and surveys. The default option is Global Opt-in. See Managing contact opt-ins.

Table 454: Unsubscribe Link Window Description (Continued)

Field	Description
*Mode	Click this drop-down menu to select how the link functions. You can select from three options: • "One Click" sets all global, survey, and custom opt-in fields to No when contacts click the link. • "Prompt, then set field" opens a web page where contacts must confirm their choice to unsubscribe before the field is set. • "Set field, then prompt" also opens a web page to confirm, but the field is set first. The default option is One Click.
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the unsubscribe link.

Tip You can also apply style and class attributes by right-clicking an element after you add it to the canvas. See Editing style and class attributes.

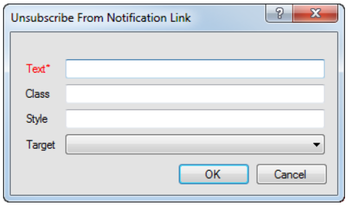
Inserting unsubscribe this answer links

When you use answer sections to display repeatable content on the Answer Update Notification message template, an Unsubscribe This Answer Link is included, by default, inside the answer section. This link adds an unsubscribe link to each answer that is included in the email notification and is available only on the Answer Update Notification message template.

To insert an unsubscribe this answer link

1 Click the Unsubscribe This Answer Link button. The Unsubscribe From Notification Link window opens.

Note This button is available only on the Answer Update Notification message template.



2 Enter the following field information.

Table 455: Unsubscribe From Notification Link Window Description

Field	Description
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click OK to insert the unsubscribe this answer link.

Tip You can also apply style and class attributes by right-clicking an element after you add it to the canvas. See Editing style and class attributes.

- Customizing messages
- Inserting answer sections

Inserting web forms

When creating HTML content, you have the option to add web forms to collect customer data. You can add any database contact field, contact custom field, or survey question to the web form, letting you populate a contact record based on the submitted form.

A contact record is created each time a contact submits a form, unless any of the following occurs: the email address is included in the form, cookies are set through a survey or campaign (see Feedback Surveys and Outreach Campaigns), or the contact opens the form from a link in a mailing. If an email address exists or the repeat visitor has a cookie set for the form, the contact record is updated rather than creating a new record. If email address sharing is enabled and the email address is shared by multiple contacts, the web form submission is associated with the contact deemed to be the best fit. See Email address sharing.

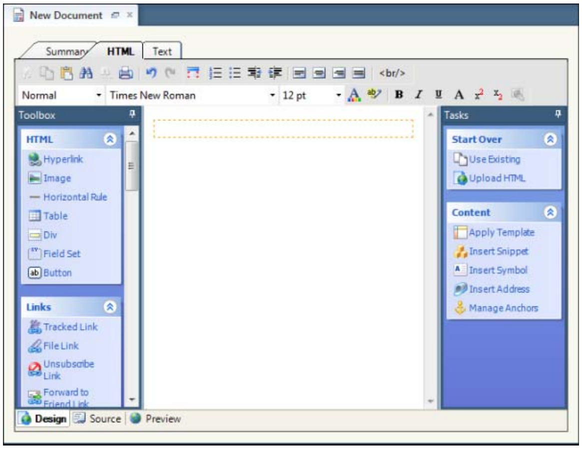
Also, if a contact submits a value for Organization Name *(contacts.ma_org_name)* in a web form, Oracle Service Cloud searches existing organization records for a match. If a match is found, the contact is associated to the matching organization.

Important There is no client-side validation when a web form is used in an email. For security reasons, most email clients disallow the submission of forms from email messages. Therefore, embedding a web form in the body of a mailing or survey invitation message can result in an extremely low submission rate. As an alternative, we recommend creating the web form in a served web page and including a link to the page in your message. See Editing Serve Web Page attributes.

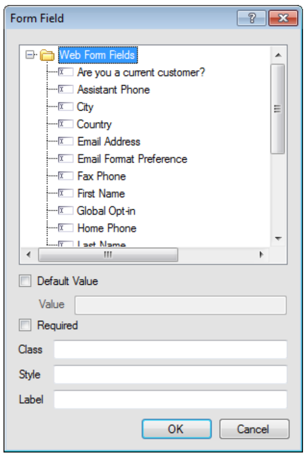
You can also insert standard HTML objects in the form, such as images and tables, and click and drag form elements into place through the HTML editor. When you finish the web form, you can add a Submit button with one click.

To add a web form

1 Click the Web Form button. The web form section appears in the HTML content bordered by an orange dotted line.



2 Insert the cursor in the web form section and click the Form Field button to insert a field. The Form Field window opens.



3 Enter the following information.

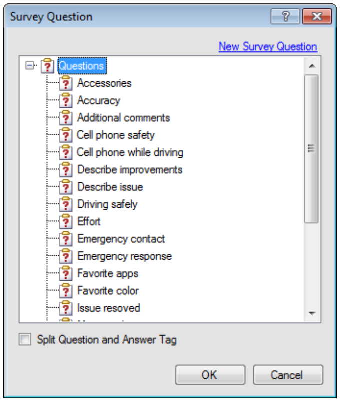
Table 456: Form Field Window Description

Field/Option	Description
*Web Form Fields	Select a database field from this list.
Default Value	Select this check box to add a default value for the field and then type or select the value from the text box.
Required	Select this check box to make the field required. **Note:** You must add your own visual indicator that the field is required (for example, *).
Class	Type the class name you want to assign to the field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Style	Type any style attributes you want to assign to the field in this text box. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Label	Type a label for the field as you want it to display. The default label is the name of the web form field.
Display As	If an opt-in field or radio custom field is selected, select Radio Buttons or Check Boxes to select how to display the field in the web form.

Note Custom field masks are not enforced in web forms.

4 Click the OK button to insert the field.

5 To add a survey question, click the Survey Question button. The Survey Question window opens.



- **a** Select a survey question from the Questions list.
- **b** To create a question, click New Survey Question. A window opens where you can create a question. See Creating questions.
- **c** To show the question and the answer as two separate fields on the web form, select the Split Question and Answer Tag check box. This lets you control where the question and answer portions of the question display.
- **d** Click the OK button to insert the question.

6 Click the Submit Button button to add the Submit button to the web form.

Note You must include a Submit button with the form. If using your own HTML code, you must include the attributes used in the Submit button. Therefore, we recommend that you use the HTML editor to insert the Submit button. You can double-click the button to edit the button text, or switch to source mode to use advanced options such as using an image for the button.

Once you add a web form to a document and serve the document in a campaign or survey, you can modify the URL of the web form page to include parameters to prefill one or more of the fields on the form. See Prefilling web form fields.

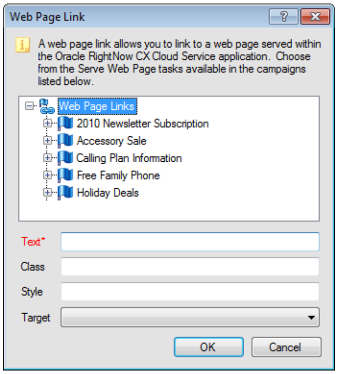
Inserting web page links

Web page links let you link to another document in Oracle Service Cloud. When you create a campaign that serves a web page as an action, you make the page available to link to. See Creating campaigns.

To insert a web page link

1 Click the Web Page Link button. The Web Page Link window opens.

Note Your campaign must be launched for it to appear in the Web Page Links list. See Launching and suspending campaigns.



2 Enter the following information.

Table 457: Web Page Link Window Description

Field/Option	Description
*Web Page Links	Select a web page from this list. See Editing Serve Web Page attributes for information about web pages served in campaigns.
*Text	Type the text you want to appear as the link in this field.
Class	Type any class name you want to assign to the link in this field. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings.
Style	Type any style attributes you want to assign to the link in this field. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).

Table 457: Web Page Link Window Description (Continued)

Field/Option	Description
Target	Click this drop-down menu and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.

3 Click the OK button to insert the web page link.

Setting merge report properties

The following table describes the properties that can be defined from the Properties tab of the Merge Report window when merging a report into HTML content. Some properties are also available when merging into text content and are noted as well.

Table 458: Merge Report Properties Description

Output Type/Field	Description
Table	Select this output type to display the report data as a table in your content.
Max Rows	Type the maximum number of rows for the table. Click the up or down arrow to increase or decrease the value.
Table Properties	The settings in this section define the appearance of the table when it is merged.
Caption	Type the caption you want to appear at the top of the table. **Note:** This setting is also available when merging a report into text content.
Table Style	Type any style attributes you want to apply to the table.
Table Class	Type any class attributes you want to apply to the table.
Caption Style	Type any style attributes you want to apply to the table caption. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Column Headers	Select this check box to display column headers for the table. **Note:** This setting is also available when merging a report into text content.

Table 458: Merge Report Properties Description (Continued)

Output Type/Field	Description
Column Header Style	Type any style attributes you want to apply to the column headers. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Column Header Class	Type the class name you want to apply to the column headers. You must define the class in your content's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Cell Style	Type any style attributes you want to apply to the table cells. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
Cell Class	Type the class name you want to apply to the table cells. You must define the class in your content's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Cell Format	Click this drop-down menu to select a case format for cells in the table. **Note:** This setting is also available when merging a report into text content.
Width	Enter the width of the table and select pixels or percent from the drop-down menu.
Border	Enter the width, in pixels, of the table's border.

Table 458: Merge Report Properties Description (Continued)

Output Type/Field	Description
Frame	Click this drop-down menu to apply an HTML style to your frame. Options include the following. • **Void**—Outside borders are not shown. • **Above**—Top outside border is shown. • **Below**—Bottom outside border is shown. • **Hsides**—Top and bottom outside borders are shown. • **Vsides**—Left and right outside borders are shown. • **Lhs**—Left outside border is shown. • **Rhs**—Right outside border is shown. • **Box**—Outside borders are shown on all four sides. • **Border**—Outside borders are shown on all four sides.
Rules	Click this drop-down menu to apply an HTML style to the lines in your table. Options include the following. • **None**—No lines are shown. • **Groups**—Lines are shown between row groups and column groups. • **Rows**—Lines are shown between rows. • **Cols**—Lines are shown between columns. • **All**—Lines are shown between rows and columns.
Cell Padding	Enter the padding, in pixels, of the table's cells.
Cell Spacing	Enter the spacing, in pixels, of the table's cells.
Primary Background Color	Click this color box to select a primary color for the cell's background or type the HTML hexadecimal value of the color in the field to the right of the color box.
Alternating Background Color	Click this color box to select a primary color for the cell's background or type the HTML hexadecimal value of the color in the field to the right of the color box.
Border Color	Click this color box to select a primary color for the cell's background or type the HTML hexadecimal value of the color in the field to the right of the color box.
List	Select this output type to display the report data as a list in your content.
Max Rows	Type the maximum number of rows for the list. Click the up or down arrow to increase or decrease the value.

Table 458: Merge Report Properties Description (Continued)

Output Type/Field	Description
List Type	Select the radio button next to the type of list you want to display.
Ordered List	Select this radio button to display a numbered list.
Unordered List	Select this radio button to display a bulleted list.
List Style	Type any style attributes you want to apply to the list text. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).
List Class	Type the class name you want to apply to the list text. You must define the class in your content's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.
Format	Click this drop-down menu to select a case format for the list text. The available options are Lowercase, Uppercase, and Proper Case. **Note:** This setting is also available when merging a report into text content.
Single Value	Select this output type to display only the value of the field in the report's first row and first column in your content.
Format	Click this drop-down menu to select a case format for the single value text. The available options are Lowercase, Uppercase, and Proper Case. **Note:** This setting is also available when merging a report into text content.
Style	Type any style attributes you want to apply to the single value output. Style attributes define how the text appears, such as color and font (for example, color: red; font-weight: bold; font-style: italic).

Table 458: Merge Report Properties Description (Continued)

Output Type/Field	Description
Class	Type the class name you want to apply to the single value output. You must define the class in your content's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag. **Note:** Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings and surveys.

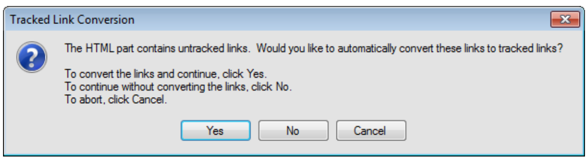
Tracked link conversion

When a document, template, or snippet with HTML content is saved, you can choose to convert the links in the HTML to tracked links. Oracle Service Cloud automatically finds any links by searching for HTML anchor tags with an *href* attribute that do not begin with "mailto:" or "#." In addition, the system finds links that are part of an image map by searching for HTML area tags with an *href* attribute.

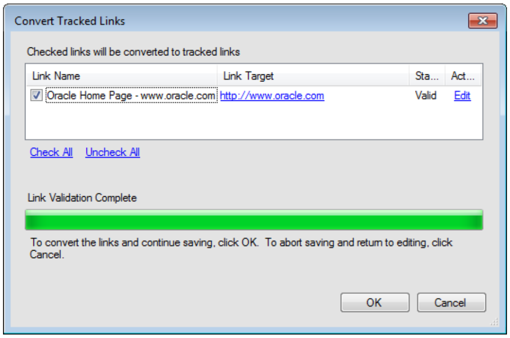
When you save, the system searches for links and prompts you to convert them to tracked links. After you confirm, the links are validated and converted to tracked links. The tracked links are named using the link text and the URL. For example, the link "Oracle Home Page" will be named "Oracle Home Page – oracle.com." If the link is an image or part of an image map, the name includes "[Image: <image_name>]" or "[Image Map: <image_name>]."

To convert links to tracked links

1 Save the document, template, or snippet. The HTML content is scanned and the Tracked Link Conversion message opens if links are found.



2 Click the Yes button to convert the links to tracked links.



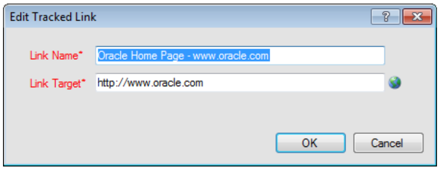
Each link in the document is validated and the results display in the window. The following fields display.

Table 459: Convert Tracked Links Window Description

Field	Description
Link Name	This column lists the names of the tracked links created from the HTML links.
Link Target	This column lists the URLs of the tracked links. You can open the link in a browser by clicking the link target.
Status	This column lists the status of the link validation. The status can be Valid, Broken, or Validating.
Action	Click Edit in this column to edit the tracked link's name and target.
Check All	Click this text to select all check boxes in the list of tracked links. Selected links are converted.
Uncheck All	Click this text to clear all check boxes in the list of tracked links. Cleared links are not converted.

3 Select the links you want to convert by clicking the check boxes next to the link names.

4 To edit the name and URL of a link, click Edit.



a Type the name of the tracked link in the Link Name field.
b Type the URL of the tracked link in the Link Target field.
c To open the link in a web browser, click the View URL in Web Browser button.
d Click the OK button to save the changes to the tracked link.

5 Click the OK button to convert the selected tracked links.

Important The tracked links can be viewed or edited from the Tracked Links explorer (refer to Adding tracked links). The links are stored in a folder named "Automatically Generated" and a subfolder named by the date the conversion was done (YYYY MM DD). See Automatically generated folders.

Adding HTML in source mode

The HTML editor contains an option to create your documents using HTML code. You can type HTML code directly in the editor to create your document, template, or snippet. The editor displays your code using colored text to indicate structure and syntax. There are also special functions available that you can access through the Toolbox and Tasks sections.

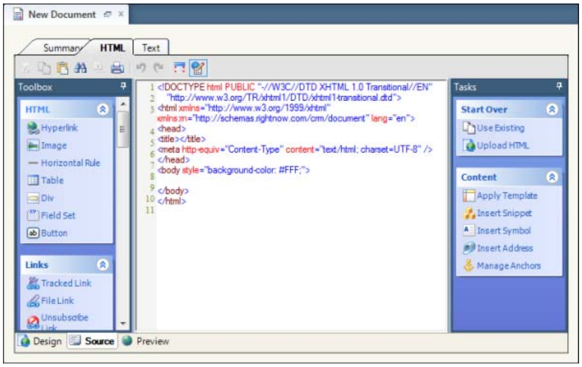
Upon saving, the system automatically validates your code formatting and notifies you about any errors.

Note By default, the editor requires your code to be XHTML compliant before it can be saved. To allow code to be saved without XHTML compliance, disable the HTML_TIDY_ENFORCE_XHTML configuration setting (RightNow User Interface > Misc. Customization > HTML Editor).

To add HTML in source mode

Click the Source tab.

Tip Source mode automatically places the cursor after the opening `<body>` tag.



The Source tab has a toolbar and a section for typing your source code. Using the toolbar, you can create HTML using some of the same options available in basic word processing applications. Functions include:

- Cut, copy, and paste
- Find and replace text
- Print the document
- Undo and redo changes
- Switch to full screen
- Enable or disable syntax highlighting

Tip It's a good idea to preview your work when using Source mode. When you switch between the Source and Preview tabs, your cursor stays where you left it, making it easy to check your work. See Previewing documents.

The Source tab also has special functions that you can access through the Toolbox and Tasks sections. See Toolbox Section Description and Tasks Section Description.

Tip You can insert HTML by clicking a button in the Toolbox or Tasks section, or by dragging and dropping the button to a specific location on the canvas.

Using dynamic content

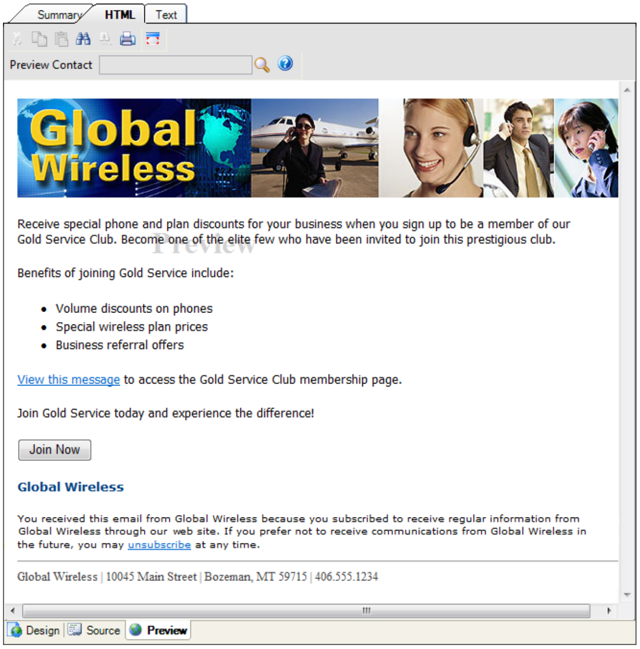
In addition to HTML, Oracle Service Cloud supports the passing of specific JavaScript events to fields within web forms and surveys. This provides increased flexibility in personalizing the appearance and behavior of fields and questions as they are completed. For example, an “onclick” event can be specified to dynamically enable a phone number field when a customer selects a check box indicating they want to be contacted by phone. The following table describes the supported events and field types.

Table 460: Supported JavaScript Events and Field Types

Event	Field Types
onselect	Text fields such as email, first_name, last_name, or any custom field of type text field, text area, or integer.
onchange	• Text fields such as email, first_name, last_name, or any custom field of type text field, text area, or integer. • Drop-down menus such as country, province, or any custom field of type menu, date, or date time.
onblur	• Text fields such as email, first_name, last_name, or any custom field of type text field, text area, or integer. • Drop-down menus such as country, province, or any custom field of type menu, date, or date time. • Radio buttons and check boxes such as opt-in fields, or any custom field of type opt-in or yes/no.
onfocus	• Text fields such as email, first_name, last_name, or any custom field of type text field, text area, or integer. • Drop-down menus such as country, province, or any custom field of type menu, date, or date time. • Radio buttons and check boxes such as opt-in fields, or any custom field of type opt-in or yes/no.
onclick	• Text fields such as email, first_name, last_name, or any custom field of type text field, text area, or integer. • Drop-down menus such as country, province, or any custom field of type menu, date, or date time. • Radio buttons and check boxes such as opt-in fields, or any custom field of type opt-in or yes/no.
disabled	Text fields such as email, first_name, last_name, or any custom field of type text field, text area, or integer.

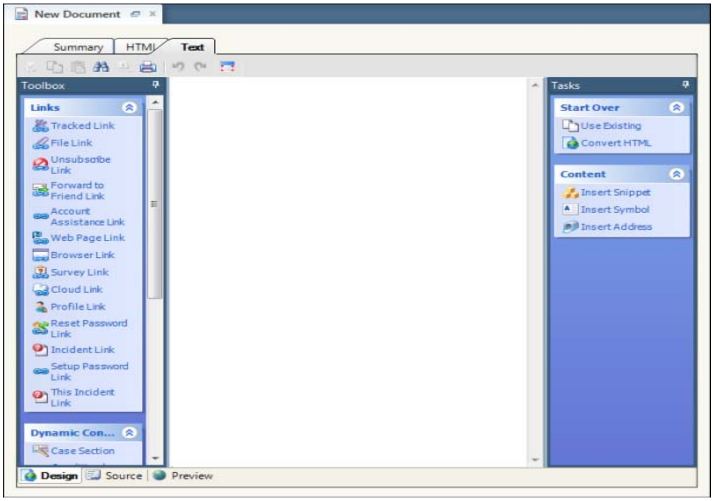
Previewing documents

The Preview tab provides you with a preview of the HTML and text versions of your document, template, or snippet as it will appear in Internet Explorer. The content displays as customers will see it in their email client or on a web page.



Creating and editing text

You can create text-only messages for your customers who can receive only plain text emails. Unlike the HTML editor, the text editor does not contain text formatting options. It does, however, contain links for additional functions related to Oracle Service Cloud, such as adding a **merge field**, or **conditional section**. You can also add several types of links to your content. When a link is added, you have the option of defining certain attributes depending on the type of link. Links in plain text cannot be clicked and customers need to copy the URL into their web browser.



Using the toolbar, you can use several of the same options available in basic word processing applications. Functions include:

- Cut, copy, and paste
- Find and replace text
- Print the document
- Undo and redo changes
- Switch to full screen
- Enable or disable syntax highlighting

The special functions available in Oracle Service Cloud are accessed through the Toolbox and Tasks sections described in the following table.

Table 461: Toolbox and Tasks Sections Description

Button	Description
Links	Buttons in this section are used to insert links in your content.
Account Assistance Link	Click this button to insert a link to the Account Assistance page on your customer portal. See Inserting account assistance links.

Table 461: Toolbox and Tasks Sections Description (Continued)

Button	Description
Answer Link	Click this button to insert a link to any answer you specify. See Inserting links to answers. **Note:** This button is available only in message templates. See Customizing messages.
Browser Link	Click this button to insert a browser link. See Inserting browser links.
Chat Link	Click this button to insert a link to the Live Help page on the customer portal. See Inserting chat links. **Note:** This button is available only if Chat is enabled.
Cloud Link	Click this button to insert a link to a social media service. See Inserting cloud links.
File Link	Click this button to insert a file link. See Inserting unsubscribe links.
Forward to Friend Link	Click this button to insert a forward to friend link. See Inserting forward to friend links.
Incident Link	Click this button to insert a link to any incident you specify. See Inserting links to incidents.
Profile Link	Click this button to insert a link to the Account Settings page on your customer portal. See Inserting profile links.
Reset Password	Click this button to insert a reset password link. See Inserting reset password links.
Setup Password	Click this button to insert a link to the Finish Account Creation page on your customer portal. See Inserting setup password links.
Survey Link	Click this button to insert a link to an existing survey. See Inserting links to surveys.
This Answer Link	Click this button to insert a link to the incident that triggered the message being sent. See Inserting links to answers.

Table 461: Toolbox and Tasks Sections Description (Continued)

Button	Description
This Incident Link	Click this button to insert a link to the incident that triggered the message being sent. For example, the standard Question Receipt email sends a confirmation message after a customer submits a question through the Ask a Question page, an email, or a chat session. By adding a This Incident Link to your Question Receipt message template, you can provide your customers with easy access to the incident created from their question. See To insert a this incident link.
Tracked Link	Click this button to insert a tracked link. See Inserting tracked links.
Unsubscribe All Answers Link	Click this button to insert a link that lets contacts who receive answer notifications unsubscribe from future communications. See Inserting unsubscribe all answers links. This button is available only in message templates. See Customizing messages.
Unsubscribe Link	Click this button to insert an unsubscribe link. See Inserting unsubscribe links.
Unsubscribe This Answer Link	Click this button to insert an unsubscribe link to a specific answer that's been returned as the result of a repeatable answer section. See Inserting unsubscribe this answer links. **Note:** This button is available only on the Answer Update Notification message template. See Customizing messages.
Web Page Link	Click this button to insert a web page link. See Inserting web page links.
Dynamic Content	Buttons in this section are used to insert dynamic content.
Answer Section	Click this button to add any repeatable answer details on your answer update notification messages. See Inserting answer sections. **Note:** This button is available only in message templates. See Customizing messages.
Case Section	Click this button to add a case section to your conditional text. See Inserting case sections.
Conditional Section	Click this button to insert a section of conditional text. See Inserting conditional sections.

Table 461: Toolbox and Tasks Sections Description (Continued)

Button	Description
Incident Thread	Click this button to insert an **incident thread** that displays all communication between the parties associated with the message. See Inserting incident threads.
Merge Field	Click this button to insert a merge field. See Inserting merge fields.
Merge Report	Click this button to insert a merge report. See Inserting merge reports.
Start Over	Buttons in this section are used to clear all content and start over.
Use Existing	Click this button to clear all content and start over with an existing document.
Convert HTML	Click this button to clear all text and start over with a converted HTML file. See Creating text content in documents.
Content	Buttons in this section are used to insert snippets and symbols.
Insert Snippet	Click this button to insert a snippet. See Creating snippets.
Insert Symbol	Click this button to insert a special symbol. A symbol map opens. Double-click the symbol you want to insert.
Insert Address	Click this button to insert a physical address. Refer to Inserting physical addresses. **Note:** The CAN-SPAM Act of 2003 requires that commercial email messages contain the sender's valid physical postal address.

Prefilling web form fields

Web forms can display with one or more fields prefilled with data, letting you simplify the form completion process for your contacts. By appending specially formatted parameters to the web page URL, any database or custom contact field that appears on the form can be set with a default value. Field values submitted in a prefilled form overwrite the existing values in the contact record.

Prefilled values can be unique to the placement of each link. For example, you can publish links at three different sites to a single web form but configure each link to prefill fields on the form with different values.

To prefill fields in a web form, the document containing the form must first be served in a campaign or advanced survey using a Serve Web Page element. See Editing Serve Web Page attributes.

To prefill web form fields

1 Open the campaign or survey that serves the document containing the web form.

2 Double-click the Serve Web Page element to open the Serve Web Page window.

3 To prefill the web form with any field information that can be derived from a contact's Oracle Service Cloud browser cookie, click the User Identification tab.

   a Select the Other Credentials radio button.

   b Select the Cookie check box to enable browser cookie identification.

Note Prefilled field values override any common values set by the cookie.

   c Select the Email Click-Through Parameters check box to enable parameters passed in the URL.

4 Click the Web Page tab and click the Copy URL button.

   a Click OK to acknowledge that the web page URL has been copied to the clipboard.

5 Click OK to close the window.

6 If you have not already launched the campaign or survey, click the Launch button on the Home tab.

   a Click OK to launch and save.

7 Open a new web browser and paste the web page URL into the browser's address field.

8 Append parameters to the URL to define which fields you want to prefill. See Appending field parameters.

   a Submit the URL in your web browser and confirm the fields are prefilled as you want.

9 Copy the updated URL from the browser's address field and publish the link to your designated external sources.

Appending field parameters

Every field in a web form is associated with a parameter that can be passed a value in the web page URL, and multiple parameters may be passed at once to define multiple field values. To define a prefilled value for a specific field, append its parameter to the web page URL in the following format:

```
/wf_2_<field_ID>/<prefill value>
```

Each field's parameter contains a unique field ID. You can view custom field IDs on the Custom Fields editor by hovering over each field. For example, if a custom field has an ID of 3, the parameter would be:

```
/wf_2_3/<prefill value>
```

Default contact fields also have unique field IDs. For example, if you select the Country field, which has an ID of 100022, the parameter would be:

```
/wf_2_100022/<prefill value>
```

The following table lists each default contact field and its field ID.

Table 462: Contact Field IDs

Field Name	Field	Field ID
Last Name	last_name	100002
First Name	first_name	100003
Email Address	email	100004
Email Address Alternate 1	email_alt1	100010
Email Address Alternate 2	email_alt2	100011
Title	title	100013
Office Phone	ph_office	100015
Mobile Phone	ph_mobile	100016
Fax Phone	ph_fax	100017
Assistant Phone	ph_asst	100018
Home Phone	ph_home	100019
Street	street	100020

Table 462: Contact Field IDs (Continued)

Field Name	Field	Field ID
Country	country_id	100022
State/Province	prov_id	100023
Postal Code	postal_code	100024
Global Opt-in	ma_opt_in	100025
Organization Name (Outreach)	ma_org_name	100027
Invalid Email Flag	email_invalid	100028
Email Format Preference	ma_mail_type	100029
Organization Name Alternate (Outreach)	ma_alt_org_name	100051
Last Name Alternate	alt_last_name	100052
First Name Alternate	alt_first_name	100053
Survey Opt-In	survey_opt_in	100054

Note For descriptions of these fields, click the Configuration button on the navigation pane and double-click Data Dictionary under Database.

The prefill values that can be passed in a parameter depend on the field type. All database contact fields and contact custom fields are one of the following types.

- **Text Field or Text Area**—The value of a text field or text area is expressed in the URL as text. Append the text you want as the value of the field, and the field prefills with that text. For example, to prefill the Postal Code field with the text "59771," append that value to the field's parameter as follows:
  ```
  /wf_2_100024/59771
  ```
- **Integer**—The value of an integer field is expressed in the URL as an integer. Append the integer you want as the value of the field, and the field prefills with that integer. For example, to prefill a custom field (ID 301) with the number "5," append that value to the field's parameter as follows:
  ```
  /wf_2_301/5
  ```

- **Menu**—The value of a menu field item is expressed in the URL as a unique ID number. (Menu item IDs can be obtained by viewing the source code of the form in a web browser.) Append the ID of the menu item to prefill the field with the text of that menu item. For example, to prefill the State/Province field with "MT," append its menu item ID value to the field's parameter as follows:
  ```
  /wf_2_100023/32
  ```
- **Radio or Opt-in**—The value of a radio or opt-in field is expressed in the URL as 0 for a "No" value or 1 for a "Yes" value. Append either 0 or 1 and the No or Yes radio button will be selected. For example, to select the Yes radio button on the Global Opt-in field, append "1" to the field's parameter as follows:
  ```
  /wf_2_100025/1
  ```
- **Date or Date/Time**—The value of a date or date/time field is expressed in the URL in a special time format. Append the formatted value to prefill the field with the equivalent date or date/time. Use the following formats to pass values to date and date/time fields:
  ```
  <Year>-<Month>-<Day>T
  <Year>-<Month>-<Day>T<hour>:<minute>
  ```
  For example, to prefill a custom date field (ID 320) with the date "November 1, 2005," append "2005-11-01T" to the field's parameter as follows:
  ```
  /wf_2_320/2005-11-01T
  ```
  Or, to prefill a custom date/time field (ID 320) with the date and time "November 1, 2005, 3:32 PM," append "2005-11-01T15:32" to the field's parameter as follows:
  ```
  /wf_2_320/2005-11-01T15:32
  ```

Note Remember to include the "T" after the date when declaring a value in date or date/time format.

You can prefill multiple fields on a form at once by appending multiple parameters to a single URL, separated by slashes. The following example shows a URL that has been modified to prefill three fields: State, Country, and a service provider custom field.

To prefill these fields, the following three parameters were added to the end of the URL:

- /wf_2_100023/32—The State field is assigned the numeric ID value of 32 for the menu option "Montana."
- /wf_2_100022/1—The Country field is assigned the numeric ID value of 1 for the menu option "U.S."
- /wf_2_3/985—The custom service provider field is assigned the numeric ID value of 985 for the menu option "Technicomm."

Web form and survey security

When customers submit information to websites, it is common to verify that the information originates from a human rather than a bot (an automated software program) being run for malicious purposes. Oracle Service Cloud provides web form and survey security that automatically requires human validation when abuse is suspected. For example, when a standard action is performed repeatedly in a short amount of time.

Validation is accomplished through the use of a CAPTCHA, a dialog containing distorted words that the customer is asked to type. When the words are typed correctly, a human is assumed to be on the client side. Once customers have correctly entered a CAPTCHA, they are not asked for verification again as long as the visit has not ended or does not exceed an hour.

Note Because CAPTCHA runs behind the scenes, it is presented to the customer only when a web form or survey displays and requires the customer to type data and submit it to the system.

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Outreach Mailings

Oracle RightNow Outreach Cloud Service (Outreach) provides a centralized, intuitive method of sending emails to specific audiences. You can create messages using text and HTML documents, and choose contact lists and segments to be included in or excluded from the mailing. Mailings can then be sent all at once or at times determined by specific criteria or transactional events.

Outreach also provides extensive tools for proofing and testing mailings. You can send mailings to one or more people for approval and track the status of their review. You can also send mailings to smaller subsets of the defined **audience** and view analytics regarding how many emails sent to the subset bounced or were opened, clicked though, replied to, or unsubscribed to. This lets you fine-tune the mailing before broadcasting it to the entire audience, and also lets you determine how effective it was after the entire broadcast.

- Defining the broadcast mailing audience
- Audiences
- Content Library

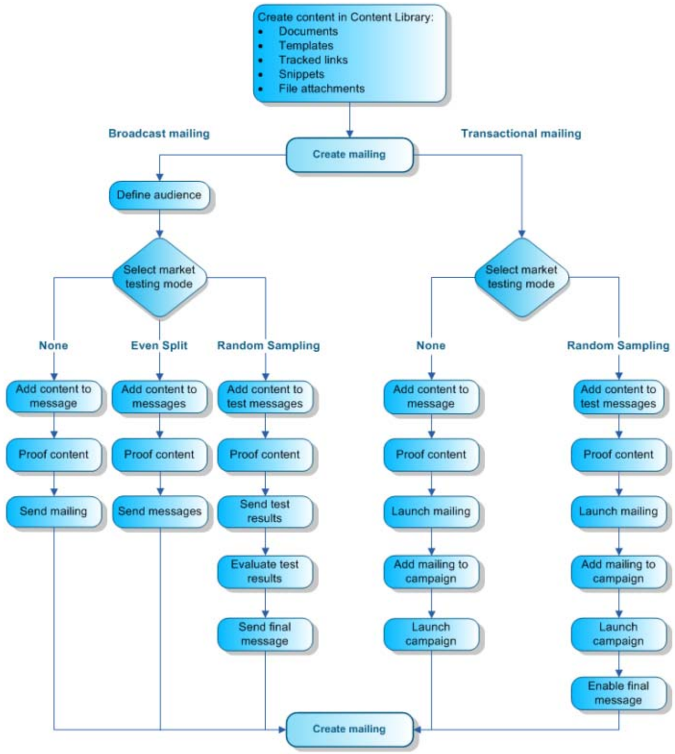
Creating mailings

You can target and email different groups of your customers. When you create a mailing, you define the content of the message and the group of customers who will receive it. You can include and exclude a total of fifty contact lists or segments of contacts from your mailing. You can also send test mailings and proofs before committing to a final email.

There are two types of mailings you can create, distinguished by delivery method.

- **Broadcast mailings** are used to send a message to a specified **audience** at a time you choose.
- **Transactional mailings** are event-triggered, so the email is sent when actions you define occur, such as a campaign action or a rule action.

The following figure shows the process for creating and sending a mailing.



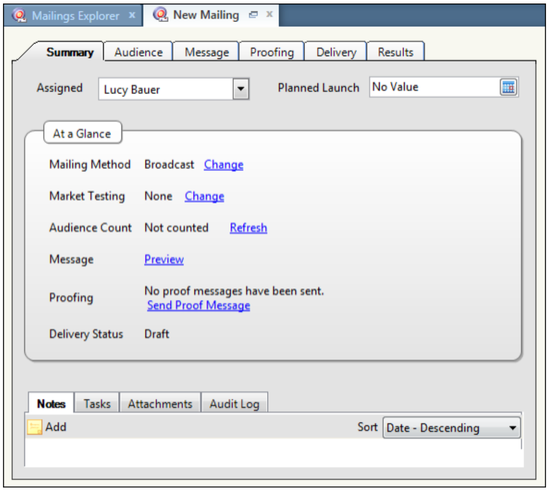
Note The following procedure assumes that you access the Mailings explorer from the Mailings **navigation list**. However, this explorer may reside in a different navigation list.

To create a mailing

1 Click the Mailings button on the navigation pane and double-click Mailings Explorer. The Mailings explorer opens on the content pane.

2 Click the New button. A new mailing opens on the content pane.

Tip You can also create a mailing from an open mailing by clicking the New button. Additionally, if your navigation set is configured to add mailings from the file menu, click File and select Mailing in the Create New Item section. See To configure the file menu.



3 To create a broadcast mailing (the mailing method selected by default), see Creating broadcast mailings.

4 To change to a transactional mailing, see To change the mailing method. Then, to create the transactional mailing, see Creating transactional mailings.

- ❖ Defining the broadcast mailing audience
- ❖ Audiences
- ❖ Content Library

Mailing delivery statuses

Your **broadcast** and **transactional mailings** must follow certain steps that are defined by the mailing's delivery status. Delivery status indicates the mailing's current state as it progresses through the distribution process.

The following table describes the delivery statuses for broadcast and transactional mailings and indicates whether the status is set by a staff member action or updated automatically by the system. For more about mailing delivery, see Accessing broadcast delivery options and Accessing transactional delivery options.

Table 463: Broadcast and Transactional Mailing Delivery Statuses Description

Status	Survey Type	Description
Draft	Broadcast Transactional	This is the preliminary status of a mailing. When a mailing is created, it is automatically set to the Draft status. The status reverts to Draft if a staff member unschedules the mailing.
Scheduled	Broadcast	This status indicates a mailing is ready to be sent at a scheduled date and time. When a staff member selects the send time, the mailing is automatically set to the Scheduled status.
Launched	Transactional	This status indicates a mailing has been launched and can be included in a rule or campaign. Staff members launch a mailing by clicking the Launch button on the Delivery tab. **Note:** A launched mailing cannot be edited. However, you can suspend the mailing's message, make edits, and then re-launch it. See Suspending transactional mailings.
Recurrence Scheduled	Broadcast	This status indicates a mailing is scheduled for recurring runs. When a staff member selects a recurrence pattern, the mailing is automatically set to the Recurrence Scheduled status.
Preparing to Send	Broadcast	This status indicates a mailing is about to be sent. The status changes to Preparing to Send when a staff member clicks the Send Now button.
Sending	Broadcast	This status indicates a mailing is currently being sent to customers. The system automatically sets the mailing's status to Sending after the mailing is done preparing to send or at the mailing's scheduled date and time.

Table 463: Broadcast and Transactional Mailing Delivery Statuses Description (Continued)

Status	Survey Type	Description
Suspended	Broadcast Transactional	This status indicates a mailing is temporarily suspended from the Sending or Scheduled status. Staff members can change the status to Suspended by clicking the Suspend button on the Delivery tab.
Suspended by Error	Broadcast Transactional	This status indicates a mailing encountered an error and was suspended by the system.
Canceled	Broadcast Transactional	This status indicates the survey was manually canceled. Staff members can cancel a mailing by clicking the Cancel Mailing button on the Delivery tab. **Note:** A canceled mailing can no longer be modified or sent. However, it can be copied to a new mailing, and the copy can be modified and sent.
Completed	Broadcast	This status indicates a mailing was sent. The system automatically sets a mailing's status to Completed from the Sending status.

Managing mailings

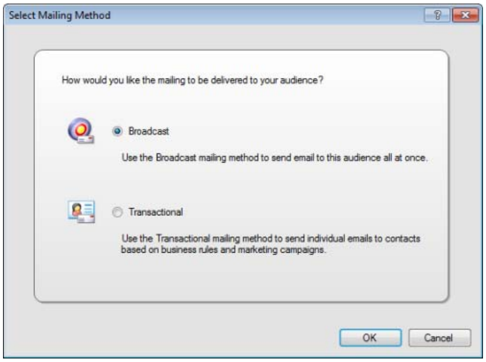
When creating or editing a mailing, the Summary tab provides a variety of mailing management functions, including the following.

- **Changing the mailing method**—Once you create a mailing, you can change its mailing method type. The mailing methods available are Broadcast and Transactional. Broadcast mailings with recurrence activated are shown as Recurring Broadcast.
- **Adding notes**—You may want to add notes to a mailing that are not sent to audience members. You can use notes to provide additional information about the mailing that can be viewed by staff members as they are working with the mailing.
- **Adding tasks**—You can assign new or existing tasks to mailings and edit, delete, and forward tasks to other staff members. You can also view each task associated with the mailing.

Other common functions available from the Summary tab include the ability to add file attachments or view the **audit log** to see when the mailings were created and edited and when mailing delivery statuses were changed. See Working with records.

To change the mailing method

1 On the Summary tab of an open mailing, click Change next to Mailing Method. The Select Mailing Method window opens.



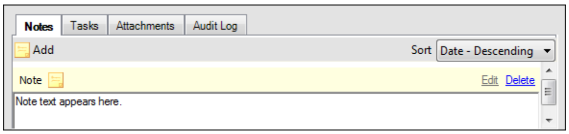
2 Select the Broadcast or Transactional radio button.

3 Click the OK button. The mailing changes to the method you selected.

Note You can switch mailing methods only when the delivery status of the mailing is Draft, Suspended, or Error and no emails have been sent. See Mailing delivery statuses.

To add a note

1 On the Summary tab of an open mailing, click the Notes tab.



2 Click the Add button.

3 Enter the text of the note.

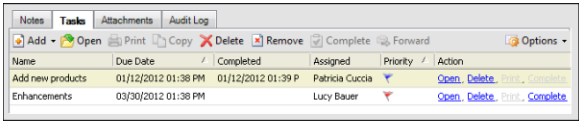
4 To sort the notes by ascending or descending date, click the Sort drop-down menu and select the sort option.

5 To edit an existing note, click Edit next to the note.

6 To permanently delete a note, click Delete next to the note.

To add a task

1 On the Summary tab of an open mailing, click the Tasks tab.



2 To add a new task to the mailing, click the Add button, select Add New, complete the task information, and click the OK button. See Adding tasks for the procedure to complete the fields on this window.

3 To add an existing task to the mailing, click the Add button, select Add Existing, search for the task you want to add, and click the Select button. See To search for a task from an open record.

You can perform other task actions on the Tasks tab. The following table describes the buttons on the Tasks tab toolbar and tells you what actions you can take on tasks.

Table 464: Tasks Tab Toolbar Description

Button	Description
Add	Click this button to display a drop-down menu containing the following options.
Add New	Select this option to add a task. See Adding tasks for the procedure to complete the fields on this window.
Add Existing	Select this option to add an existing task. After finding and selecting a task, the task is added to the task list for the mailing. See To search for a task from an open record for information about the Task Search window.
Open	Click this button to open the selected task for editing.
Print	Click this button to print the task.

Table 464: Tasks Tab Toolbar Description (Continued)

Button	Description
Copy	Click this button to copy the task.
Delete	Click this button to permanently delete the task.
Remove	Click this button to remove the selected task from the mailing (without deleting the task).
Complete	Click this button to mark the task completed.
Forward	Click this button to send the task to one or more recipients.
Options	Click this button to select an option for managing the output and display of information on the tab, such as print, forward, or export. See Changing output options for information about other options, such as Auto Filter, Slice, Cross Tab, and Rollups.

Creating broadcast mailings

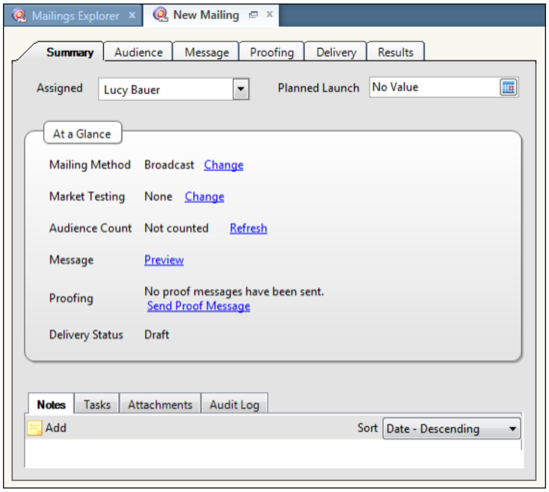
You can create a broadcast mailing if you want to email a group of contacts in your knowledge base. Broadcast mailings are sent to an audience you define. The content of the email can be added as you create the mailing, or by using a previously defined document (see Creating documents). You can also choose to market test your mailing by sending different message content to subsections of your audience (see Market testing in broadcast mailings).

Important The delivery of broadcast mailings can be impaired by factors beyond the scope of Outreach. For a list of best practices for optimizing your message delivery and improving delivery and participation rates, see *Best Practices for Email Marketing*.

To create a broadcast mailing

1 On the Mailings explorer, click the New button on the ribbon. A new broadcast mailing opens on the content pane.

Tip You can also create a mailing from an open mailing by clicking the New button. Additionally, if your navigation set is configured to add mailings from the file menu, click File and select Mailing in the Create New Item section. See To configure the file menu.



By default, the Summary tab is active. From here, you can review general information about the mailing in the At a Glance section, as well as manage the mailing's notes, tasks, and attachments (see Managing mailings). As you create the mailing, you move through each tab to complete the mailing's elements.

Note You can also add custom tabs to your mailings. Custom tabs give you quick access to elements you frequently use in your mailings. See Adding custom tabs.

2 To assign the mailing to another staff member (by default, the mailing is assigned to the staff member who creates it), click the Assigned drop-down menu and select the staff member.

a To search for a staff member, type the staff member’s name in the Find field.

Tip Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.

3 Click the calendar in the Planned Launch field to select a date for the launch. This field is for planning purposes only. The email is not sent on this date.

4 Click the text in the At a Glance section described in the following table to perform common mailing functions.

Table 465: At a Glance Section Description

Field	Description
Mailing Method	This field displays the mailing method currently selected for the mailing. Click Change to change the method and see Managing mailings.
Market Testing	This field displays the market testing mode of the mailing. Click Change to change market testing modes. See Market testing in broadcast mailings.
Audience Count	This field displays the most recent audience count and the time and date it was performed. Click Refresh to perform an updated count. To view the details of the count, click Details and see Viewing audience count details in mailings. **Note:** Occasionally, the **replication database** used to process mailings can fall slightly behind the **operational database**. If the system determines that the replication contact data is not current, the audience count is labeled “Estimated.”
Message	Click Preview to preview the mailing.
Proofing	This field displays the cumulative number of proofs that have been sent, approved, and rejected. Click Send Proof Message to send a proof. See Sending a proof message.

Table 465: At a Glance Section Description (Continued)

Field	Description
Delivery Status	This field displays the delivery status of the mailing and the number of emails sent and delivered. See Accessing broadcast delivery options.

5 Click the Audience tab to define an audience for the mailing. See Defining the broadcast mailing audience.

6 Click the Message tab to create the email sent to the mailing audience. See Customizing the message in broadcast mailings.

7 Click the Proofing tab to send a proof of the mailing for internal review before sending it to the entire audience. See Sending a proof message.

8 Click the Delivery tab to select delivery options. See Accessing broadcast delivery options.

9 Click the Results tab to view the report associated with the mailing. See Viewing mailing results.

Note If your application is configured with custom tabs for mailings, they display after the Results tab. See Adding custom tabs.

10 To spell check the mailing, click the Spelling button and refer to Spell checking.

11 Click the Save and Close button to save the mailing. The Save As window opens.

Note You can click the Save button to save the mailing without closing it.

12 Select the folder you want to save the mailing in and type the name of the mailing in the Name field.

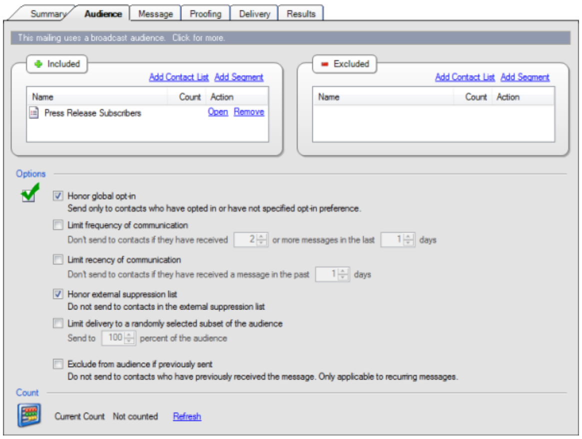
13 Click the Save and Close button to save the mailing.

Defining the broadcast mailing audience

You specify the **audience** your mailing will be sent to from the Audience tab. You can include and exclude a total of fifty contact lists and segments, each containing a vast number of contacts. For example, you could include twenty-two segments of contacts and exclude twenty-eight contact lists for a total of fifty lists. You can also restrict the scope of your audience, set mailing frequency and recency limits, and specify how to handle global opt-in and suppression options. See Audiences.

To define the audience

1 From an open mailing, click the Audience tab.



2 To include a list in the audience, click Add Contact List in the Included section. The Select Contact List window opens.

   a To add a contact list, click New Contact List and refer to Adding contact lists.
   b Select the list you want to include in the mailing's audience and click the OK button. The list is added to the Included grid. Contacts belonging to the list will receive the mailing unless they are in an excluded segment or list.

3 To include a segment in the audience, click Add Segment in the Included section. The Select Segment window opens.

   a To add a segment, click New Segment and refer to Creating segments.
   b Select the segment you want to include in the mailing's audience and click the OK button. The segment is added to the Included grid. Contacts belonging to the segment will receive the mailing unless they are in an excluded segment or list.

4 To exclude a list from the audience, click Add Contact List in the Excluded section. The Select Contact List window opens.

a Select the list you want to exclude from the mailing's audience and click the OK button. The list is added to the Excluded grid. Contacts belonging to the list will not receive the mailing.

5 To exclude a segment from the audience, click Add Segment in the Excluded section. The Select Segment window opens.

a Select the segment you want to exclude from the mailing's audience and click the OK button. The segment is added to the Excluded grid. Contacts belonging to the segment will not receive the mailing.

6 To edit a list or segment that is included in or excluded from the mailing, click Open next to the list or segment name. See Managing contact lists.

7 To remove a list or segment from the Included or Excluded sections, click Remove next to the list or segment name.

8 Enter field information in the Options section described in the following table.

Table 466: Options Section Description

Field	Description
Honor global opt-in	Select this check box to send the mailing to contacts who did not explicitly opt out of receiving mailings. Clear this check box to send the mailing to all contacts in the audience, regardless of their opt-in preference.
Limit frequency of communication	Select this check box to set a mailing frequency limit, and then enter a maximum number of mailings and a number of days in which contacts can receive messages before they are excluded from mailings. When the mailing is launched, it is not sent to any contacts who have received the maximum number of mailings within the designated time period. For more information about how this setting works, see Frequency and recency limits. **Note:** The minimum you can enter is 2 in the last 1 day. The maximum number of days you can enter is 90. **Tip:** To ensure contacts receive only 1 email every “x” number of days, use the Limit recency of communication setting described next.

Table 466: Options Section Description (Continued)

Field	Description
Limit recency of communication	Select this check box to set a mailing recency limit. Enter the minimum number of days that can elapse before contacts receive another email. When the mailing is launched, it is not sent to any contacts who have received a mailing in the past specified number of days. For more information about how this setting works, see Frequency and recency limits. **Note:** The maximum number of days you can enter is 90. The default value is 1 day. **Tip:** Use this check box to ensure contacts receive only one email every "x" number of days. For instance, if you want your contacts to receive only one email per week, you can select this check box and then set the field to seven.
Honor external suppression list	Select this check box to exclude contacts in the external suppression list from receiving the mailing. Clear this check box to send the mailing to all contacts in the audience, even if they are in the external suppression list. See External Suppression List.
Limit delivery to a randomly selected subset of the audience	Select this check box to send the mailing to a subset of the audience. Type a percentage or use the up and down arrows to select a percentage of the audience to send the mailing to.
Allow delivery of messages to multiple contacts sharing the same email address	Select this check box to send messages to multiple contacts sharing the same email address. If this check box is cleared, the message is sent only to the contact most recently updated. This option is available only when email address sharing is enabled. See Email address sharing. **Caution:** Because duplicate messages sent to a single address are a common characteristic of spam, you should select this check box only when necessary. When the check box is selected and you attempt to schedule or send a mailing, survey, or proof, and duplicate email addresses exist in your audience, a message warns you that your reputation as a bulk email sender may be adversely affected and impact your ability to send future communications. See *Best Practices for Email Marketing*.
Exclude from audience if previously sent	Select this check box to exclude contacts from the audience who were previously sent a message from the same mailing. This option applies only to recurring mailings. Contacts excluded in this manner are also excluded from the audience count. See Setting mailing recurrence.

9 To count the number of contacts who will receive the mailing, click Refresh in the Current Count section. Once the audience has been counted, the last count also displays in this section.

Note Occasionally, the **replication database** used to process mailings can fall slightly behind the **operational database**. If the system determines that the replication contact data is not current, the audience count is labeled "Estimated."

10 To view the details of an audience count, click Details in the Current Count section after the count has been performed.

❖ Audiences

Frequency and recency limits

There are several settings that let you limit the number of emails your customers receive through mailings and surveys. Two of the settings limit the frequency and recency of email communication with your customers.

Frequency limits let you control the frequency at which your customers receive email from your organization—in other words, how often an email will be sent to your customers. Recency limits let you define the number of days that pass between the emails that you send. Frequency is set using the Limit Frequency of Communication check box and recency is set using the Limit Recency of Communication check box, both accessed on the Audience tab of your mailing or survey. For specific details about defining these settings, see Options Section Description.

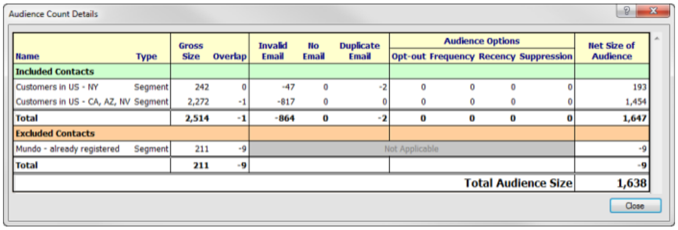
- **Frequency and recency settings apply to the sending of email.** These settings are not impacted by survey completion, views, or clicks. Following are two examples that demonstrate this point.
  - ▷ A customer received an email 31 days ago that included a transactional survey. However, the customer just submitted the survey yesterday. If recency on the next mailing is set to 30 days, the customer could receive another email from the system.
  - ▷ An agent presents a website link survey in a new browser window at the end of a chat. Since website link surveys are not associated with email, recency limits do not apply to this survey.
- **Frequency and recency settings apply to emails sent from both Outreach and Feedback** and cannot be applied to only one product area. For example, suppose you have a rule to send a transactional survey after an incident is solved. Also suppose you add an Outreach broadcast mailing with frequency limited to no more than two messages in the last seven days. Now, one of your customers has two incidents: one solved

on Monday and the other solved on Tuesday. If the broadcast mailing is scheduled for future delivery on Thursday, the customer will **not** receive the Outreach email sent by the mailing because of the two Feedback surveys emailed earlier in the week.

- **The system checks for frequency and recency limits at the time the email is sent.** The system performs frequency and recency checks at the scheduled mailing or survey time. (The system also checks for custom logic such as any segments or business rules at this time.)

Viewing audience count details in mailings

You can view the audience count to see how the count is calculated. You can see the included and excluded lists and segments, along with the number of invalid emails and opt-outs. When you click Details after counting the audience, the Audience Count Details window opens.



Audience Count Details

Name	Type	Gross Size	Overlap	Invalid Email	No Email	Duplicate Email	Audience Options: Opt-out	Frequency	Recency	Suppression	Net Size of Audience
Included Contacts											
Customers in US - NY	Segment	242	0	-47	0	-2	0	0	0	0	193
Customers in US - CA, AZ, NV	Segment	2,272	-1	-817	0	0	0	0	0	0	1,454
Total		**2,514**	**-1**	**-864**	**0**	**-2**	**0**	**0**	**0**	**0**	**1,647**
Excluded Contacts											
Mundo - already registered	Segment	211	-9	Not Applicable							-9
Total		**211**	**-9**								**-9**
										Total Audience Size	**1,638**

Close

The following table describes the columns on the Audience Count Details window.

Table 467: Audience Count Details Window Description

Column	Description
Name	Lists the name of each segment or contact list included in or excluded from the mailing.
Type	Lists whether the audience subset is a contact list or segment.
Gross Size	Lists the number of contacts belonging to the list or segment.
Overlap	Lists the number of contacts belonging to the list or segment who also belong to another list or segment in the audience.
Invalid Email	Lists the number of contacts belonging to the list or segment who have an invalid email address.
No Email	Lists the number of contacts belonging to the list or segment who do not have an email address.

Table 467: Audience Count Details Window Description (Continued)

Column	Description
Duplicate Email	Lists the number of email addresses shared by multiple contacts. If the check box is selected on the Audience tab that allows delivery to multiple contacts sharing the same email address, this count is included in the net size count of the audience. If the check box is not selected, it is subtracted from the gross size when calculating the net size of the audience. **Note:** This option is available only when email address sharing is enabled. See Email address sharing.
Opt-out	Lists the number of contacts belonging to the list or segment who have opted out of mailings.
Frequency	Lists the number of contacts belonging to the list or segment who are filtered by the mailing frequency settings.
Recency	Lists the number of contacts belonging to the list or segment who are filtered by the mailing recency settings.
Suppression	Lists the number of contacts belonging to the list or segment who belong to the external suppression list.
Net Size of Audience	Lists the number of contacts in each list or segment who are included in or excluded from the mailing.
Total Audience Size	Lists the net total number of contacts who will receive the mailing.

Audiences are filtered from mailings in the following order.

1. Excluded segments and contacts
2. Contacts without an email address
3. Contacts with an invalid email address
4. Contacts who have opted out
5. Shared email addresses and duplicate contacts (overlaps in included lists or segments)
6. Contacts in the external suppression list
7. Contacts filtered by recency settings
8. Contacts filtered by frequency settings

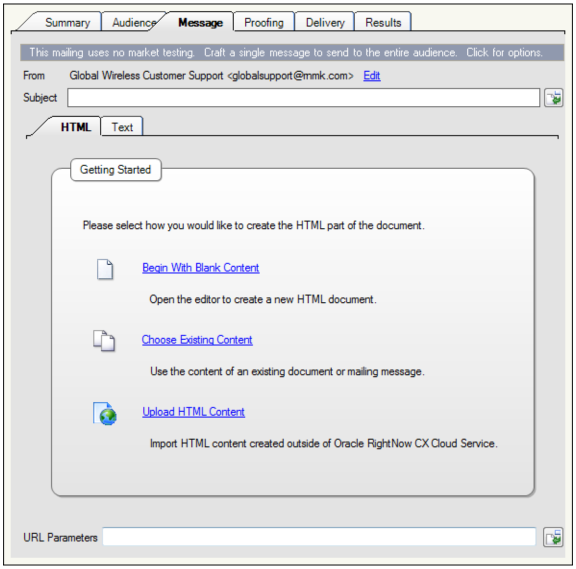
- ❖ Audiences

Customizing the message in broadcast mailings

From the Message tab, you can activate market testing, specify the mailbox settings for the mailing, the subject of the email, and any URL parameters you want to attach to links in the message. In addition, you can create either plain text or HTML messages from scratch, from existing content, or by uploading HTML from another site.

To create a message

1 From an open mailing, click the Message tab.



2 To activate market testing, click the information bar (just above the From address field) and select Change Market Testing Mode. See Market testing in broadcast mailings.

3 To change the mailbox sending the message, or the From and Reply-to addresses, click Edit next to the From address. See Customizing mailing message headers.

4 Type the subject of the message in the Subject field.

Ensuring that contacts read your message

Because most mail clients list new messages by From address and subject, the contents of these fields are critical to having your message read. Refine your message subject to be concise yet informative and make sure it clearly states your purpose and any special conditions of your offer. If it isn't clear who you are or what you want, your message can be easily passed over.

5 To add a merge field to the subject, click the Merge Field button (to the right of the Subject field) and select the field. Merge fields add personalized elements to the subject, such as the contact's first name.

6 To create an HTML message from scratch, click Begin with Blank Content and refer to Using the HTML editor.

7 To create an HTML message by using an existing document, click Choose Existing Content and refer to Choosing existing content.

8 To create an HTML message by uploading your own HTML page, click Upload HTML Content and refer to Uploading HTML content.

9 To create a text version of the message, click the Text tab.

- **a** To create a text message from scratch, click Begin with Blank Content and refer to Using the HTML editor.
- **b** To create a text message by copying an existing document, click Choose Existing Content and refer to Choosing existing content.
- **c** To create a text message by converting an HTML page to text, click Convert HTML Content and refer to Converting HTML content.

Caution The system automatically creates a document containing the content created on the Message tab and stores it in the Automatically Generated folder in the Documents explorer. When you update the document in the mailing, those changes will also be made to the automatically generated copy. In addition, if you make any changes to the copy in the Automatically Generated folder, those changes will also be made to the text on the Message tab in the mailing. See Automatically generated folders.

10 To add URL parameters, type any parameters you want to append to the links in your message (for example, p1=v1&p2=v2) in the URL Parameters field.

11 To add a merge field to the URL parameters, click the Merge Field button to the right of the URL Parameters field and select the field. See Inserting merge fields to URL parameters.

Customizing mailing message headers

By default, Outreach uses the name and email addresses specified in the outgoing email settings of your default Outreach mailbox (see Adding and editing mailboxes). If you want to use a different name and email address for your mailing, such as a branded email address, you can do so by customizing the message header. When a recipient views your mailing, the name and email addresses defined in the customized header are used instead of those specified in the default Outreach mailbox.

Using branded email domains

Using email addresses branded with your company's domain name can help recipients recognize your organization as the sender, improving **deliverability**. However, care must be taken to ensure that bounce notifications are processed correctly. Review the following recommended best practices when using branded domains to send mailings.

1. **Keep the mailbox configuration provided by Oracle**—At the time your site was created, an Oracle representative probably helped configure your Outreach mailbox settings using a mail account with an Oracle domain, such as rnmk.com. These settings should be left as is to ensure bounce errors are processed. See Email bounce handling.

2. **Customize the message header**—When creating the mailing message, add your branded email address by customizing the message header. Customizing the message header does not affect **bounce** processing, but contact replies to your email will be sent to the branded address.

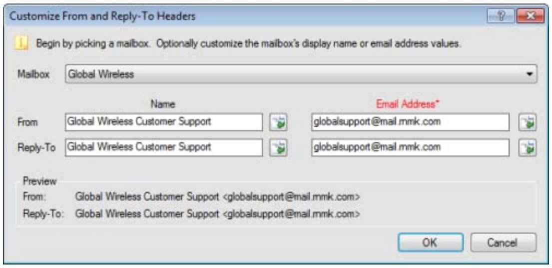
3. **Implement email authentication**—Implementing a form of authentication for your branded email accounts can help protect your reputation and secure your mail delivery rates. Oracle Service Cloud supports two forms of authentication.
   - **Sender Policy Framework**—Sender Policy Framework (SPF) is an email authentication option that designates permitted senders of email originating from your domain, excluding those with mismatched or incorrectly specified SPF records. See Answer ID 2489 on our support site for information about implementing SPF on your site.
   - **DomainKeys/DomainKeys Identified Mail**—DomainKeys (DK) and DomainKeys Identified Mail (DKIM) are email authentication options that use cryptographic signatures to designate email as originating from an authorized email delivery provider, excluding messages sent from those with unsigned or incorrectly assigned signatures. See Answer ID 2701 on our support site for information about implementing DK and DKIM on your site.

Important Be sure to regularly monitor mail received by the email addresses specified in your custom message header. If you want replies to your mailing to be converted to incidents in Oracle Service Cloud, your mail administrator must configure SMTP forwarding from that mail account to an account configured in Oracle Service Cloud. See Adding and editing mailboxes.

Also note that when an email message cannot be delivered, it usually results in a “bounce” error notification. Bounce notifications are sent to the Envelope From/Bounce Address defined in your Outreach mailbox’s outgoing email settings even if the message header is customized using the following procedure. See Email bounce handling.

To customize the mailing message header

1 On the Message tab of an open mailing, click Edit next to the From field.



2 Enter the following field information.

Table 468: Customize From and Reply-To Headers Window Description

Field	Description
Mailbox	Click this drop-down menu and select a mailbox to change the mailbox from the default. See Email handling in Outreach and Feedback.
From	Type the name and email address that you want the message to appear from in the From text boxes.
Name	Type the name you want the message to appear from.
*Email Address	Type the email address you want the message to appear from.

Table 468: Customize From and Reply-To Headers Window Description (Continued)

Field	Description
Reply-To	Type the name and email address that you want the message to reply to in the Reply-To text boxes.
Name	Type the name you want to appear as the reply-to address.
*Email Address	Type the email address you want to appear as the reply-to address. **Important:** If you use incidents, the Reply-To Address must match the Envelope From/Bounce Address unless your own mail administrator has set up SMTP forwarding for this address to automatically forward to the Envelope From/Bounce Address in the mailbox's outgoing emails settings. See Outgoing Email Settings.
Merge Field	Click this button to add merge fields to the from name and address or reply-to name and address.
Preview	This section displays how the from and reply-to addresses appear.

3 Click the OK button to save your settings and close the window.

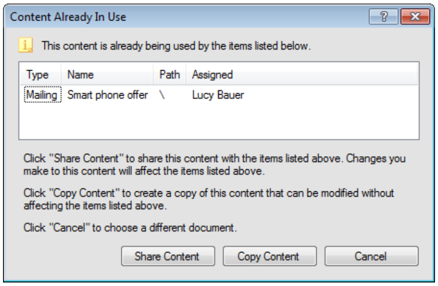
Choosing existing content

As an alternative to creating a message from scratch, you can base your message on existing content. You can choose to copy a document's content into your message and customize it, or share the content with other surveys and messages that use the document. See Creating documents.

To insert existing content

1 On the Message tab of an open mailing, click Choose Existing Content. The Choose Document window opens.

2 Select the document you want to use and click the OK button. If it is not already in use by another mailing, campaign, or survey, the content is added to your message. Otherwise, the Content Already in Use window opens.



a To share the document with the items indicated in the grid, click the Share Content button. When you share a document, you can edit the content of the document, but all other messages that share it are also modified. Likewise, if another staff member edits the document, your message is also modified.

b To create a copy of the document, click the Copy Content button. If you edit the copied content, the original document is not affected. Conversely, if the content of the original document is modified, it does not affect your copy of the message.

Caution The system automatically creates a document containing the copied content and stores it in the Automatically Generated folder in the Documents explorer. When you update the document in the mailing, those changes are also made to the automatically generated copy. In addition, if you make any changes to the copy in the Automatically Generated folder, those changes are also made to the content on the Message tab in the mailing. See Automatically generated folders.

Uploading HTML content

You can upload an HTML file into your mailing to create your message. The HTML document must be stored in a file accessible through your workstation. You cannot access the HTML of a web page.

To upload HTML content

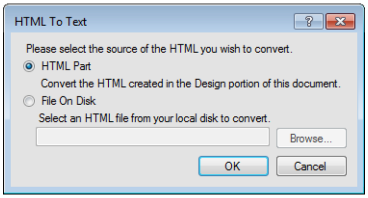
1. On the Message tab of an open mailing, click Upload HTML Content.
2. Select the HTML file you want to upload.
3. Click the Open button. The HTML is inserted in your message.

Converting HTML content

When creating a text message, you can take HTML content from the HTML message or from an HTML file and convert it to plain text.

To convert HTML content

1 On the Message tab of an open mailing, click the Text tab and click Convert HTML Content.



2 To convert the HTML message to text, select the HTML Part radio button.

Note You should finalize your HTML content before converting it to text.

3 To convert an HTML file to text, select the File On Disk radio button and browse for the file.

4 Click the OK button to insert the converted HTML in the text part of your message.

Market testing in broadcast mailings

When creating a broadcast mailing, you can test different content and designs on a subset of your audience by using market testing. Market testing is available in two modes.

- **Even split**—This mode sends your test messages to equal portions of your audience. For example, if you created four messages, each message would be sent to twenty-five percent of your audience. In this way, you can test different content and designs for use in future mailings.

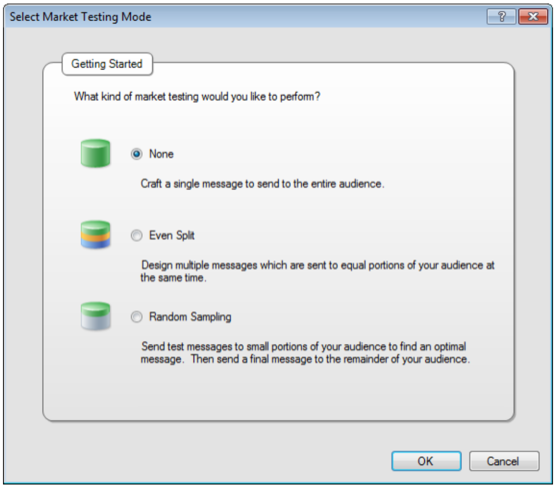
- **Random sampling**—This mode sends test messages to a percentage of the audience you specify. After the test messages are sent, you send a final message to remaining audience members. For example, you could send two messages to five percent of your audience each. After determining the most effective message, you would send a final message to any audience members who had not received a test message.

Important By default, the Message tab is set up without market testing. This means you create and send only one message with the mailing.

To activate market testing

1 On the Message tab of an open mailing, click the information bar (just above the From address field) and select Change Market Testing Mode. The Select Market Testing Mode window opens.

Note You can also access this window on the Summary tab by clicking Change next to Market Testing.



2 To send test messages to equal portions of your audience, select the Even Split radio button. See Creating messages in even split mode.

3 To send test messages to a percentage of your audience, select the Random Sampling radio button. See Creating messages in random sampling mode.

4 To disable market testing, select the None radio button.

Note If you have created more than one test message, the Select Message To Keep window opens asking which message you want to use. You must select a message to keep before you can disable market testing.

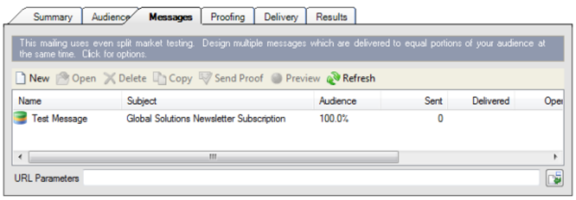
5 Click the OK button.

Creating messages in even split mode

When creating messages in even split mode, you define different message content and proofing options for each version of your message. Your audience is split evenly between the messages. The messages are sent at the same time and share delivery options.

To create messages in even split mode

1 From the Select Market Testing Mode window, select the Even Split radio button and click the OK button. The market testing page displays in even split mode.



By default, you have one test message being sent to 100 percent of the audience. From here, you can add more messages, edit messages, send proofs, or view results. You can also see information about each message, described in the following table.

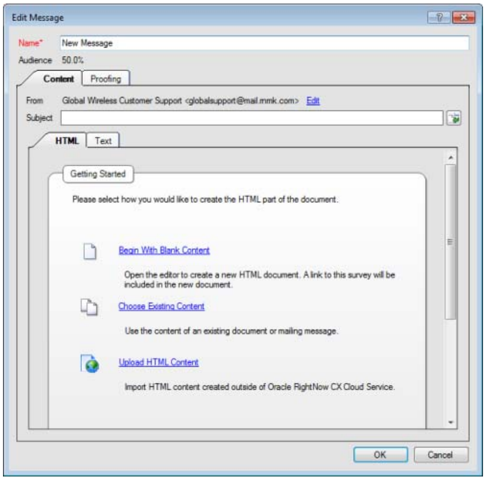
Table 469: Messages Description

Column	Description
Name	This column displays the name of the message.
Subject	This column displays the email's subject line for the message.
Audience	This column displays the percentage of the audience the message will be sent to.
Sent	This column displays the number of emails sent with the message.

Table 469: Messages Description (Continued)

Column	Description
Delivered	This column displays the number of emails sent with the message that did not bounce.
Opened	This column displays the number of unique email recipients who opened the message.
Clicked	This column displays the number of unique email recipients who clicked a tracked link.
Unsubscribed	This column displays the number of email recipients who unsubscribed from mailings. **Note:** Unsubscribe sets global opt-in in both Outreach and Feedback. See Inserting unsubscribe links.
Replied	This column displays the number of times the mailing was replied to.

2 Click the New button to add another message. The Edit Message window opens.



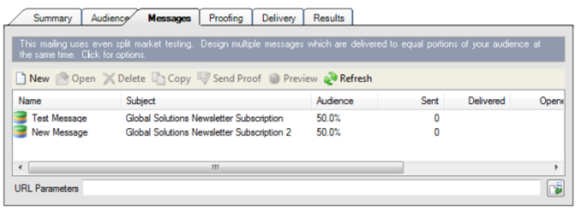
3 Type the name of the message in the Name field.

4 Type the subject of the message in the Subject field on the Content tab. See Customizing the message in broadcast mailings.

5 Define any other content or formatting options you may want to test using either the HTML editor or the text editor on the Content tab. See Using the HTML editor and Creating and editing text.

6 To send a proof message, click the Proofing tab on the Edit Message window. See Sending a proof message.

7 Click the OK button to save the message. The new message is added to the Messages tab.



8 To open a message for editing, select the message and click the Open button.

9 To delete a message, select the message and click the Delete button.

10 To copy a message to create another test message, select the message and click the Copy button.

Important A document is automatically created and stored in the Automatically Generated folder in the Documents explorer for every copy of a test message. Changes made to content in any of the copied test messages is not shared with the original test message or subsequent copies. See Automatically generated folders.

11 To send a proof of a message, select the message and click the Send Proof button. See Sending a proof message.

12 To preview the content of a message, select the message and click the Preview button.

13 To refresh the message statistics, click the Refresh button.

14 To add URL parameters, type any parameters you want to append to the links in your message (for example, p1=v1&p2=v2) in the URL Parameters field.

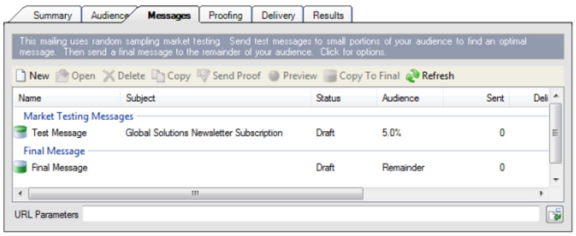
15 To add a merge field to the URL parameters, click the Merge Field button to the right of the URL Parameters field and select the field. See Inserting merge fields to URL parameters.

Creating messages in random sampling mode

You should use random sampling mode when you want to send a sample of test messages to your audience before determining the best one to use as a final message. When creating messages in random sampling mode, you define different message content, designs, delivery, and proofing options for each version of your message. Once you evaluate the effectiveness of your test messages, you create a final message and send it.

To create messages in random sampling mode

1 From the Select Market Testing Mode window, select the Random Sampling radio button and click the OK button. The market testing page displays in random sampling mode.



By default, you have one test message being sent to five percent of the audience, and one final message sent to the remainder of the audience. You can add more messages, edit the messages, send proofs, or view results. From here, you can also see information about each message, described in the following table.

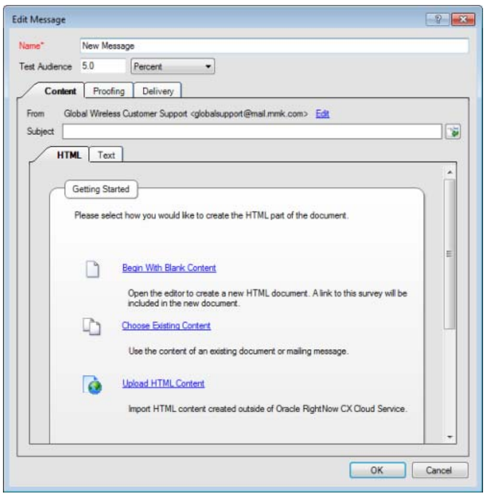
Table 470: Messages Description

Column	Description
Name	This column displays the name of the message.
Subject	This column displays the email's subject line for the message.
Status	This column displays the status of the message. See Mailing delivery statuses.
Audience	This column displays the percentage of the audience the message will be sent to.
Sent	This column displays the number of emails sent with the message.
Delivered	This column displays the number of emails sent with the message that did not bounce.

Table 470: Messages Description (Continued)

Column	Description
Opened	This column displays the number of unique email recipients who opened the message.
Clicked	This column displays the number of unique email recipients who clicked a tracked link.
Unsubscribed	This column displays the number of email recipients who unsubscribed from mailings. **Note:** Unsubscribe sets global opt-in in both Outreach and Feedback. See Inserting unsubscribe links.
Replied	This column displays the number of times the mailing was replied to.

2 Click the New button to add another message. The Edit Message window opens.



3 Type the name of the message in the Name field.

4 Type the number or percentage of recipients you want to receive the message in the Test Audience field and select Percent or Recipients from the drop-down menu.

Note The percentage of recipients is based on the number of contacts in the audience at the time the mailing is sent.

5 Type the subject of the message in the Subject field on the Content tab. See Customizing the message in broadcast mailings.

6 Define any other content or formatting options you may want to test using either the HTML editor or the text editor on the Content tab. See Using the HTML editor and Creating and editing text.

7 To send a proof message, click the Proofing tab on the Edit Message window. See Sending a proof message.

8 Click the Delivery tab on the Edit Message window to define the delivery options for the message. See Accessing broadcast delivery options.

Note When sending multiple test cells, we recommend scheduling them to be sent all at one time rather than a few minutes apart. This minimizes any performance impact on your database by sharing audience segmentation processes across all of the sending cells, instead of performing them multiple times.

9 Click the OK button to save the test message. The new message is added to the Messages tab.

10 To open a message for editing, select the message and click the Open button.

11 To delete a message, select the message and click the Delete button.

Note You cannot delete the final message.

12 To copy a message to create a new message, select the message and click the Copy button.

Important A document is automatically created and stored in the Automatically Generated folder in the Documents explorer for every copy of a test message. Changes made to content in any of the copied test messages is not shared with the original test message or subsequent copies. See Automatically generated folders.

13 To send a proof of a message, select the message and click the Send Proof button. See [Sending a proof message](#).

14 To preview the content of a message, select the message and click the Preview button.

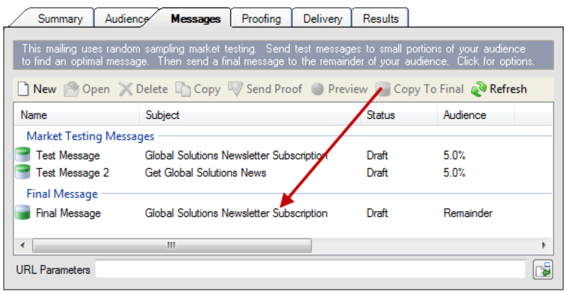
15 To refresh the message statistics, click the Refresh button.

16 To add URL parameters, type any parameters you want to append to the links in your message (for example, p1=v1&p2=v2) in the URL Parameters field.

17 To add a merge field to the URL parameters, click the Merge Field button to the right of the URL Parameters field and select the field. See [Inserting merge fields to URL parameters](#).

18 Once you are satisfied with your message, you must copy it as your final message and then define delivery options.

a Select the message and click the Copy To Final button. The message you selected is copied to the Final Message section of the Messages tab.



b Select the final message and click the Open button.

c Click the Delivery tab on the Edit Message window to define delivery options.

[Scheduling mailings for market testing](#)

Market testing your mailings works best when you schedule the test messages at the same time rather than launching them a few minutes apart. By scheduling test messages at the same time, the database and servers have to process data only once instead of multiple times.

Sending a proof message

An important part of sending a mailing is proofing the content to ensure the message is approved by the necessary contacts and staff members and as a final check for any mistakes. You can send a proof to any combination of staff accounts, staff groups, **proof lists**, **distribution lists**, and distribution list available addresses, and then view the results of the proof from the Proofing tab. For information about distribution lists, see Managing distribution lists.

Once a reviewer has approved or rejected the proof, the mailing's assigned staff member will receive a Mailing Proof Response Notification. This notification can be customized using message templates and is found in the Administrator Notifications message type under the Outreach category. See Customizing messages.

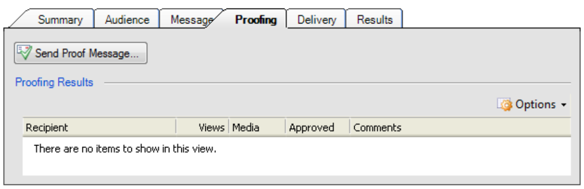
Note Any conditional sections contained in your message display in the proof message. However, reviewers see the conditional sections only if they can be mapped to contact records that allow access to those conditional sections.

Send proofs to key staff

When sending proofs, consider adding key members of your customer support, sales, and marketing teams. Sharing a sample of each mailing can help you ensure that all contact "touch points" (groups in your organization that work directly with customers) are aware of the messages being communicated to your customers. Providing a consistent message across all channels is key to providing a world-class customer experience.

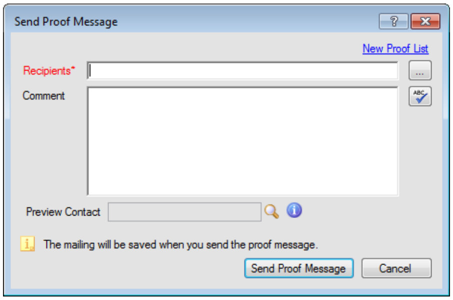
To send a proof

1 From an open mailing, click the Proofing tab.



2 Click the Send Proof Message button to select proof recipients and send a proof of the mailing. The Send Proof Message window opens.

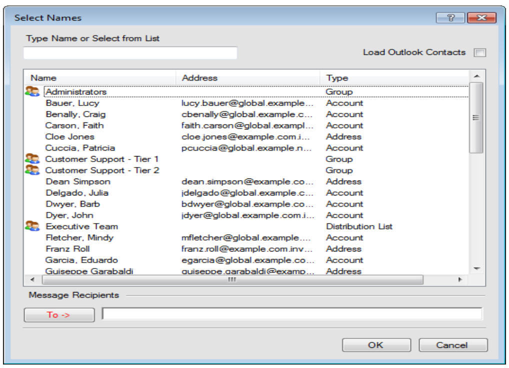
Note From the Summary tab, clicking Send Proof Message opens the Send Proof Wizard where you can select the mailing you want to send for a proof, and then follow the wizard as it steps you through the process of sending your message.



3 To create a proof list, click New Proof List and refer to Adding contact lists.

4 Type an email address or the name of a group, distribution list, or proof list in the Recipients field.

5 To select proof recipients from a list, click the Select Recipients button (to the right of the Recipients field). The Select Names window opens.



a Select a staff member, address, group, distribution list, or proof list and click the To button to add it to the To field.

b To find a staff member, address, group, distribution list, or proof list, type the name in the text box above the list. The first item matching those letters is selected in the grid.

c To import your contacts from the default Contacts folder in Outlook, select the Load Outlook Contacts check box. This is useful for displaying contacts that are not included in Oracle Service Cloud. See Synchronizing contacts.

d Click the OK button to close the window.

6 Type any comments you want to appear in the message in the Comment text box.

7 To spell check the Comment field, click the Spell Check button (to the right of the Comment field) and refer to Spell checking.

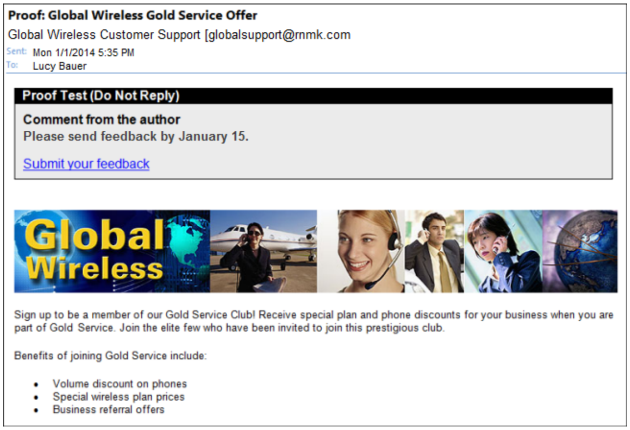
8 To customize your proof message by contact record, which lets your reviewers see how any dynamic content will look for a specific contact, click the Search button next to the Preview Contact field on the bottom of the window. The Contact Search window opens.

a Type your search criteria in one or more of the available fields and click the Search button. A list of contacts that match your search criteria displays in the grid below the search criteria fields. You can then select a contact and click the Select button. The Contact Search window closes and the contact name you selected populates the Preview Contact field on the Send Message Proof window.

9 Click the Send Proof Message button to save the mailing and send the proof message to the specified recipients.

Accepting or rejecting proof mailings

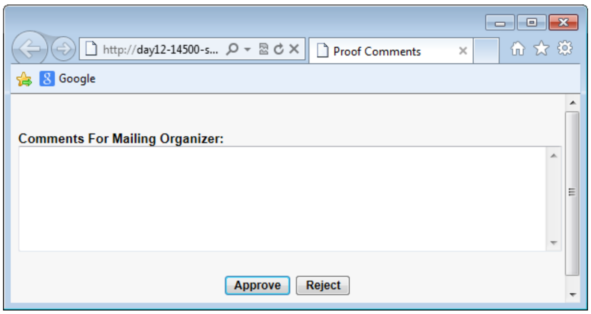
After you send a proof, the recipients can accept or reject the mailing. The proof email automatically displays a link to a web page where the tester can accept or reject the mailing. The word “Proof:” is prepended to the message subject. The following figure shows an email with the proof tester link.



The mailing's assigned staff member receives a Mailing Proof Response Notification every time a reviewer submits feedback.

To accept or reject a proof email

1 In a proof email, click the Submit Your Feedback link. A new window opens where you can make comments and accept or reject the proof.



2 Type any comments related to the proof mailing in the Comments for Mailing Organizer text box.

3 To approve the mailing, click the Approve button.

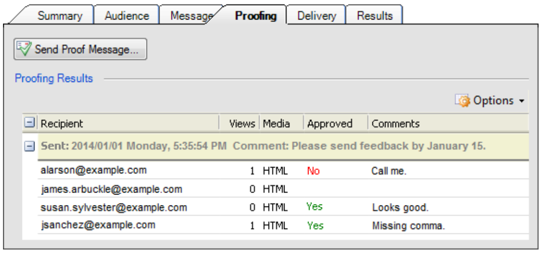
Or

To reject the mailing, click the Reject button.

A message displays confirming your submission.

Viewing proof results

Once you have sent the proof message, you can easily check the proof results from the Proofing tab. The Proofing Results section lists all message proofs that were previously sent for the selected mailing, grouped by date and time. You can see how many times the proof was viewed, who accepted and rejected the proof, and any comments from the proof testers.



The columns in this section are described in the following table.

Table 471: Proofing Results Description

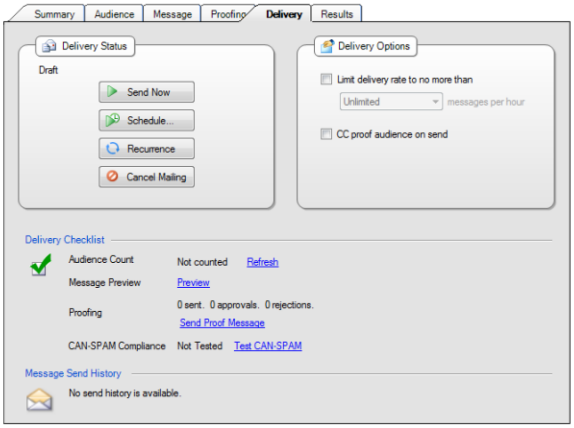
Column	Description
Recipient	This column displays all recipients of the proof mailing.
Views	This column displays the number of times each recipient views the message.
Media	This column displays whether the recipient received HTML or text content.
Approved	This column displays whether each recipient approved the proof (Yes or No). The column is blank if the recipient has yet to approve or reject the proof.
Comments	This column displays the recipient's comments.

Accessing broadcast delivery options

After you have defined the audience, created a message, and sent a proof mailing, you can send the mailing to your customers. The Delivery tab lets you choose to send the mailing immediately or schedule its delivery for sometime in the future. In addition, you can control the speed of the delivery and access common administration tasks for the mailing.

To access broadcast delivery options

From an open mailing, click the Delivery tab.



The Delivery tab is divided into sections. The Delivery Status section displays the status of the mailing (see Mailing delivery statuses) and contains buttons for controlling the sending of the mailing. You can perform the following tasks from this section.

- **Send a mailing**—See Sending mailings.
- **Schedule a mailing**—See Scheduling mailings.
- **Reschedule a mailing**—See Scheduling mailings.
- **Mailing recurrence**—See Setting mailing recurrence.
- **Suspend a mailing**—See Suspending broadcast mailings.
- **Cancel a mailing schedule**—See Scheduling mailings.
- **Cancel a mailing**—See Canceling broadcast mailings.

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Important Some high-volume sites are configured to send mailings from a **replication database** to reduce the impact of large processes on the **operational database**. Because the sync between the replication database and the operational database can occasionally fall behind, the **mailer daemon** (also called RNMD) uses a fail-safe function before sending to ensure that the replication database is caught up. If it is not, the mailing is delayed until the replication database has been synchronized. The fail-safe function ensures that the mailing reflects the current state of your production contact records (including those that are opted out or have email addresses marked as invalid) at the time the mailing is sent. If you are uncertain whether your site uses the replication database to send mailings, contact support or your Oracle account manager.

The Delivery Options section allows you to set options related to sending the mailing. See Sending mailings.

On the bottom of the tab, delivery information about the mailing is available for you to quickly scan and assess in the Delivery Checklist and Message Send History sections. The following table describes these sections.

Table 472: Delivery Sections Description

Section	Description
Delivery Checklist	This section displays the audience count and proof history and provides a link to preview the survey.
Audience Count	This field displays the most recent audience count and the time and date it was performed. Click Refresh to perform an updated count. See Defining the broadcast mailing audience. **Note:** Occasionally, the replication database used to process mailings can fall slightly behind the operational database. If the system determines that the replication contact data is not current, the audience count is labeled “Estimated.”
Message Preview	This section contains a link to preview the message that is sent with the mailing. Click Preview to preview the message.
Proofing	This section displays a summary report of message proofs associated with the mailing. Click Send Proof Message to send the message as a proof. See Sending a proof message.

Table 472: Delivery Sections Description (Continued)

Section	Description
CAN-SPAM Compliance	This section displays the results of the CAN-SPAM compliance test. Click Test CAN-SPAM to test the mailing for compliance with the CAN-SPAM Act. Click Details to view the results of a test. See CAN-SPAM compliance in mailings.
Message Send History	This section displays a log of events relating to the delivery status of the mailing. If the mailing has not been sent, it is noted here.

Sending mailings

Broadcast mailings can be sent immediately from the Delivery tab. The status changes to **Preparing to Send** and then the mailing is sent to your defined audience. Once the mailing finishes sending, the status is **Completed**.

To send a broadcast mailing

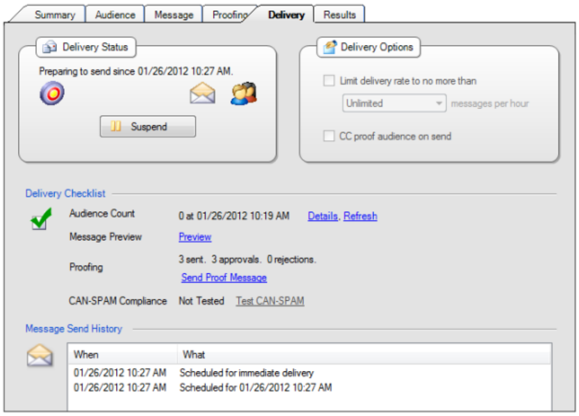
1 On the Delivery tab of an open mailing, enter field information in the Delivery Options section described in the following table.

Table 473: Delivery Options Section Description

Field	Description
Limit delivery rate to no more than x messages per hour	Select this check box to control the rate of delivery, and then click the drop-down menu to select the number of emails to send per hour when the Limit Delivery Rate check box is selected.
CC proof audience on send	Select this check box to copy the sent mailing to your proof message recipients. The phrase "Proof Copy:" is prepended to the message subject. **Note:** Proof members may receive two messages if they are also part of the audience.

2 Click the Send Now button. A message asks you to confirm that you want to send the mailing.

3 Click the Yes button on the confirmation message to send the message. The delivery status on the Delivery tab changes to Preparing to Send and you can see the delivery progress of the message along with the audience count.



When the mailing finishes sending, the status changes to Completed and the Delivery Status section displays the number of emails sent and delivered.

Scheduling mailings

You can schedule broadcast mailings to be sent on a specified date and time. This lets you coordinate sending a mailing before the actual send date (for example, to coincide with a product launch). Once scheduled, the mailing sends automatically.

To schedule a mailing

1 On the Delivery tab of an open mailing, enter field information in the Delivery Options section as described in the following table.

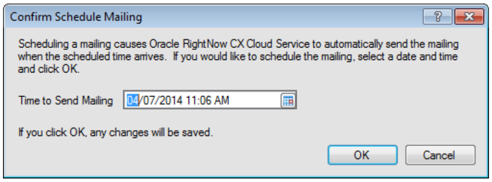
Table 474: Delivery Options Section Description

Field	Description
Limit delivery rate to no more than x messages per hour	Select this check box to control the rate of delivery, and then click the drop-down menu to select the number of emails to send per hour when the Limit Delivery Rate check box is selected.

Table 474: Delivery Options Section Description (Continued)

Field	Description
CC proof audience on send	Select this check box to copy the sent mailing to your proof message recipients. The phrase “Proof Copy:” is prepended to the message subject. **Note:** Proof members may receive two messages if they are also part of the audience.

2 Click the Schedule button. The Confirm Schedule Mailing window opens.



3 Type the date and time you want to send the mailing or click the calendar to open a calendar and select the date.

4 Click the OK button to save the schedule. The Delivery Status section displays the time and date the mailing is scheduled to be sent.

5 To reschedule the mailing, click the Reschedule button.

6 To cancel a mailing’s schedule, click the Unschedule button.

Note Although you do not have to wait until all the test messages are sent before scheduling a final mailing, all of the test messages must be sent before the final mailing can be sent.

Setting mailing recurrence

Mailing recurrence lets you send broadcast mailings at regular daily, weekly, monthly, or yearly intervals with a number of flexible options.

- You can schedule mailings to run during a specific date range, or set no end date to allow recurrences to run indefinitely.

- You can schedule mailings to run on specific days of the month or specific months of the year.
- You can send a message to each contact in your audience only once or every time the recurrence is initiated.
- You can select the time of day that you want messages to begin sending.

Note Occasionally, the **replication database** used to process mailings can fall slightly behind the **operational database**. If the system determines that the replication contact data is not current at the scheduled recurrence time, it waits until the data is appropriately synchronized before sending.

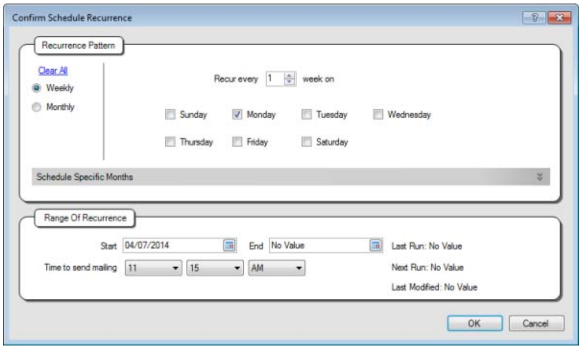
Before setting a recurring schedule, you must first define the audience and the message subject and content. Once recurrence has been set, you can click the Suspend button to suspend recurrences. This saves the recurrence information so it can be edited or reactivated.

Information about past recurrences—such as the time last run, next scheduled run time, the time the schedule was last updated, and basic results data—is stored in the knowledge base and tracked in the Recurring Mailings Summary report. Also, each recurrence is tracked in the mailing's **audit log** along with a description of how many emails were sent. See Audit logs.

To add or edit a recurring schedule for a broadcast mailing

1 From an open mailing, click the Delivery tab.

2 Click the Recurrence button. The Confirm Schedule Recurrence window opens.



3 Enter the following field information.

Table 475: Confirm Schedule Recurrence Window Description

Field	Description
Recurrence Pattern	Select the weekly or monthly interval when the mailing should be sent. For example, a mailing could be sent every two weeks on Tuesday, or every month on the 7th and 19th.
Clear All	Click this text to clear all selected recurrence pattern check boxes.
Monthly	Select this radio button to display check boxes for the days of the month. You can then select the days of the month when the mailing should be sent.
Weekly	Select this radio button to display check boxes for each day of the week. You can then select the check boxes next to the days when you want the mailing to be sent. When you select this radio button, a Recur drop-down menu displays where you can specify the frequency of the weekly mailing. For example, if you want to send a mailing every week on the days selected, enter 1 in the field. If you want the mailing to be sent every third week on the days selected, enter 3 in the field. This field accepts values from 1 to 99.
Schedule Specific Months	Click this header to display check boxes for the months of the year. Select the months during which the mailing should be sent. By default, every month is selected, but if you do not want to send during a specific month, you can clear the check box for that month.
Clear All	Click this text to clear all check boxes for the selected months.
Range of Recurrence	Options in this section let you specify a date range for the recurrence and time of day at which the mailing is sent.
Start End	Enter the start and end date of the schedule or click the calendar from which you can select the start and end date. The current day is the default start date.
Time to send mailing	Enter the time of day to begin sending the mailing.

4 Click the OK button to save the recurrence settings and return to the Delivery tab.

5 To suspend the recurrence, click the Suspend button.

a Click the OK button to confirm you want to suspend the recurrence.

Note Once recurrence is suspended, you can click the Recurrence button again to edit or reactivate it.

6 To exclude contacts from the audience that were included in a previous instance of the recurrence, click the Audience tab and select the Exclude From Audience if Previously Sent check box.

Note By default, a recurring mailing is sent on every recurrence to every contact who matches your audience, even contacts who previously received an instance of the same message. If you want each contact to receive only one instance of a recurring mailing, you need to exclude contacts from the audience that were previously sent to. This is often helpful when sending a one-time offer—for example, to all contacts who are having a birthday in the next month.

Suspending broadcast mailings

You may want to stop sending a mailing while it is sending or preparing to send. You can temporarily stop a mailing from sending by suspending it.

To suspend a mailing

1 On the Delivery tab of an open mailing, click the Suspend button. This button appears only when a mailing is in the process of being sent. The Confirm Suspend message appears asking you to confirm that you want to suspend the mailing.

2 Click the Yes button to confirm suspending the mailing.

The status changes to Suspended and the Delivery Status section displays the number of audience members the mailing was already sent and delivered to.

Canceling broadcast mailings

You can cancel a mailing at any time. When you cancel a mailing, the mailing is saved and you can still view mailing results. However, the mailing can no longer be sent or modified. To temporarily suspend a mailing, see Suspending broadcast mailings.

Tip A canceled mailing can no longer be modified or sent. However, it can be copied to a new mailing, and the copy can be modified and sent.

To cancel a mailing

1 On the Delivery tab of an open mailing, click the Cancel Mailing button. The Confirm Canceling Mailing message appears asking you to confirm that you want to cancel the mailing.

2 Click the Yes button to cancel the mailing. The delivery status changes to Canceled.

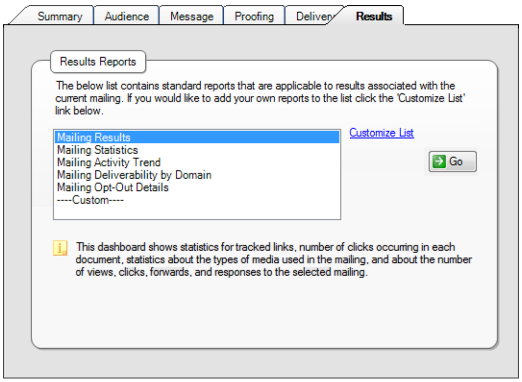
Viewing mailing results

One of the most important benefits of sending mailings is the ability to analyze the results. With Outreach, you have direct access to a comprehensive dashboard from the Results tab. You can get up-to-the-minute statistics of mailing results, including the number of clicks, unsubscribes, forwards, and **bounces** as well as the number of emails sent and delivered.

Important The email gateway must be activated in order for the **Techmail** utility to capture bounce data for analytics. See Email bounce handling.

To view mailing results

1 From an open mailing, click the Results tab.



2 Select a report from the Results Reports list.

Tip When you select a report, the report description displays in the area below the list to help you understand the purpose of the report.

3 Click the Go button. The report is displayed on the content pane in a new tab.

4 To view a definition of the report, including its tables, filters, and column descriptions, click the Definition button on the ribbon and select View. See Viewing and exporting report definitions.

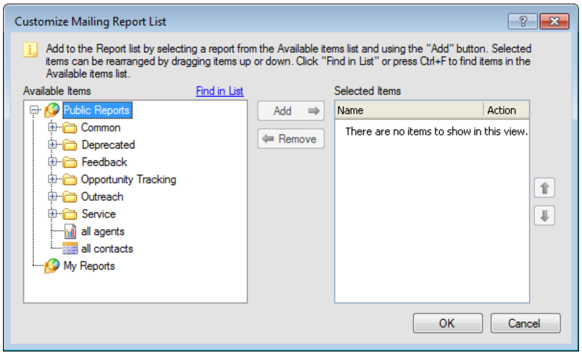
5 To view the same report for a different mailing, select the mailing from the Mailing drop-down menu at the top of the open report and click the Search button.

Customizing the mailing report list

The mailing report list provides a set of useful standard reports that display results information about the mailing you are editing. However, you can add or remove reports to customize the list.

To customize the mailing report list

1 From the Results tab of an open mailing, click Customize List next to the reports list. The Customize Mailing Report List window opens.



2 To add a report to the mailing report list, select a report from the Available Items list and click the Add button. You can also double-click reports to add them.

3 To search for a report in the Available Items list, click Find In List and enter the name of the report you are looking for.

4 To remove a report from the mailing report list, select the report in the Selected Items list and click the Remove button.

5 To rearrange the order of the reports you are adding, select a report in the Selected Items list and click the up or down arrow.

Tip You can also drag and drop reports to adjust their position.

6 Click the OK button to close the window and update the list. Added reports are displayed at the bottom of the list.

Creating transactional mailings

Transactional mailings let you send a mailing when an event occurs. For instance, you can send the email as part of a campaign. See Editing Transactional Mailing attributes.

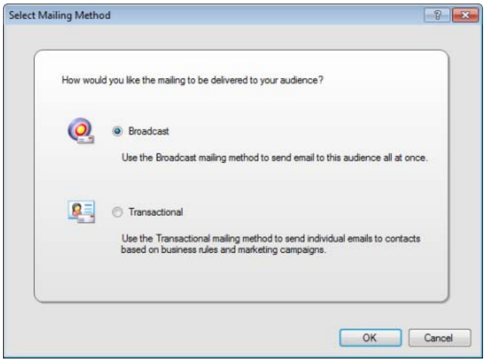
Transactional mailings can also be sent from a contact, opportunity, or incident rule when a creation or update occurs. For example, when an incident is closed, you can send a mailing to the incident contact to notify them of product updates. See Actions for rule bases.

To create a transactional mailing

1 From the Mailings explorer, click the New button on the ribbon. A new broadcast mailing opens on the content pane.

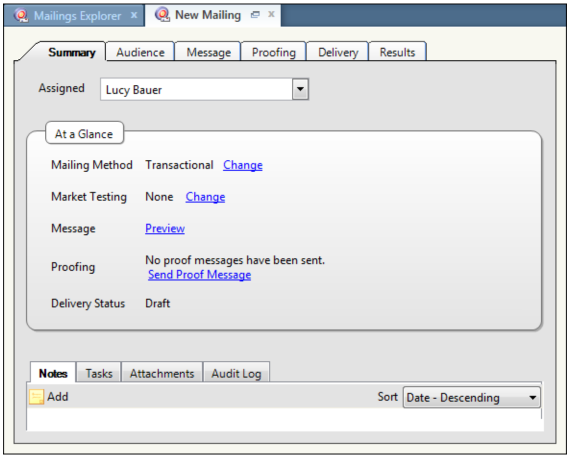
Tip You can also create a mailing from an open mailing by clicking the New button. Additionally, if your navigation set is configured to add mailings from the file menu, click File and select Mailing in the Create New Item section. See To configure the file menu.

2 Click Change in the Mailing Method section of the Summary tab. The Select Mailing Method window opens.



3 Select the Transactional radio button.

4 Click the OK button.



By default, the Summary tab is active. From here, you can review general information about the mailing in the At a Glance section, as well as manage the mailing's notes, tasks, and attachments (see Managing mailings). As you create the mailing, you move through each tab to complete the mailing's elements.

Note You can also add custom tabs to your mailings. Custom tabs give you quick access to elements you frequently use in your mailings. See Adding custom tabs.

5 To assign the mailing to another staff member (by default, the mailing is assigned to the staff member who creates it), click the Assigned drop-down menu and select the staff member.

a To search for a staff member, type the staff member's name in the Find field.

Tip Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.

6 Click the text in the At a Glance section described in the following table to perform common mailing functions.

Table 476: At a Glance Section Description

Field	Description
Mailing Method	This field displays the mailing method currently selected for the mailing. Click Change to change the method and refer to Managing mailings.
Market Testing	This field displays the market testing mode of the mailing. Click Change to change market testing modes. See Market testing in transactional mailings.
Message	Click Preview to preview the mailing.
Proofing	This field displays the number of proofs that have been sent, approved, and rejected. Click Send Proof Message to send a proof. See Sending a proof message.
Delivery Status	This field displays the delivery status of the mailing and the number of emails sent and delivered. See Accessing transactional delivery options.

7 Click the Audience tab to define an audience for the mailing. See Defining the transactional mailing audience.

8 Click the Message tab to create the email sent to the mailing audience. See Customizing the message in transactional mailings.

9 Click the Proofing tab to send a proof of the mailing for internal review before sending it to the entire audience. See Sending a proof message.

10 Click the Delivery tab to select delivery options. See Accessing transactional delivery options.

11 Click the Results tab to view the report associated with the mailing. See Viewing mailing results.

Note If your application is configured with custom tabs for mailings, they display after the Results tab. See Adding custom tabs.

12 To spell check the mailing, click the Spell Check button and refer to Spell checking.

13 Click the Save and Close button to save the mailing. The Save As window opens.

Note You can click the Save button to save the mailing without closing it.

14 Select the folder you want to save the mailing in and type the name of the mailing in the Name field.

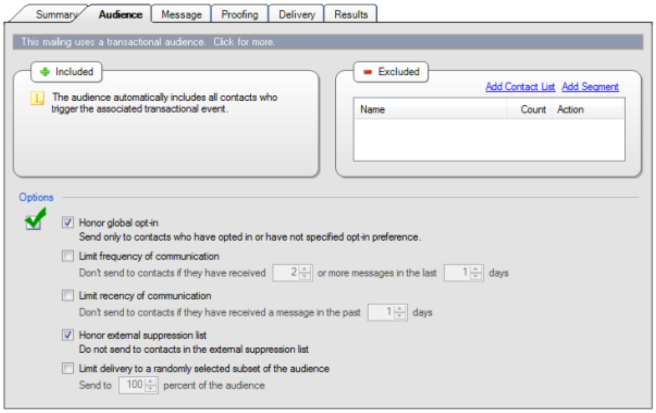
15 Click the Save button to save the mailing.

Defining the transactional mailing audience

Even though your rules and campaigns determine which customers receive the mailing, you still need to define certain audience elements if you want to exclude certain customers or configure opt-out and external suppression list settings. You can also restrict the scope of your audience, set mailing frequency and recency limits, and specify how to handle global opt-in and suppression options. See Audiences.

To define the audience

1 From an open mailing, click the Audience tab.



Note The audience for a transactional mailing automatically includes all contacts who trigger the associated transactional event. For that reason, you can select only who is excluded from the mailing, not who is included in it. You can exclude a total of fifty contact lists and segments, each containing a vast number of contacts.

2 To exclude a list from the audience, click Add Contact List in the Excluded section. The Select Contact List window opens.

   a To add a contact list, click New Contact List and refer to Adding contact lists.

   b Select the list you want to exclude from the mailing's audience and click the OK button. The list is added to the Excluded grid. Contacts belonging to the list do not receive the mailing.

3 To exclude a segment from the audience, click Add Segment in the Excluded section. The Select Segment window opens.

   a To add a segment, click New Segment and refer to Creating segments.

   b Select the segment you want to exclude from the mailing's audience and click the OK button. The segment is added to the Excluded grid. Contacts belonging to the segment do not receive the mailing.

4 To edit a list or segment that is excluded from the mailing, click Open next to the list or segment name. See Audiences.

5 To remove a list or segment from the Excluded section, click Remove next to the list or segment name.

6 Enter field information in the Options section described in the following table.

Table 477: Options Description

Field	Description
Honor global opt-in	Select this check box to send the mailing to contacts who did not explicitly opt out of receiving mailings. Clear this check box to send the mailing to all contacts in the audience, regardless of their opt-in preference.
Limit frequency of communication	Select this check box to set a mailing frequency limit, and then enter a maximum number of mailings and a number of days in which contacts can receive messages before they are excluded from mailings. When the mailing launches, it is not sent to any contacts who have received the maximum number of mailings within the designated time period. For more information about how this setting works, see Frequency and recency limits. **Note:** The minimum you can enter is 2 in the last 1 day. The maximum number of days you can enter is 90. **Tip:** To ensure contacts receive only 1 email every "x" number of days, use the Limit recency of communication setting described next.
Limit recency of communication	Select this check box to set a mailing recency limit. Enter the minimum number of days that should elapse before contacts receive another email. When the mailing launches, it is not sent to any contacts who have received a mailing in the past specified number of days. For more information about how this setting works, see Frequency and recency limits. **Note:** The maximum number of days you can enter is 90. The default value is 1 day. **Tip:** Use this check box to ensure contacts receive only one email every "x" number of days. For instance, if you want your contacts to receive only one email per week, you can select this check box and then set the field to seven.
Honor external suppression list	Select this check box to exclude contacts in the external suppression list from receiving the mailing. Clear this check box to send the mailing to all contacts in the audience, even if they are in the external suppression list. See External Suppression List.
Limit delivery to a randomly selected subset of the audience	Select this check box to send the mailing to a random subset of the audience. Type a percentage or use the up and down arrows to select a percentage of the audience to send the mailing to.

Table 477: Options Description (Continued)

Field	Description
Allow delivery of messages to multiple contacts sharing the same email address	Select this check box to send messages to multiple contacts sharing the same email address. If this check box is cleared, the message is only sent to the contact most recently updated. **Caution:** Because duplicate messages sent to a single address are a common characteristic of spam, you should select this check box only when necessary. When the check box is selected and you attempt to schedule or send a mailing, survey, or proof, and duplicate email addresses exist in your audience, a message warns you that your reputation as a bulk email sender may be adversely affected and impact your ability to send future communications. See *Best Practices for Email Marketing*. **Note:** This option is available only when email address sharing is enabled. See Email address sharing.

Customizing the message in transactional mailings

From the Message tab, you can activate **market testing** and specify the mailbox settings for the mailing, the subject of the email, and any URL parameters you want to attach to links in the message. In addition, you can create either plain text or HTML messages from scratch, from existing content, or by uploading HTML from another site.

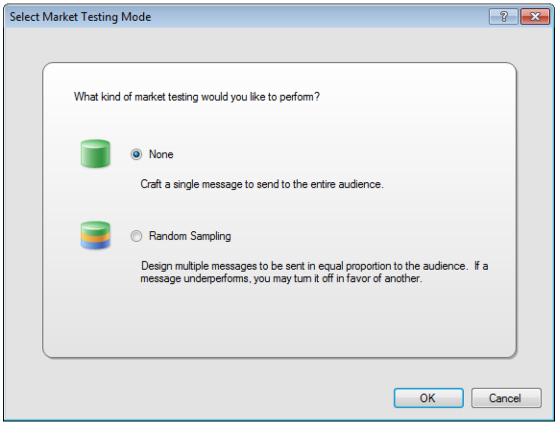
Creating a message follows the same procedure as creating a message in a broadcast mailing. See To create a message.

Market testing in transactional mailings

When creating a transactional mailing, you can test different formats on equal portions of your audience. If more than one message is created when market testing is used, then contacts sent the email through a campaign or rule are sent one of the messages. All messages have an equal number of recipients. In other words, when the mailing is **launched** through a campaign, it rotates between messages.

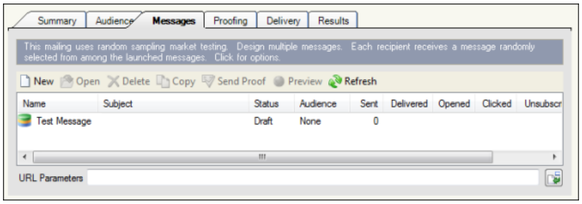
To activate market testing

1 On the Message tab of an open mailing, click the information bar and select Change Market Testing Mode. The Select Market Testing Mode window opens.



2 Select the Random Sampling radio button.

3 Click the OK button. The market testing page displays in random sampling mode.



By default, one message is sent to 100 percent of the audience. From here, you can add more messages, edit the messages, send proofs, or view results. You can also see information about each message, described in the following table.

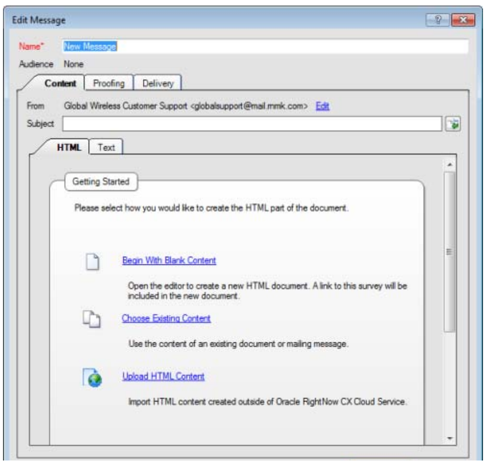
Table 478: Messages Description

Column	Description
Name	This column displays the name of the message.
Subject	This column displays the email's subject line for the message.

Table 478: Messages Description (Continued)

Column	Description
Status	This column displays the delivery status of the message.
Audience	This column displays the percentage of the audience the message is sent to.
Sent	This column displays the number of emails sent with the message.
Delivered	This column displays the number of emails sent with the message that did not bounce.
Opened	This column displays the number of unique email recipients who opened the message.
Clicked	This column displays the number of unique email recipients who clicked a tracked link.
Unsubscribed	This column displays the number of email recipients who unsubscribed from mailings. **Note:** Unsubscribe sets global opt-in in both Outreach and Feedback. See [Inserting unsubscribe links]().
Replied	This column displays the number of times the mailing was replied to.

4 Click the New button to add a second test message. The Edit Message window opens.



5 Type the name of the message in the Name field.

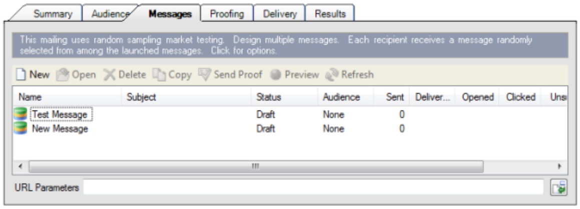
6 Type the subject of the message in the Subject field on the Content tab. See Customizing the message in transactional mailings.

7 Define any other content or formatting options you may want to test using either the HTML editor or the text editor on the Content tab. See Using the HTML editor and Creating and editing text.

8 To send a proof message, click the Proofing tab on the Edit Message window. See Sending a proof message.

9 Click the Delivery tab on the Edit Message window to access delivery options. See Accessing transactional delivery options.

10 Click the OK button to save the message. The new test message appears on the Messages tab.



11 To open a message for editing, select the message and click the Open button.

12 To delete a message, select the message and click the Delete button.

13 To copy a message to create another test message, select the message and click the Copy button.

Important A document is automatically created and stored in the Automatically Generated folder in the Documents explorer for every copy of a test message. Changes made to content in any of the copied test messages are not shared with the original test message or subsequent copies. See Automatically generated folders.

14 To send a proof of a message, select the message and click the Send Proof button. See Sending a proof message.

15 To preview the content of a message, select the message and click the Preview button.

16 To refresh the message statistics, click the Refresh button.

17 To add URL parameters, type any parameters you want to append to the links in your message (for example, p1=v1&p2=v2) in the URL Parameters field.

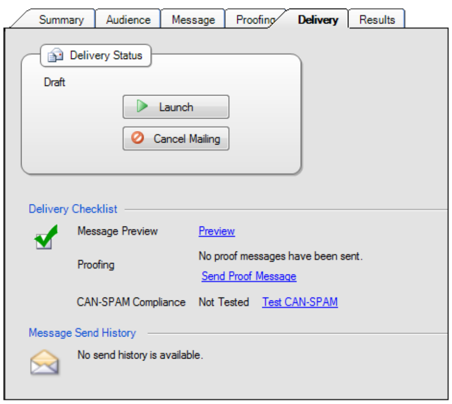
18 To add a merge field to the URL parameters, click the Merge Field button to the right of the URL Parameters field and select the field. See Inserting merge fields to URL parameters.

Accessing transactional delivery options

After you have defined the audience, created a message, and proofed the mailing, you can launch the mailing so it becomes active in rules and campaigns. From the Delivery tab, you can launch, suspend, or cancel the mailing, as well as access common administration tasks and see the send history.

To access transactional delivery options

From an open mailing, click the Delivery tab.



The Delivery tab is divided into sections. The Delivery Status section displays the status of the mailing (see Mailing delivery statuses) and contains buttons for controlling the sending of the mailing. You can perform the following tasks from this section.

- **Launch a mailing**—See Launching mailings.
- **Suspend a mailing**—See Suspending transactional mailings.
- **Cancel a mailing**—See Canceling transactional mailings.

Below this section, delivery information about the mailing is available for you to quickly scan and assess. The following table describes the Delivery sections.

Table 479: Delivery Sections Description

Section	Description
Message Preview	This section contains a link to preview the message that is sent with the mailing. Click Preview to preview the message.
Proofing	This section displays a summary report of message proofs associated with the mailing. Click Send Proof Message to send the message as a proof. See Sending a proof message.
CAN-SPAM Compliance	This section displays the results of the CAN-SPAM compliance test. Click Test CAN-SPAM to test the mailing for compliance with the CAN-SPAM Act. Click Details to view the results of a test. See CAN-SPAM compliance in mailings.
Message Send History	This section displays a log of events relating to the delivery status of the mailing. If the mailing has not been sent, it is noted here.

Launching mailings

Transactional mailings must be launched before they can be used in rules or campaigns. Once you launch a mailing, the status changes to Launched. From the Launched status, you can suspend the mailing or cancel it.

Note A launched transactional mailing cannot be edited. However, you can suspend the transactional mailing's message, make edits, and then re-launch it. See Suspending transactional mailings.

To launch a mailing

1 From the Delivery tab of an open mailing, click the Launch button. A message opens asking you to confirm that you want to launch the mailing.

2 Click the Yes button on the confirmation message to launch the mailing. The delivery status on the Delivery tab changes to Launched and you can see how many mailings were sent and delivered.

Important Some high-volume sites are configured to send mailings from a **replication database** to reduce the impact of large processes on the **operational database**. Because the sync between the replication database and the operational database can occasionally fall behind, the **mailer daemon** uses a fail-safe function before sending to ensure that the replication database is caught up. If it is not, the mailing waits until the replication database is synchronized. This fail-safe function ensures that the mailing reflects the current state of your production contact records (including those that are opted out or have email addresses marked as invalid) at the time the mailing is sent. If you are uncertain whether your site uses a replication database to send mailings, contact support or your Oracle account manager.

Suspending transactional mailings

You may want to stop sending a mailing after it has already been launched. You can temporarily stop a mailing from sending by suspending it.

To suspend a mailing

1 From the Delivery tab of an open mailing, click the Suspend button. This button appears only when a mailing has been launched. The Confirm Suspend message appears asking you to confirm that you want to suspend the mailing.

2 Click the Yes button to confirm suspending the mailing.

The status changes to Suspended and the Delivery Status section displays the number of audience members the mailing was already sent and delivered to.

Canceling transactional mailings

You can cancel a mailing at any time. When you cancel a mailing, the mailing is saved and you can still view mailing results. However, the mailing cannot be launched again or further modified.

Tip A canceled mailing can no longer be modified or sent. However, it can be copied to a new mailing, and the copy can be modified and sent.

To cancel a mailing

1 From the Delivery tab of an open mailing, click the Cancel Mailing button. The Confirm Canceling Mailing message appears asking you to confirm that you want to cancel the mailing.

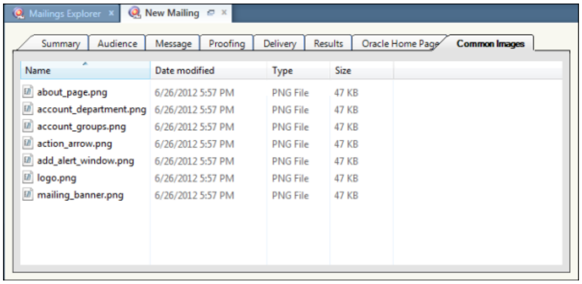
2 Click the Yes button to cancel the mailing. The delivery status changes to Canceled.

Adding custom tabs

Custom tabs give you quick access to elements you use frequently in your mailings. For example, if you use images in your mailings, you could add a tab with a URL link to the place where your images are stored. Likewise, if you use a web-based email deliverability tool (or any other type of web-based program), you could link to those programs.

You can also use merge fields in your custom tab to include attributes of the mailing in query string parameters or URL redirect links. See Inserting merge fields and Editing Redirect to URL attributes.

Custom tabs display after the Results tab on the mailings editor.



To add a custom tab to mailings

1 Click the Configuration button on the navigation pane.

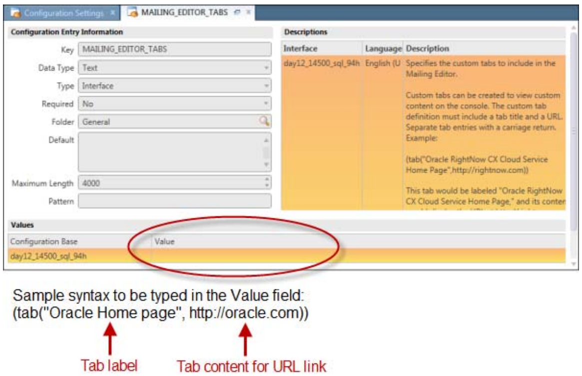
2 Double-click Configuration Settings under Site Configuration. The Search window opens.

3 Clear the Select All check box in the Folders field, select the RightNow User Interface check box, and click the Search button. The Configuration Settings editor opens.

4 Double-click the MAILING_EDITOR_TABS setting under RightNow User Interface > Miscellaneous > General to open the setting on the content pane.

Tip To display configuration settings in alphabetical order, click in the Key column header.

5 To add a URL link to your custom tab, type the label name and the associated link in the Value field using the following syntax: (tab("<label name>",<URL>))



6 To add a merge field, type the following sample code in the Value field:

```
(tab("Revenue",http://oracle.com/
revenue?report.php?mailing=$mailing.mailing_id))
```

7 To add more than one custom tab, press **Enter** to begin a separate line, and repeat steps 5–6.

8 Click the Save and Close button.

Note Your custom tab displays next to the Results tab on every new and existing mailing after you log out and then log back in.

CAN-SPAM compliance in mailings

Legal definitions and penalties for spam vary among countries. Therefore, it is important to stay abreast of current and pending legislation in the United States and other countries. There are many sites that you can check to stay current with the laws and to make sure your site is compliant.

The CAN-SPAM Act of 2003 requires that email marketers adhere to certain rules when sending commercial emails. Included in the requirements are the following conditions:

- Email does not contain false or misleading header information.
- Email does not use a deceptive subject line.
- Email contains a way for recipients to opt out of all emails, not just specific types.
- Email does not send to contacts that have previously opted out.
- Email must be identified as an advertisement in the subject line.
- Email includes the sender's physical mailing address, which must be displayed in ASCII text.
- Email that contains adult content is identified as such in the subject line.
- Email does not send to harvested or generated email addresses.
- Email does not send to domains in the Federal Communications Commission (FCC) wireless domain list.

Oracle Service Cloud helps you identify CAN-SPAM compliance issues. When creating a mailing or survey with a message, the system automatically checks that the message contains a physical address and an unsubscribe link, and honors global opt-in preferences. The remaining requirements must be manually verified by the staff member saving the mailing or survey.

For information about the CAN-SPAM Act, refer to the Federal Trade Commission (FTC) website.

Important The checklist is used to gauge your compliance with CAN-SPAM. You should use this checklist in conjunction with and not as a replacement for legal counsel.

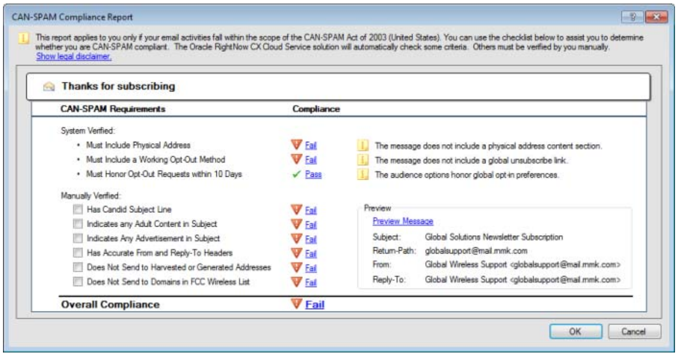
You can check for CAN-SPAM compliance from the Message tab of a mailing, the Invitation Message tab of a survey, or the Delivery tab of a mailing or survey.

To check CAN-SPAM compliance

1. From the Message tab of an open mailing, click the Test CAN-SPAM button in the Content section of the HTML editor.

   Or

   From the Delivery tab, click Test CAN-SPAM in the Delivery Checklist section. The CAN-SPAM Compliance Report opens.



The report shows whether each system-verified requirement passed or failed. The manually verified requirements can be selected or cleared based on your manual verifications. The following table describes the fields on the window.

Table 480: CAN-SPAM Compliance Report Description

Field	Description
System Verified	This section shows whether the following system-verified requirements passed or failed.
Must Include Physical Address	The system automatically verifies that a physical address is included in the message. For this requirement to pass, you must have inserted a physical address using the Insert Address button on the HTML editor. See Inserting physical addresses. If a text address has not been inserted using the Insert Address button, the requirement fails.
Must Include a Working Opt-Out Method	The system automatically verifies that a global unsubscribe link is included in the message. The unsubscribe link can be added by using the Unsubscribe Link button in the toolbox of the HTML editor. When this button is clicked, a window opens for selecting the opt-in field. If Global Opt-In is selected, the requirement passes when CAN-SPAM compliance is checked.

Table 480: CAN-SPAM Compliance Report Description (Continued)

Field	Description
Must Honor Opt-Out Requests within 10 Days	The system automatically verifies whether the global opt-in setting is honored by the mailing or survey. By default, the Honor Global Opt-In check box is selected on the Audience tab, which prevents messages from sending to contacts who have globally opted out of receiving communications. If this check box is not selected, the requirement fails when compliance is checked. Since contacts are instantly unsubscribed when they globally opt out of mailings, any global opt-out requests are automatically met within 10 days.
Manually Verified	This section allows you to select whether the following requirements passed or failed.
Has Candid Subject Line	You must manually verify that the message uses a candid subject line. CAN-SPAM compliance requires that the subject line of an email accurately reflects its contents. To pass this requirement, you should ensure that the subject line is not deceptive to the email recipient. You can view the subject line in the Preview section.
Indicates any Adult Content in Subject	You must manually verify that the subject identifies adult content in the message. The CAN-SPAM act requires that a message containing adult content must contain the text "SEXUALLY EXPLICIT" in the subject line of the email. You can view the subject line in the Preview section.
Indicates Any Advertisement in Subject	You must manually verify that the subject identifies the message as an advertisement, when applicable. The CAN-SPAM act requires that the message contains clear and conspicuous notice that the message is an advertisement or solicitation. To pass this requirement, you should ensure that the subject line accurately reflects the message's content. You can view the subject line in the Preview section.
Has Accurate From and Reply-To Headers	You must manually verify that the From and Reply-To headers contain accurate information. CAN-SPAM compliance requires that the From and Reply-To headers and routing information, including the originating name and email address, must accurately identify your organization. You can view the From and Reply-To headers and the return path in the Preview section.

Table 480: CAN-SPAM Compliance Report Description (Continued)

Field	Description
Does Not Send to Harvested or Generated Addresses	You must manually verify that you are not sending the message to harvested or generated addresses. Harvested email addresses are gathered from websites or web services that have published a notice prohibiting the transfer of email addresses for the purpose of sending email. Generated email addresses are formed by using a "dictionary attack," by combining names, letters, or numbers into multiple permutations.
Does Not Send to Domains in FCC Wireless List	You must manually verify that you are not sending the message to email addresses that contain domains in the FCC wireless list. The CAN-SPAM act prevents the sending of messages to wireless devices, such as mobile phones. The FCC publishes a list of domain names used by cellular companies that you can download at downloadable list of domain names used by cellular companies.
Overall Compliance	This section indicates whether the email is entirely CAN-SPAM compliant. All of the compliance criteria in this table must be met for overall compliance to pass.
Preview	This section lets you preview the following parts of a mailing.
Preview Message	Click this text to preview the message.
Subject	Displays the subject of the mailing message.
Return-Path	Displays the mailbox address the message is being sent from.
From	Displays the From address of the message.
Reply-To	Displays the Reply-To address of the message.

2 Select the check box next to the manually verified items that you have verified.

3 Click the OK button.

Improving your email marketing

In addition to anti-spam legislation, many other external factors can negatively impact the efficiency and success of your mailings. It is important that you follow industry-accepted best practices to protect your reputation, optimize your audience, and produce well-formed content. While these best practices do not guarantee that your emails will always be accepted, they improve the chances that your messages will be delivered to the intended recipients with minimal interference from content monitors and filters. Since these practices are focused on improving the quality of your contact data as well as your messages, your conversion rates will most likely improve as well. For a list of best practices, see *Best Practices for Email Marketing*.

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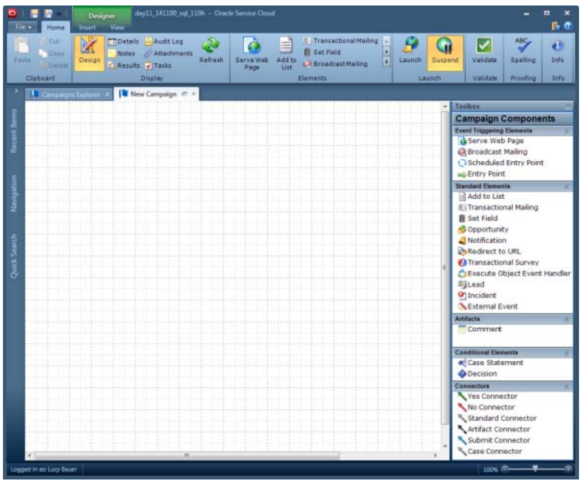
Outreach Campaigns

Oracle RightNow Outreach Cloud Service (Outreach) provides a powerful solution for building and managing dynamic, multiple-step marketing campaigns. Using the intuitive campaign designer, you can create your campaign as a flow diagram comprised of a series of conditional elements that can trigger a variety of business processes. Based on criteria you define, your campaign can send mailings, add contacts to **lists**, create **incidents** and **opportunities**, notify staff, and perform many other useful actions.

When creating and editing a campaign, you perform most tasks using the ribbon, canvas, and campaign components. These tools provide all of the resources you need to design and launch any campaign, simple or complex.



In addition, you can define a budget and predict your campaign's return on investment. Once your campaign is launched, you can review its results and compare them against your estimates to evaluate the effectiveness of your design.

Campaign design ribbon

The campaign design ribbon includes three standard tabs (Home, Insert, and View) as well as two contextual tabs (Element Tools and Path Tools) that become visible when an element or connector is selected on the canvas. Each tab has one or more groups containing buttons you can use to modify the campaign or elements on the canvas.

Home tab

The Home tab gives you access to options that impact the entire campaign. For example, you can manage campaign details, review results, create tasks, select element types, and validate, launch, and suspend the campaign.

The groups and buttons on the Home tab are described in the following table.

Table 481: Home Tab Description

Group/Button	Description
Clipboard	The buttons in this group provide access to basic editing commands when working with components on the canvas.
Paste	Click this button to paste the contents of the clipboard.
Cut	Click this button to cut selected components from the canvas to the clipboard.
Copy	Click this button to copy selected components from the canvas to the clipboard.
Delete	Click this button to delete selected components from the canvas.
Display	The buttons in this group display different campaign details on the **content pane**.
Design	Click this button to display the design canvas on the content pane. When a campaign is first created, this button is active by default.

Table 481: Home Tab Description (Continued)

Group/Button	Description
Details	Click this button to display the campaign details on the content pane. Refer to Managing campaigns.
Notes	Click this button to add notes about the campaign.
Results	Click this button to review the campaign results.
Audit Log	Click this button to view the **audit log**.
Attachments	Click this button to add attachments to the campaign.
Tasks	Click this button to add tasks to the campaign. Refer to Managing campaigns.
Refresh	Click this button to see the latest updated information as you are editing your campaign. For example, on a Scheduled Entry Point, clicking this button would update the last run, next run, and last modified information.
Elements	The buttons in this group let you add campaign components to your flow diagram. For a description of available components, refer to Designing flow diagrams in campaigns. **Note:** Components can also be accessed from the Campaign Components toolbox.
Launch	The buttons in this group let you launch or suspend the campaign.
Launch	Click this button to launch the campaign.
Suspend	Click this button to suspend the campaign. When a campaign is first created, this button is active by default.
Validate	Click this button to check the campaign flow diagram for errors. Refer to Validating campaigns.
Spelling	Click this button to check for spelling errors in the editable text portions of the campaign.
Info	Click this button to view information about the campaign.

Insert tab

The Insert tab allows you to add components to your campaign flow diagram, either one at a time or in predefined campaign templates.

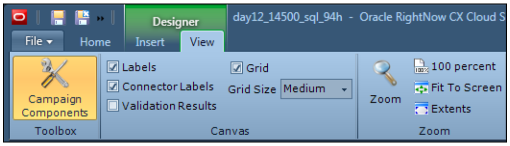
The groups and buttons on the Insert tab are described in the following table.

Table 482: Insert Tab Description

Group/Button	Description
Template	The buttons in this group let you select a predefined flow template to apply to your campaign. Refer to Campaign templates. **Caution:** When you add a template, any content you previously added is deleted from the canvas.
Ad Conversion	Hover over this button to see a preview of the Ad Conversion campaign template. Click the button to add the template to the canvas. Refer to Ad Conversion.
Email Promotion	Hover over this button to see a preview of the Email Promotion campaign template. Click the button to add the template to the canvas. Refer to Email Promotion.
Event Registration	Hover over this button to see a preview of the Event Registration campaign template. Click the button to add the template to the canvas. Refer to Event Registration.
Information Request	Hover over this button to see a preview of the Information Request campaign template. Click the button to add the template to the canvas. Refer to Information Request.
Subscription Management	Hover over this button to see a preview of the Subscription Management campaign template. Click the button to add the template to the canvas. Refer to Subscription Management.
Elements	The buttons in this group let you select components to add to your flow diagram. Refer to Designing flow diagrams in campaigns. **Note:** Components can also be accessed from the toolbox.

View tab

The View tab provides access to the component toolbox and options for changing your view of the design canvas.



The groups and buttons on the View tab are described in the following table.

Table 483: View Tab Description

Group/Button	Description
Campaign Components	Click this button to display the toolbox.
Canvas	The check boxes and drop-down menu in this group let you select canvas options.
Labels	Select this check box to display labels for elements in the diagram.
Connector Labels	Select this check box to display labels for connectors in the diagram. Labels display by default.
Validation Results	Select this check box to display validation icons in the diagram.
Grid	Select this check box to display the canvas grid.
Grid Size	Click this drop-down menu to select the size of the canvas grid.
Zoom	The buttons in this group let you select a zoom level for the canvas.
Zoom	Click this button to access the Zoom Options window. Refer to To select zoom options.
100 percent	Click this button to view the canvas at its normal size.
Fit To Screen	Click this button to adjust the zoom level to show all elements.
Extents	Click this button to show the entire canvas.

As described in the previous table, you can change the view of the design canvas from the View tab, including displaying design grid elements and adjusting the zoom level. These options make it easier to review and edit your flow diagram.

To select canvas options

1 To display labels for elements on the canvas, select the Labels check box.

2 To display labels for connectors on the canvas, select the Connector Labels check box.

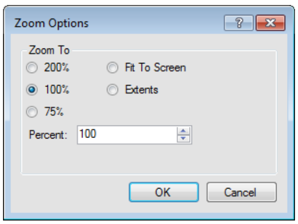
3 To display validation results on the canvas, select the Validation Results check box and refer to Validating campaigns.

4 To display the canvas grid, select the Grid check box.

5 To change the size of the canvas grid, click the Grid Size drop-down menu.

To select zoom options

1 From an open campaign, click the Zoom button on the View tab. The Zoom Options window opens.



2 To specify a desired zoom level, select a radio button in the Zoom To section.

a To adjust the zoom level to show all components, select the Fit to Screen radio button.

b To show the entire canvas, select the Extents radio button.

3 Type a zoom percentage in the Percent field. Click the up or down arrow to increase or decrease the value.

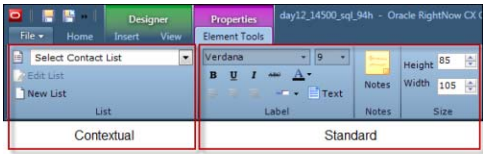
Tip You can also change the magnification of the canvas using the zoom slider located in the bottom right corner of the Service Console.

4 Click the OK button to close the window.

Contextual tabs

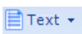
When you select an element or connector on the canvas, the ribbon displays a fourth contextual tab. When an element is selected, the Element Tools tab appears. This tab is divided into two sections. On the left are contextual groups and buttons, meaning they change depending on the element selected. On the right are standard groups and buttons, meaning they display no matter what element is selected.

The following figure displays the Element Tools tab and shows the contextual group of buttons for the Add to List element on the left and the standard group of buttons on the right.



The standard groups and buttons on the Element Tools tab are described in the following table.

Table 484: Element Tools Tab Description

Group/Button	Description
Label	The buttons in this group let you change the font style, size, and color. You can select font attributes, such as bold and italic, and change the text's alignment.
 (Label Position)	Click this button to select the position of the label relative to the element. The default label position of a new element is Inside.
	Click this button to type the text of the element label. **Note:** You can also edit the label text inline by clicking the element label.
Notes	Click this button to type notes about the element.
Size	The buttons in this group let you change the height and width of the element.

Another contextual tab that displays on the ribbon is the Path Tools tab. This tab displays when you select a connector. The buttons on this tab let you format the connector and change the connector type.

The standard groups and buttons on the Path Tools tab are described in the following table. Also see Creating connectors in campaigns.

Table 485: Path Tools Tab Description

Group/Button	Description
Type	Click this drop-down to change the type of the selected connector. **Note:** A connector's type can be changed only when it is not connected to a standard or event-triggering element.
Style	The buttons in this group let you change the line style of the selected connector.
Straight	Click this button to set the connector line style to straight.
Square	Click this button to set the connector line style to square.
Rounded Square	Click this button to set the connector line style to rounded square.
Curved	Click this button to set the connector line style to curved.

Creating campaigns

Outreach provides an intuitive graphical interface for creating and editing campaigns. When designing a campaign, you can drag components from the toolbox and order them on the canvas. (You can select components from either the Home or Insert tab on the ribbon.)

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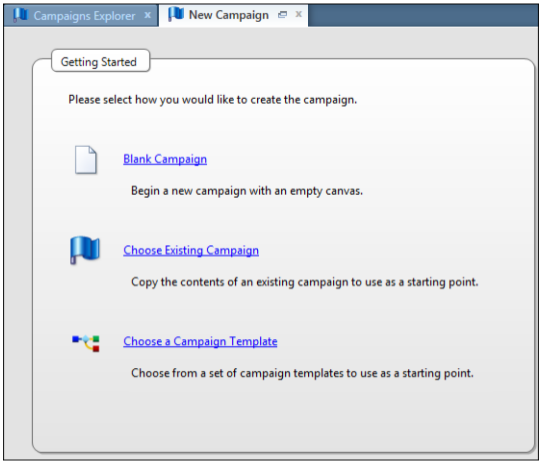
You can also define the objectives for the campaign by including a text summary and estimating expenses and return on investment. Once the campaign has been launched, you can view its results to assess the effectiveness of your efforts.

Note The following procedure assumes that you access the Campaigns explorer from the Campaigns **navigation list**. However, this explorer may reside in a different navigation list.

To create a campaign

1 Click the Campaigns button on the **navigation pane** and double-click Campaigns Explorer. The Campaigns explorer opens on the **content pane**.

2 Click the New button to select a starting point for your new campaign.



a Click Blank Campaign to open a new campaign with a blank design canvas.
b To create a new campaign by copying the design of an existing campaign, click Choose Existing Campaign and refer to Choosing an existing design.
c To create a new campaign by copying a campaign template, click Choose a Campaign Template and refer to Campaign templates.

Tip You can also create campaigns from an open campaign by clicking the New button. Additionally, if your navigation set is configured to add campaigns from the file menu, click File and select Campaign in the Create New Item section. See To configure the file menu.

By default, the design canvas is active when creating a campaign. From here, you can design the campaign's flow diagram. Refer to Designing flow diagrams in campaigns.

3 Click the Details button to manage campaign details, including assignment, start and end dates, and objectives. Refer to Managing campaigns.

4 Click the Results button to view the campaign results. Note that this report will display no data until the campaign has been launched. Refer to Viewing results.

5 Click the Tasks button to add tasks to the campaign. Refer to Adding tasks to campaigns.

6 Click the Save and Close button to save the campaign. The Save As window opens.

Note You can click the Save button to save the campaign without closing it.

7 Select the folder you want to save the campaign in and type the name of the campaign in the Name field.

8 Click the Save button to save the campaign.

Designing flow diagrams in campaigns

The first step in creating a campaign is to design a flow diagram. The flow diagram is a graphical representation of the campaign's "flow," the actions and decisions your campaign will perform, and the order in which it will perform them. Your flow diagram can be as simple as a single path connecting a few actions, or it can be complex, routing your audience through dozens of actions, paths, and decision points. With its simplified graphical interface, Outreach makes creating a complex workflow as easy as clicking and dragging components into a logical order.

Whether your business needs are simple or complex, start by reviewing the elements available in the toolbox and consider how each might help accomplish your campaigns's key objectives. Once you have a clear idea which elements will be useful, you can create the flow diagram by dragging them from the toolbox to the canvas, inserting each element in a logical position, and connecting them to define the sequence of action. Once an element has been inserted, you can double-click it to open a window where you can edit its attributes.

Tip When explaining attributes that can be edited on a window or the ribbon, we describe the procedure using the window. However, keep in mind that the ribbon provides easy access to most of the same attributes available on windows, without the need to double-click. Campaign components can also be dragged to your flow diagram from the Elements groups on the Home and Insert tabs.

When a campaign is launched and a contact performs the first **action**, the decisions and actions in each element are evaluated and executed in the sequence you have specified. For example, when a contact submits a web form, your campaign evaluates the information provided and executes the next action, such as creating a sales lead and sending a follow-up message to the contact.

To create a flow diagram

1 From an open campaign, drag and drop an element from the toolbox onto the canvas. Refer to the following table for a description of the available elements.

Table 486: Elements Description

Element	**Description**
Event Triggering Elements	Event-triggering elements serve as starting points for campaigns.
Serve Web Page	Drag and drop this element to serve a web page. After adding this element, double-click it to define its attributes. Right-click to preview the web page. Refer to Editing Serve Web Page attributes.
Broadcast Mailing	Drag and drop this element to send a broadcast mailing. **Note:** Once a broadcast mailing has been added to a campaign, it cannot be added to any other campaign. After adding this element, double-click it to define its attributes. Refer to Editing Broadcast Mailing attributes.
Scheduled Entry Point	Drag and drop this element to create an entry point to the campaign based on a recurring schedule. After adding this element, double-click it to define its attributes. Refer to Editing Scheduled Entry Point attributes.

Table 486: Elements Description (Continued)

Element	Description
Entry Point	Drag and drop this element to create a standard entry point to the campaign. Entry points can be used to send a contact through the campaign from an outside source by using the Data Upload Wizard. After adding this element, double-click it to define its attributes. Refer to Editing Entry Point attributes.
Standard Elements	Standard elements perform actions when specified criteria are met.
Add to List	Drag and drop this element to add the contact to a list. After adding this element, double-click it to define its attributes. Refer to Editing Add to List attributes.
Transactional Mailing	Drag and drop this element to send a transactional mailing to the contact. After adding this element, double-click it to define its attributes. Refer to Editing Transactional Mailing attributes.
Set Field	Drag and drop this element to set one of the fields in the contact record. After adding this element, double-click it to define its attributes. Refer to Editing Set Field attributes.
Opportunity	Drag and drop this element to create an opportunity from the contact record. After adding this element, double-click it to define its attributes. Refer to Editing Opportunity attributes.
Notification	Drag and drop this element to send a notification to one or more staff members. After adding this element, double-click it to define its attributes. Refer to Editing Notification attributes.
Redirect to URL	Drag and drop this element to redirect the contact to a URL. After adding this element, double-click it to define its attributes. Refer to Editing Redirect to URL attributes.
Transactional Survey	Drag and drop this element to send a transactional survey to the contact. After adding this element, double-click it to define its attributes. Refer to Editing Transactional Survey attributes.
Execute Object Event Handler	Drag and drop this element to add a contact-related object event handler that will trigger an external event action. See Editing Execute Object Event Handler attributes.

Table 486: Elements Description (Continued)

Element	Description
Lead	Drag and drop this element to create a lead from the contact record. After adding this element, double-click it to define its attributes. Refer to Editing Lead attributes.
Incident	Drag and drop this element to create an incident from the contact record. After adding this element, double-click it to define its attributes. Refer to Editing Incident attributes.
External Event	Drag and drop this element to run an external event. External events are scripts that run outside of Oracle Service Cloud. After adding this element, double-click it to define its attributes. Refer to Editing External Event attributes.
Artifacts	Artifact elements let you make comments about your campaign. They do not affect the outcome of your flow diagram.
Comment	Drag and drop this artifact to add comments about your flow diagram or a specific campaign component. A comment artifact does not require a connector, but if your comment is about a specific element, use the Artifact connector type. See Creating connectors in campaigns.
Conditional Elements	Conditional elements produce multiple path outcomes based on decisions.
Case Statement	Drag and drop this element to add a case statement to the campaign. A case statement is a type of conditional element that lets you add multiple choice decisions. This give you an easy way to add diverse branching capabilities to your campaigns based on conditions defined in the workflow. Case statements are unique because they have an outgoing path for every condition. As soon as the first choice (condition) is matched, the path for that choice is followed, and no other conditions within the case statement are evaluated. Refer to Creating connectors in campaigns. After adding the case statement, double-click it to define its attributes. Refer to Editing Case Statement attributes.

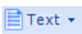
Table 486: Elements Description (Continued)

Element	Description
Decision	Drag and drop this element to add a decision point. A decision allows you to specify conditions the contact must meet to advance in the workflow. You can create two outgoing paths from a decision: Yes (contact meets the criteria) and No (contact does not meet the criteria). Refer to Creating connectors in campaigns. After adding the decision, double-click it to define its attributes. Refer to Editing Decision attributes.

2 To connect one element to another, click an anchor on the first element and drag the connector to an anchor on the second element. The anchor is highlighted when the connector is able to link to it. The connector arrow will point from the first element to the second. Refer to Creating connectors in campaigns.

3 To change the formatting of an element, select the element and refer to the following table.

Table 487: Element Tools Tab Description

Group/Button	Description
Label	The buttons in this group let you change the font style, size, and color. You can select font attributes, such as bold and italic, and change the text's alignment.
 (Label Position)	Click this button to select the position of the label relative to the element. The default label position of a new element is Inside.
	Click this button to type the text of the element label. **Note:** You can also edit the label text inline by clicking the element label.
Notes	Click this button to type notes about the element.
Size	The buttons in this group let you change the height and width of the element.

Tip To select multiple elements at once, press **Ctrl** and select each component.

4 To cut, copy, or paste one or more components, click the appropriate button on the Clipboard group of the Home tab.

5 To undo an action on the canvas, click the Undo button on the Quick Access toolbar.

6 To redo an action on the canvas, click the Redo button on the Quick Access toolbar.

7 To export an image of the canvas to your workstation, click File and select Export Image.

Creating connectors in campaigns

Connectors are components used to link elements and indicate flow direction. Elements can be connected to other elements depending on their type. The type of connector is indicated by its color, as described in the following table.

Table 488: Types of Connectors

Connector	Color	Description
Yes	Green	This type of connector links a decision element to another element. The path is taken if the contact meets the criteria specified in the decision.
No	Red	This type of connector links a decision element to another element. The path is taken if the contact does not meet the criteria specified in the decision.
Standard	Gray	This type of connector links one element to another element. The second action is performed immediately after the first.
Artifact	Black (Dashed)	This type of connector links a comment to an element.
Submit	Blue	This type of connector submits an element's web form fields to the database and then links to another element. A web form can be a document with a web form or survey questions. **Note:** In order for the submit connector to work, there must be a submit action on the web form that's used in the campaign. See Inserting survey results links.

Table 488: Types of Connectors (Continued)

Connector	Color	Description
Case	Gray	This type of connector links a case statement element to another element. The path is taken if the contact meets the criteria specified in the case statement.

Each element can have a specific number of incoming and outgoing connectors. Refer to the following table for a list of the number of connectors allowed in each element.

Table 489: Connectors Allowed for Element Types

Element	Connectors Allowed
Add to List	• Unlimited incoming connectors • 1 outgoing standard connector
Broadcast Mailing	• No incoming connectors • 1 outgoing submit path
Case Statement	• Unlimited incoming connectors • 1 outgoing connector for each choice.
Decision	• Unlimited incoming connectors • 1 outgoing Yes connector • 1 outgoing No connector
Entry Point	• No incoming connectors • 1 outgoing standard connector
Execute Object Event Handler	• Unlimited incoming connectors • 1 outgoing standard connector
External Event	• Unlimited incoming connectors • 1 outgoing standard connector
Incident	• Unlimited incoming connectors • 1 outgoing standard connector
Lead	• Unlimited incoming connectors • 1 outgoing standard connector
Notification	• Unlimited incoming connectors • 1 outgoing standard connector

Table 489: Connectors Allowed for Element Types (Continued)

Element	Connectors Allowed
Opportunity	• Unlimited incoming connectors • 1 outgoing standard connector
Redirect to URL	• Unlimited incoming connectors • 1 outgoing standard connector
Scheduled Entry Point	• No incoming connectors • 1 outgoing standard connector
Serve Web Page	• Unlimited incoming connectors • 1 outgoing standard connector (if incoming path exists) • 1 outgoing submit connector
Set Field	• Unlimited incoming connectors • 1 outgoing standard connector
Transactional Mailing	• Unlimited incoming connectors • 1 outgoing standard connector • 1 outgoing submit connector
Transactional Survey	• Unlimited incoming connectors • 1 outgoing standard connector • 1 outgoing submit connector

To connect an element

To connect one element to another, click an anchor on the first element and drag the connector to an anchor on the second element. The anchor is highlighted when the connector is able to link to it. The connector arrow will point from the first element to the second. When you connect your element types this way, the system automatically applies the correct connector type.

Note If you use the wrong connector type, the element anchor will not be highlighted. See Connectors Allowed for Element Types.

Other ways to connect elements include:

- Hover over the first element and click a blue arrow to link to an adjoining element.

- Drag one element over another, hover over its blue arrow until it turns dark blue, and then drop to connect the elements. Connecting your elements this way auto-links them with the correct connector type.
- Click an element from the toolbox, and then hover over an element on the canvas and click its blue arrow to drop and auto-link the new element.
- Drag and drop a connector from the toolbox to the canvas, and then drag the ends of the connector to the elements you want to link.

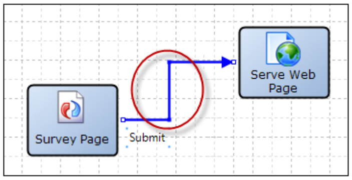
Tip To auto-link your elements, drag your connector over both elements until they are highlighted, and then drop to connect them. Remember, if you select the wrong connector type, your elements will not be highlighted.

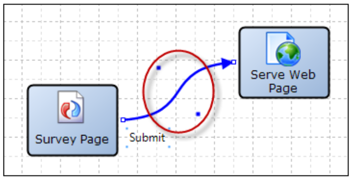
To connect to a different element

Click a midpoint on the connector to select it and drag one of its ends to an anchor on a different element to create a different connection.

To edit a square or curved connector

Click a midpoint on a square or curved connector to select it and drag the calibration points to adjust the shape of the connection. The following figures show the calibration points on square and curved connectors.





To delete a connector

Click a midpoint on the connector to select it and press **Delete**.

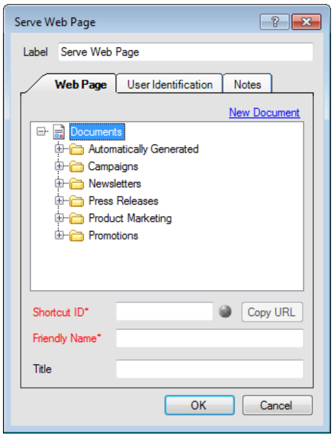
Editing Serve Web Page attributes

Once you add a Serve Web Page element to your flow diagram, you can edit its attributes to select a document to serve as a web page through Oracle Service Cloud. You can specify the shortcut ID used to generate the URL and choose whether to prefill the web form in the document with contact fields stored in the contact's cookies or passed as parameters in the URL. You can also customize the title of the page you are editing. The page title displays in the title bar of the web browser when the survey is taken. Refer to Creating documents.

Tip Use a submit path to connect this element to the next element when the web page contains a web form or survey questions.

To edit Serve Web Page attributes

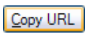
1 Double-click the Serve Web Page element to open the Serve Web Page window.



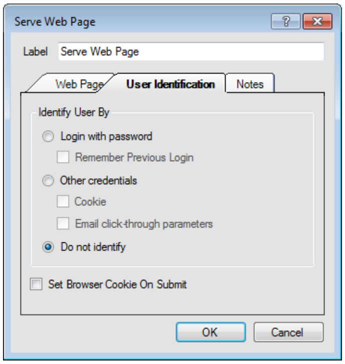
2 Type the name of the element in the Label field.

3 Enter the following field information.

Table 490: Serve Web Page Window Description

Field	Description
Documents	Select the document you want to use as a web page from this list. To search for a document, right-click the list and select Search. Then type the document name in the Find field.
New Document	Click this text to create a document. Refer to Creating documents.
***Shortcut ID**	Type the shortcut ID that is used to format the URL in this field. The URL for the document will be: http://<your_domain>/ci/documents/detail/2/<shortcut_ID> **Note:** This shortcut ID must be unique for all Serve Web Page elements in all surveys and campaigns.
 (View Web Page)	Click this button to open the web page in a browser. **Note:** The button is inactive until the campaign is launched. If the shortcut ID is edited after launching, the button is inactive until the campaign is saved.
	Click this button to copy the web page URL to the clipboard. **Note:** The URL will not be valid until the campaign is launched.
***Friendly Name**	Type the name of your web page. This name is used when linking to the web form from another document.
Title	Type the name of the page as you want it to display in the title bar of the web browser when the survey is taken. **Note:** If you leave this field blank, either the document title or the template title will display in the web browser title bar. If a template has been applied to the document the web page uses, then the template title is used.

4 Click the User Identification tab.



Note You can specify default values for the settings on the User Identification tab by editing optional configuration settings. Refer to Customizing Outreach and Feedback settings.

5 Enter the following field information.

Table 491: User Identification Tab Description

Field	Description
Identify User By	Select from the following options to prefill a web form (if one is included in your document).
Login with Password	Select this radio button to require the contact to log in to the **customer portal** before viewing the web form.
Remember Previous Login	Select this check box to identify the contact through the contact's Oracle Service Cloud login cookie. If a login cookie does not exist, the contact is redirected to the login page on the customer portal. If this check box is cleared, the contact is always required to log in through the customer portal before viewing the web form.
Other Credentials	Select this radio button to identify the contact by a cookie or through URL parameters.
Cookie	Select this radio button if you want to use the contact's browser cookie to prefill the web form. The contact's record is updated with the form submission.

Table 491: User Identification Tab Description (Continued)

Field	Description
Email Click-Through Parameters	Select this radio button if you want to use parameters passed in the URL to prefill the web form. **Note:** If using this option to prefill a web form from a link in a mailing, be sure to use a web page link instead of a **tracked link**. Because tracked links are used to redirect to external sites, they do not support click-through parameters.
Do Not Identify	Select this radio button if you never want the web form to be pre-filled. **Note:** A contact record is updated through the web form if the email address field is included and can be matched to an existing record.
Set Browser Cookie on Submit	Select this check box if you want to set the contact's browser cookie upon submitting the form. If the contact accesses any form later, the form will be prefilled if the Cookie radio button is selected for that form.

Tip You can set default values for the user identification fields by editing the configuration settings located at Outreach and Feedback > General > Campaigns. Note that default values specified by these settings impact both new campaigns and new advanced surveys.

6 To add any notes associated with the element, click the Notes tab and type the notes.

7 Click the OK button.

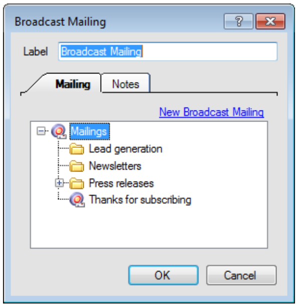
Editing Broadcast Mailing attributes

Once you add a Broadcast Mailing element to your flow diagram, you can edit its attributes to define which mailing to send. You can choose to create a mailing or use an existing mailing in your database. Refer to Creating broadcast mailings.

Tip Use a submit connector to connect this element to the next element when the mailing contains a web form.

To edit Broadcast Mailing attributes

1 Double-click the Broadcast Mailing element to open the Broadcast Mailing window.



2 Type the name of the element in the Label field.

3 Select the mailing you want to send from the list.

a To search for a mailing, right-click the list and select Search. Then type the mailing name in the Find field.

4 To create a broadcast mailing, click New Broadcast Mailing and refer to To create a broadcast mailing.

Note When adding a new broadcast mailing to a campaign, you cannot send or schedule the mailing until you save the campaign.

5 To add any notes associated with the element, click the Notes tab and type the notes.

6 Click the OK button.

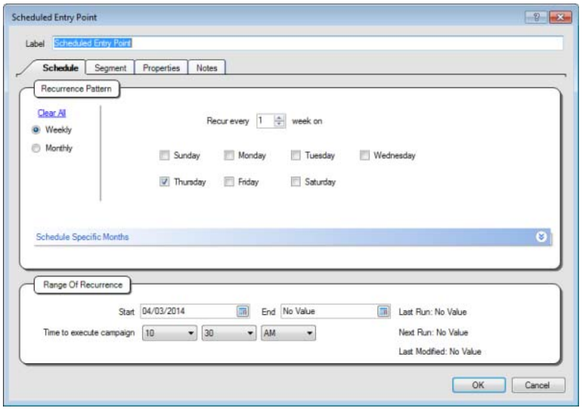
Editing Scheduled Entry Point attributes

Once you add a Scheduled Entry Point element to your flow diagram, you can edit its attributes to schedule regular runs of a campaign for a designated segment. Once launched, a scheduled campaign can be edited, suspended, rescheduled, or canceled at any time. Information about past runs—such as the time last run, next scheduled run time, the time the schedule was last updated, and basic results data—is stored in the knowledge base and tracked in the Recurring Campaigns Summary report. Also, each recurrence is tracked in the campaign's **audit log** along with a description of how many contacts were processed. Refer to Audit logs.

Note To avoid conflicts, campaigns may contain only one Scheduled Entry Point. Those containing a Scheduled Entry Point cannot contain a broadcast mailing and cannot be selected to run automatically when using the Data Upload Wizard.

To edit Scheduled Entry Point attributes

1 Double-click the Scheduled Entry Point element to open the Scheduled Entry Point window.



2 Type the name of the entry point in the Label field.

3 Enter the following field information on the Schedule tab.

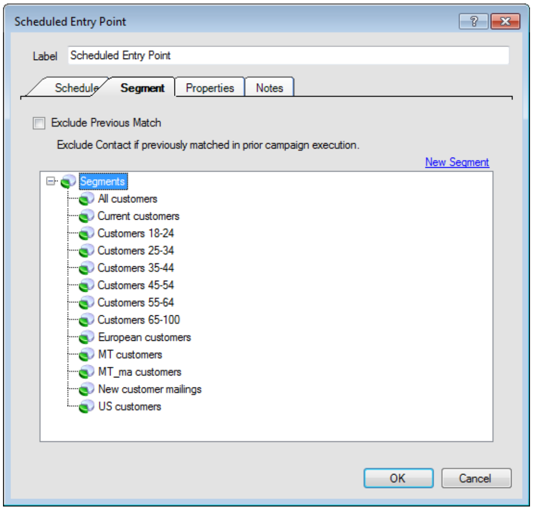
Table 492: Scheduled Entry Point Window Description

Field	Description
Recurrence Pattern	Select the weekly or monthly interval for the campaign to be launched. For example, a mailing can be sent every two weeks on Tuesday, or every month on the 7th and 19th.
Clear All	Click this text to clear all selected recurrence pattern check boxes.

Table 492: Scheduled Entry Point Window Description (Continued)

Field	Description
Monthly	Select this radio button to display check boxes for the days of the month. You can then select the days of the month when you want to send the campaign.
Weekly	Select this radio button to display check boxes for each day of the week. You can then select the check boxes next to the days when you want to send the campaign. When you select this radio button, a Recur drop-down menu displays where you specify the frequency of the weekly mailing or survey. For example, if you want to send a mailing every week on the days selected, enter 1 in the field. If you want the mailing to be sent every third week on the days selected, enter 3 in the field. This field accepts values from 1 to 99.
Schedule Specific Months	Click this header to display check boxes for the months of the year. Select the months during which you want to send the campaign. By default, every month is selected, but if you do not want to send during a specific month, you can clear the check box for that month.
Clear All	Click this text to clear all check boxes for the selected months.
Range of Recurrence	Options in this section let you specify a date range for the recurrence and time of day to send the campaign.
Start	Enter the start date of the schedule or click the calendar to open a calendar from which you can select the start date. The current day is the default start date.
End	Enter the end date of the schedule or click the calendar to open a calendar from which you can select the end date.
Time to execute campaign	Enter the time of day to begin sending the campaign.

4 Click the Segment tab and select the segment you want the campaign to act on.



a. To exclude contacts from the segment that were included in a previous instance of the recurrence, select the Exclude Previous Match check box.
b. To create a new segment, click New Segment.

5. Click the Properties tab and type the shortcut ID of the entry point in the Shortcut ID field. This value is used to identify the entry point and must be unique for each campaign.

6. Type the name of the entry point in the Friendly Name field.

7. To add any notes associated with the entry point, click the Notes tab and type the notes.

8. Click the OK button.

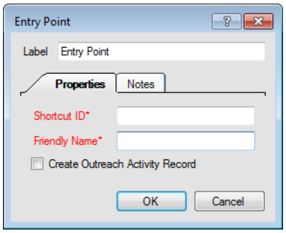
Editing Entry Point attributes

Once you add an Entry Point element to your flow diagram, you can edit its attributes to define its name and shortcut. The shortcut can be passed as a parameter to send contacts through the campaign, beginning at the entry point.

The entry point can also be used when contacts are uploaded using the Data Import Wizard. Refer to Importing data.

To edit Entry Point attributes

1. Double-click the Entry Point element to open the Entry Point window.



2 Type the name of the entry point in the Label field.

3 Type the shortcut ID of the entry point in the Shortcut ID field. This value is used to identify the entry point and must be unique for each campaign.

4 Type the name of the entry point in the Friendly Name field.

5 Select the Create Outreach Activity Record check box to record a transaction when a contact enters the flow diagram at an entry point. This can be used to report on the entry point in outreach activity reports, including on the Outreach Activity tab when editing a contact record.

6 To add any notes associated with the entry point, click the Notes tab and type the notes.

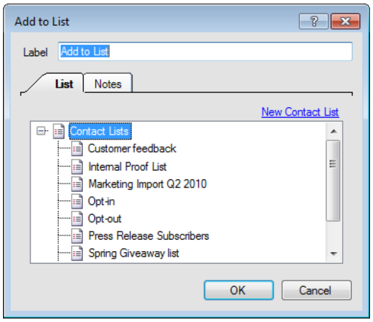
7 Click the OK button.

Editing Add to List attributes

Once you add an Add to List element to your flow diagram, you can edit its attributes to define which list the contact is added to. You can select from predefined lists in your system or create a list. Refer to Adding contact lists.

To edit Add to List attributes

1 Double-click the Add to List element to open the Add to List window.



2 Type the name of the element in the Label field.

3 Select a contact list from the List tab.

a To search for a contact list, right-click the list and select Search. Then type the list name in the Find field.

4 To create a contact list, click New Contact List and refer to To add a contact list.

5 To add any notes associated with the element, click the Notes tab and type the notes.

6 Click the OK button.

Editing Transactional Mailing attributes

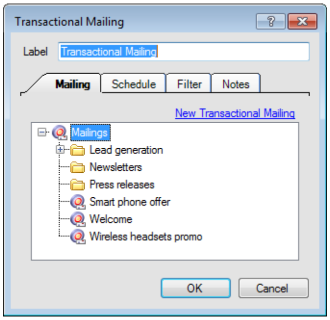
Once you add a Transactional Mailing element to your flow diagram, you can edit its attributes to define which mailing to send to a contact. In addition, you can choose to send the mailing immediately, at an exact time, or at a certain interval. If the mailing is scheduled to be sent at a certain interval, it is stored until the **mailer daemon** sends it. By default, the mailer daemon sends scheduled transactional mailings every fifteen minutes. If you want the utility to send mailings more frequently, you must edit the RNMD_EVENT_PROC_INTERVAL configuration setting.

Note The Transactional Mailing element simply schedules a mailing to be sent. It does not pause the processing of the flow until the mailing is sent. Therefore, any elements following this element in the flow continue to be processed immediately, even if the mailing is scheduled to be sent in the future.

This element can be filtered using segments. If you choose to filter a transactional mailing, you can select whether contacts who are in or not in the segment will be sent an email. Refer to Creating transactional mailings.

To edit Transactional Mailing attributes

1 Double-click the Transactional Mailing element to open the Transactional Mailing window.



2 Type the name of the element in the Label field.

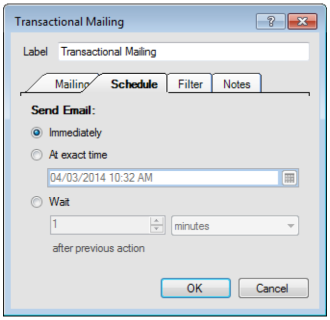
3 Select the mailing you want to send.

a To search for a mailing, right-click the list and select Search. Then type the mailing name in the Find field.

Note In order to send a transactional mailing, it must be in a launched state. If you select a transactional mailing that has not been launched, it does not send and the system advances to the next element in your flow diagram.

4 To create a transactional mailing, click New Transactional Mailing and refer to [To create a transactional mailing](#).

5 Click the Schedule tab.

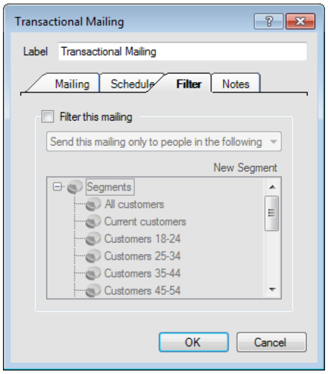


6 Enter the following field information.

Table 493: Schedule Tab Description

Field	Description
Immediately	Select this radio button to send the email immediately after the action occurs.
At exact time	Select this radio button and click the calendar (to the right of the date field) to select a specific date and time to send the email. **Note:** If this option is selected, a clock icon appears on the Transactional Mailing element to indicate that a delivery time for the mailing is scheduled.
Wait	Select this radio button to send the mailing a specified amount of time after the action is triggered in the flow. Use the up and down arrows to select the number of units, and click the drop-down menu to select the interval (minutes, hours, days, or weeks). **Note:** If this option is selected, a clock icon appears on the Transactional Mailing element to indicate that a delivery time for the mailing is scheduled.

7 Click the Filter tab to select whether or not contacts should be included in the segment to be filtered from the mailing.



8 Select the Filter this Mailing check box.

9 Click the drop-down menu and select whether or not customers in the segment will receive the mailing.

10 Select a segment for the mailing.

11 To add a segment, click New Segment and refer to To create a segment.

12 To add any notes associated with the element, click the Notes tab and type the notes.

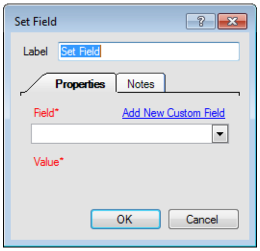
13 Click the OK button.

Editing Set Field attributes

Once you add a Set Field element to your flow diagram, you can edit its attributes to specify the value of contact fields. You can specify a number of different field values, including opt-in status, state, or any contact custom fields defined in your system.

To edit Set Field attributes

1 Double-click the Set Field element to open the Set Field window.



2 Type the name of the element in the Label field.

3 Click the Field drop-down menu and select the contact field you want to set the value of.

4 To add a new contact custom field, click Add New Custom Field and refer to Adding and editing custom fields.

5 Enter a value for the contact field you selected.

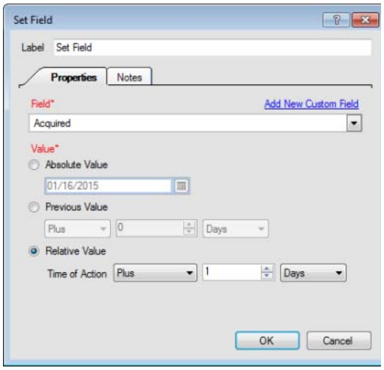
Note In addition to setting explicit (absolute) values, you can set null values for text and text area fields as well as relative values for some field types. Relative values are defined by adding or subtracting (or appending or prepending) a value to the field's previous value. Refer to Setting relative field values.

6 To add any notes associated with the element, click the Notes tab and type the notes.

7 Click the OK button.

Setting relative field values

In addition to setting absolute field values for date, date/time, integer, text, and text area fields, you can set relative values. When setting a value for one of these field types, clicking the Value drop-down menu presents additional options for adding or subtracting (or appending or prepending) a value to the field's previous value. For example, you can increment the value of an integer field by 1 or append text to a contact text field. For date and date/time fields, you can also set a value relative to the time of action, such as adding one day to the current date and time.



Options for setting relative field values vary by field type and are described in the following table.

Table 494: Relative Field Value Options

Field Type	Value Options
Date	Add or subtract a number of days or weeks to or from the previous value or the current date.
Date/Time	Add or subtract a number of minutes, hours, days, or weeks to or from the previous value or the current date and time.

Table 494: Relative Field Value Options (Continued)

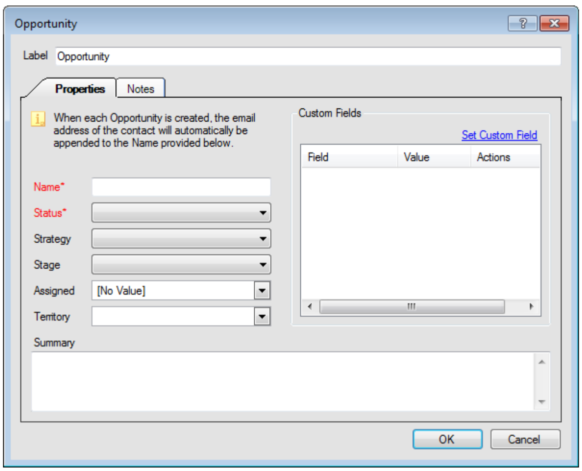
Field Type	Value Options
Integer	Add or subtract an integer value to or from the current value. **Note:** The resulting value cannot be greater than the maximum value defined for the field or less than the minimum. Therefore, the maximum value you can add or subtract is the field's maximum value minus the field's minimum value. For example, if the field maximum is 8 and the field minimum is -8, the maximum value you can add or subtract from the current value is 16.
Text Field	Prepend or append a text value to the current text value.
Text Area	Prepend or append a text value to the current text value.

Editing Opportunity attributes

Once you add an Opportunity element to your flow diagram, you can edit its attributes to define fields of the opportunity created by this element. You can specify the opportunity's name, status, strategy, stage, assigned sales representative, and territory. Refer to Opportunities overview.

To edit Opportunity attributes

1 Double-click the Opportunity element to open the Opportunity window.



2 Type the name of the element in the Label field.

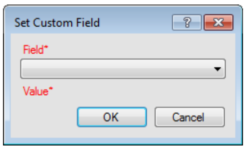
3 Enter the following field information.

Table 495: Opportunity Window Description

Field	Description
*Name	Type the name of the opportunity in this field.
*Status	Click this drop-down menu to assign a status to the opportunity.
Strategy	Click this drop-down menu to assign the opportunity to a strategy.
Stage	Click this drop-down menu to assign the opportunity to a stage. The options in this menu depend on the strategy selected.
Assigned	Click this drop-down menu to assign the opportunity to a sales representative. Use the Find field at the bottom of the Assigned drop-down menu to quickly locate staff members. **Tip:** Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.
Territory	Click this drop-down menu to assign the opportunity to a territory.
Summary	Type a summary of the opportunity in this field.

4 Click Set Custom Field to set custom fields for the opportunity. The Set Custom Field window opens.

Note You must define custom fields in the Custom Fields editor before you can set a custom field for an opportunity. See Adding and editing custom fields.



a Click the Field drop-down menu to select the custom field you want to set.

b Enter the value of the custom field in the Value field.
c Click the OK button. The custom field and its value appear in the Custom Fields grid.

5 To edit the value of a custom field, click Edit next to the custom field.

6 To remove the set value of a custom field, click Delete next to the custom field.

7 To add any notes associated with the element, click the Notes tab and type the notes.

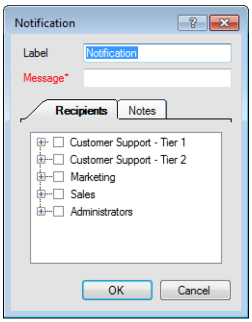
8 Click the OK button.

Editing Notification attributes

Once you add a Notification element to your flow diagram, you can edit its attributes to define which staff members to notify. You can select multiple staff accounts and customize the notification message. Details about the notification and contact record are automatically included in the notification email.

To edit Notification attributes

1 Double-click the Notification element to open the Notification window.



2 Type the name of the element in the Label field.

3 Type the message you want to appear in the subject line of the notification in the Message field.

4 Select the check boxes of the staff members you want to notify.

5 To add any notes associated with the element, click the Notes tab and type the notes.

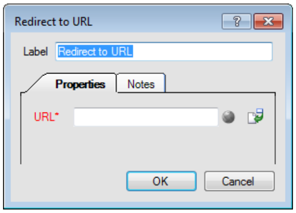
6 Click the OK button.

Editing Redirect to URL attributes

Redirect to URL elements let you define a web page that your customers are redirected to once they complete the previous action in the workflow. After you add a Redirect to URL element to your flow diagram, you can edit its attributes to specify the URL you want to send the contact.

To edit Redirect to URL attributes

1 Double-click the Redirect to URL element to open the Redirect to URL window.



2 Type the name of the element in the Label field.

3 Type the URL of the website you want to redirect the contact to in the URL text box. The protocol must be specified. The following protocols are supported:

- file:///
- ftp://
- gopher://
- http://
- https://
- mailto:
- nntp:
- news:

4 To open the URL in a browser, click the Open URL button (to the right of the URL field).

5 To add a contact, incident, opportunity, or tracked link field to the URL as a parameter, click the Merge Field button (to the right of the Open URL button). See Inserting merge fields.

6 To add any notes associated with the element, click the Notes tab and type the notes.

7 Click the OK button.

Editing Transactional Survey attributes

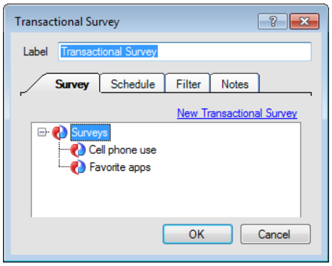
Once you add a Transactional Survey element to your flow diagram, you can edit its attributes to define which survey to send to a contact. In addition, you can choose to send the survey immediately, at an exact time, or at a certain interval. If the survey is scheduled to be sent at a certain interval, the survey is stored until the **mailer daemon** sends it. By default, the mailer daemon is scheduled to send scheduled transactional surveys every fifteen minutes.

Note The Transactional Survey element simply schedules a survey to be sent. It does not pause the processing of the flow until the survey is sent. Therefore, any elements following this element in the flow continue to process immediately, even if the survey is scheduled to be sent in the future.

This element can be filtered using segments. If you choose to filter a transactional survey, you can select whether contacts who are in or not in the segment will be sent an email. Refer to Creating transactional surveys.

To edit Transactional Survey attributes

1 Double-click the Transactional Survey element to open the Transactional Survey window.



2 Type the name of the element in the Label field.

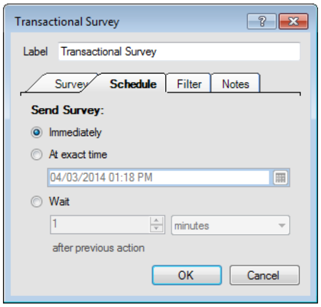
3 Select the survey you want to send.

a To search for a survey, right-click the list and select Search. Then type the survey name in the Find field.

Note In order to send a transactional survey, it must be in a launched state. If you select a transactional survey that has not been launched, it is not sent and the system advances to the next element in your flow diagram.

4 To create a transactional survey, click New Transactional Survey and refer to [To create a transactional survey](#).

5 Click the Schedule tab.

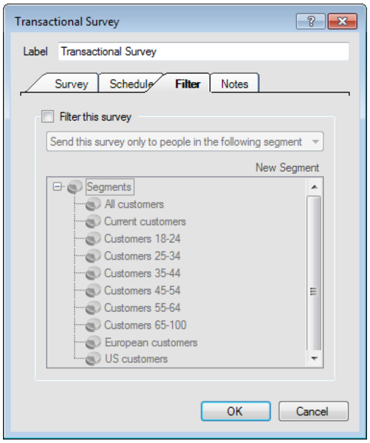


6 Enter the following field information.

Table 496: Schedule Tab Description

Field	Description
Immediately	Select this radio button to send the survey immediately after the action occurs.
At exact time	Select this radio button and click the calendar (to the right of the date field) to select a specific date and time to send the survey. **Note:** If this option is selected, a clock icon appears on the Transactional Survey element to indicate that a delivery time for the survey is scheduled.
Wait	Select this radio button to send the survey a specified amount of time after this action is triggered in the flow. Use the up and down arrows to select the number of units, and click the drop-down menu to select the interval (minutes, hours, days, or weeks). **Note:** If this option is selected, a clock icon appears on the Transactional Survey element to indicate that a delivery time for the survey is scheduled.

7 Click the Filter tab.



8 Select the Filter this Survey check box.

9 Click the drop-down menu and select whether or not customers in the segment will receive the survey.

10 Select a segment for the survey.

11 To add a segment, click New Segment and refer to To create a segment.

12 To add any notes associated with the element, click the Notes tab and type the notes.

13 Click the OK button.

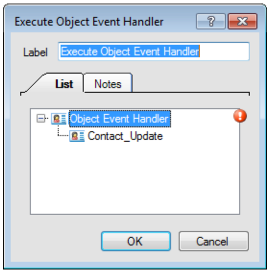
Editing Execute Object Event Handler attributes

You can add contact-related object event handlers to your campaign that can be associated with create and update operations on contact objects. Object event handlers are added and managed on the process designer in a virtual container called the **process model**. Once you add your object event handlers on the process designer and deploy the process model, you can add an Execute Object Event Handler element to your flow diagram and then associate it with one your object event handlers to trigger an action. See Adding object event handlers.

Note Only synchronous object event handlers are applicable to campaigns.

To edit Execute Object Event Handler attributes

1 Double-click the Execute Object Event Handler element. The Execute Object Event Handler window opens.



Note Contact objects must be added on the process designer and then the process model must be deployed for objects to display on the List tab.

2 Type the name of the element in the Label field.

3 Select an object event handler from the List tab.

4 To add notes about the object event handler, click the Notes tab and type your notes.

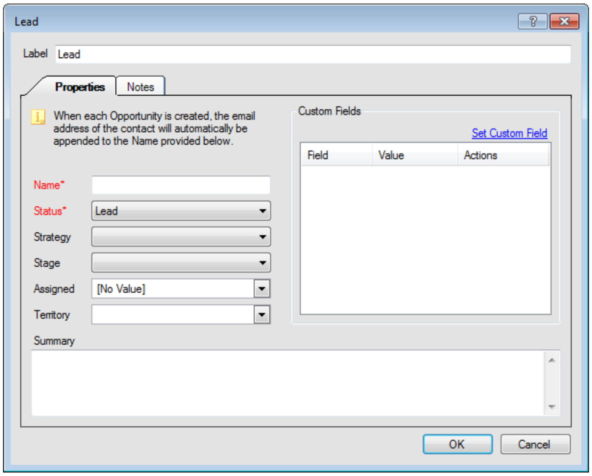
5 Click the OK button to add the object event handler to the flow.

Editing Lead attributes

Once you add a Lead element to your flow diagram, you can edit its attributes to define fields of the lead created by this element. You can specify the lead's status, strategy, stage, assigned sales representative, and territory. Refer to Accepting and rejecting leads.

To edit Lead attributes

1 Double-click the Lead element to open the Lead window.



2 Type the name of the element in the Label field.

3 Enter the following field information.

Table 497: Lead Window Description

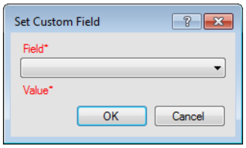
Field	Description
*Name	Type the name of the lead in this field.
*Status	Click this drop-down menu to assign a status to the lead. Only statuses with a Lead status type display. This field is set to Lead by default.
Strategy	Click this drop-down menu to assign the lead to a strategy. Only strategies with a stage assigned the Lead status type display.
Stage	Click this drop-down menu to assign the lead to a stage. The options in this menu depend on the strategy selected.

Table 497: Lead Window Description (Continued)

Field	Description
Assigned	Click this drop-down menu to assign the lead to a sales representative. Use the Find field at the bottom of the Assigned drop-down menu to quickly locate staff members. **Tip:** Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.
Territory	Click this drop-down menu to assign the lead to a territory.
Summary	Type a summary of the lead in this field.

4 Click Set Custom Field to set custom fields for the lead. The Set Custom Field window opens.

Note You must define custom fields in the Custom Fields editor before you can set a custom field for a lead. See Adding and editing custom fields.



a Click the Field drop-down menu to select the custom field you want to set.
b Enter the value of the custom field in the Value field.
c Click the OK button. The custom field and its value appear in the Custom Fields grid.

5 To edit the value of a custom field, click Edit next to the custom field.

6 To remove the set value of a custom field, click Delete next to the custom field.

7 To add any notes associated with the element, click the Notes tab and type the notes.

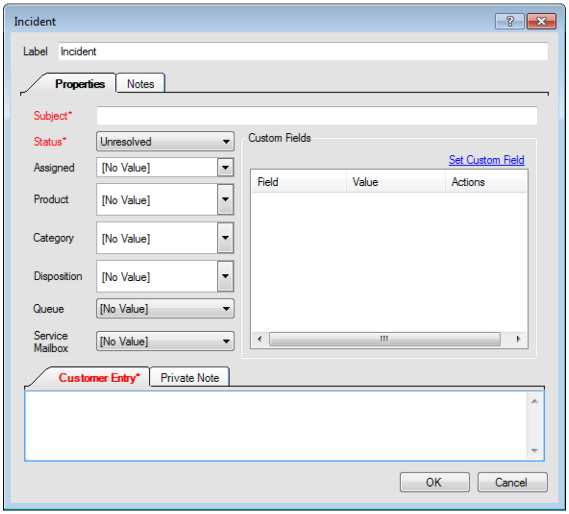
8 Click the OK button.

Editing Incident attributes

Once you add an Incident element to your flow diagram, you can edit its attributes to define the subject, status, and other elements of the created incident. Refer to Incidents overview.

To edit Incident attributes

1 Double-click the Incident element to open the Incident window.



2 Type the name of the element in the Label field.

3 Enter the following field information.

Table 498: Incident Window Description

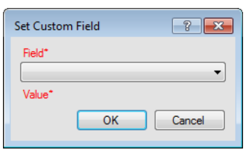
Field	Description
*Subject	Type the subject of the incident in this text box.
*Status	Click this drop-down menu to select a status to assign to the incident. The default status is Unresolved.

Table 498: Incident Window Description (Continued)

Field	Description
Assigned	Click this drop-down menu to select a group or staff member to assign to the incident. Use the Find field at the bottom of the Assigned drop-down menu to quickly locate staff members. **Tip:** Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.
Product	Click this drop-down menu to select a product for the incident.
Category	Click this drop-down menu to select a category for the incident.
Disposition	Click this drop-down menu to select a disposition for the incident.
Queue	Click this drop-down menu to select a queue for the incident.
Service Mailbox	Click this drop-down menu to select a mailbox to associate with the incident.
*Customer Entry	Type a default value for the customer thread in this text box.
Private Note	Click this tab to type a default value for the notes thread.

4 Click Set Custom Field to set custom fields for the incident. The Set Custom Field window opens.

Note You must define custom fields in the Custom Fields editor before you can set a custom field for an incident. See Adding and editing custom fields.



a Click the Field drop-down menu to select the custom field you want to set.

b Enter the value of the custom field in the Value field.

c Click the OK button. The custom field and its value appear in the Custom Fields grid.

5 To edit the value of a custom field, click Edit next to the custom field.

6 To remove the set value of a custom field, click Delete next to the custom field.

7 To add any notes associated with the element, click the Notes tab and type the notes.

8 Click the OK button.

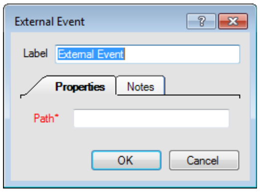
Editing External Event attributes

Once you add an External Event element to your flow diagram, you can edit its attributes to specify the path to your external event. In order to pass contact data to the external event, you must create a template file specifying the data format. For information about external events or assistance in creating external event template files, contact your Oracle account manager.

Important External events have been deprecated and may be permanently removed in a future release. Instead, you can use contact-related object event handlers to trigger actions. See Editing Execute Object Event Handler attributes.

To edit External Event attributes

1 Double-click the External Event element to open the External Event window.



2 Type the name of the element in the Label field.

3 Type the full path name of a script or program used to externally process the event in the Path field.

4 To add any notes associated with the element, click the Notes tab and type the notes.

5 Click the OK button.

Adding Comment artifacts

The toolbox also provides a Comment artifact that allows you to enter comments in your diagram without impeding the campaign flow. Comments are added to the canvas in the same way elements are and can be linked to elements using the Artifact connector type.

To add a comment

1 Drag and drop a Comment artifact from the toolbox onto the canvas.

2 Click the artifact to type your comments.

3 To connect the artifact to an element, click an anchor on the artifact and drag to an anchor on the element. The anchor is highlighted when the connector is able to link to it.

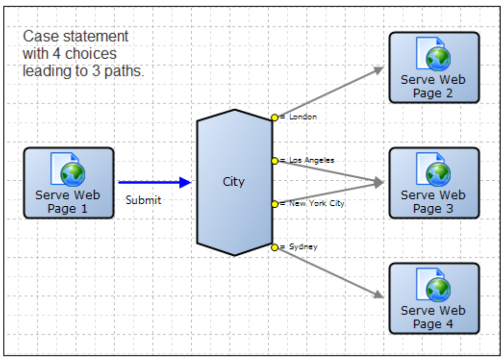
Editing Case Statement attributes

Case statements help you branch your workflow based on multiple conditions that you define. They are unique because you define an outgoing path for each condition. As soon as the first choice (condition) is matched, the path for that choice is followed, and no other conditions within the case statement are evaluated.

Once you add a case statement element to your flow diagram, you can edit its attributes to branch your flow to different paths based on whether contacts meet certain conditions. When you edit the case statement, you can define multiple conditions using a contact field in the database, a question, or a score.

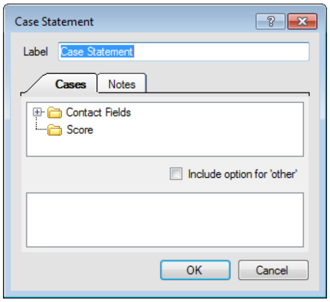
Score pertains to the cumulative score from all preceding survey question responses. Score always displays on the Cases tab, even when no survey is used in the campaign. Questions, on the other hand, are available only if a survey exists in your campaign.

Case statements differ from decisions because they let you add multiple paths to your flow.



To edit Case Statement attributes

1 Double-click the Case Statement element to open the Case Statement window.

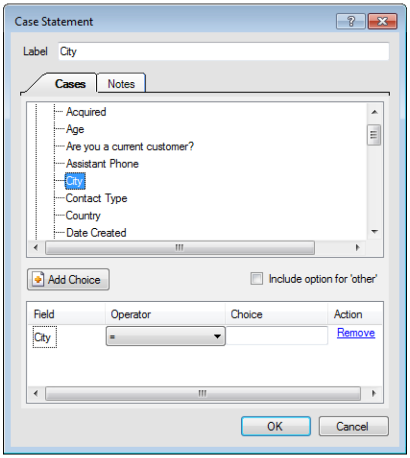


2 Select a contact field or score from the Cases tab.

Note Keep in mind that depending on the item you select, choices are either already defined by default or you must define them.

3 If you want to add an “other” path to your case statement, select the Include Option for Other check box.

4 To add a choice that is not defined by default, click the Add Choice button. The bottom section of the Case Statement window displays options to define logical expressions for your choices.



Note The Add Choice button does not display if choices have already been defined by default. For example, Contact Type or Global Opt-in under Default Contact Fields have choices defined. Therefore, the Add Choice button does not display when these fields are selected.

5 Click the Operator drop-down menu to select the logical symbol that completes your expression.

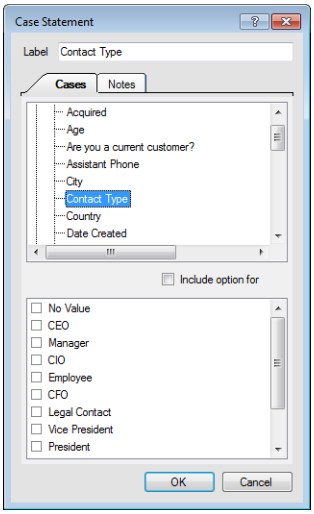
6 Type the field's value in the Choice field.

7 To add another choice that is not defined by default, repeat steps 4 through 6.

8 To delete a choice, select the choice and click Remove.

9 To add a choice that is defined by default, select the check boxes next to the choices you want to include in your case statement.

Note Cases with menu, yes/no, and opt-in items present you with default choices defined by the database.



10 To add any notes associated with the element, click the Notes tab and type the notes.

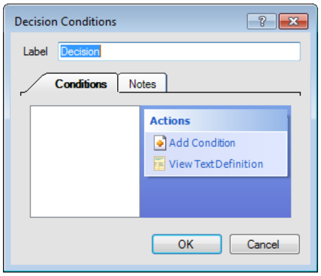
11 Click the OK button to add the case statement to the flow.

Editing Decision attributes

Decision elements let you branch your workflow based on two outgoing paths you define. Once you add a Decision element to your flow diagram, you can edit its attributes requiring contacts to meet certain criteria before moving down the Yes path. Contacts who do not meet the criteria are moved down the No path (if one exists). When you edit the decision, you can define conditions based on contact fields or question responses and a logical expression based on the conditions.

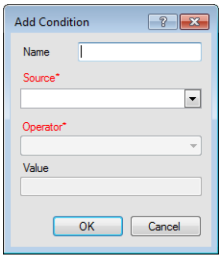
To edit Decision attributes

1 Double-click the Decision element to open the Decision Conditions window.



2 Type the name of the decision in the Label field.

3 Click the Add Condition button to create a condition for the Yes path. The Add Condition window opens.



a Type the name of the condition in the Name field.

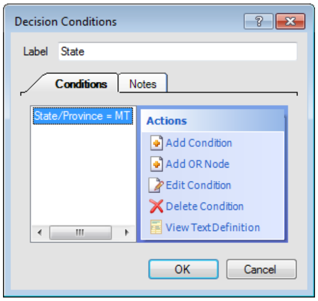
b Click the Source drop-down menu and select a database field or survey question.

c Click the Operator drop-down menu and select the logical symbol that completes the condition.

d Type the value of the field or click the drop-down menu and select the value in the Value field.

e Click the OK button to add the condition to the decision.

This expression determines which contacts meet the condition (for example, State/Province=MT or <menu question>=<specified answer>).



By default, when multiple conditions are added, they are joined by AND. When the AND operator is used, contacts are moved down the Yes path when all the conditions are met. You can further limit your data set by using the Boolean operators OR and NOT. When the OR operator is used, contacts are moved down the Yes path when any of the conditions are met.

4 To add an OR to your expression, click the Add OR Node button. Conditions attached to the OR node are joined by OR.

5 To edit a condition, select the condition and click the Edit Condition button.

6 To delete a condition, select the condition and click the Remove Condition button.

Note The Add OR Node, Edit Condition, and Delete Condition buttons display only after you have added a condition.

7 Click the View Text Definition button to see your conditions as a logical expression.

8 To add any notes associated with the element, click the Notes tab and type the notes.

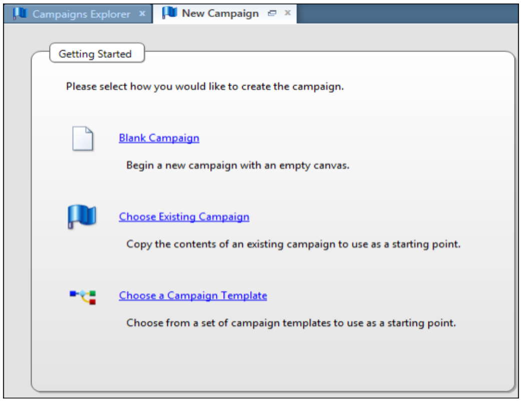
9 Click the OK button.

Choosing an existing design

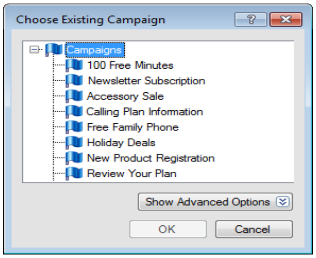
When creating a new campaign, there may be times when you want to start with a flow diagram that was previously designed for another campaign. This can be accomplished by making a copy of an existing campaign to create your new campaign. When you copy a campaign to create your design, you can also choose to copy element attributes from the original or start with empty attributes. You can then make changes and additions to the new campaign without impacting the original.

To choose an existing design

1 Click the New button to open the Getting Started section to select a starting point for your campaign.

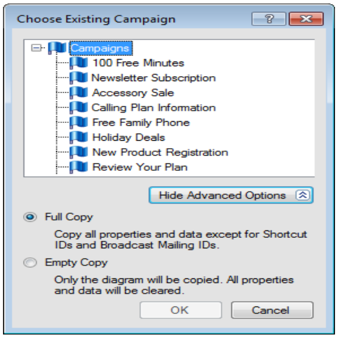


2 Click Choose Existing Campaign. The Choose Existing Campaign window opens.



3 Select the campaign you want to use.

4 To select how the campaign is inserted, click the Show Advanced Options button.



- **a** To copy the campaign diagram's element attributes, including labels and other fields, select the Full Copy radio button. (Broadcast mailing IDs and shortcut IDs will not be copied, as these values must be unique.)
- **b** To copy the campaign diagram without its element attributes, select the Empty Copy radio button. (After copying, you will need to edit each element to enter its attributes.)

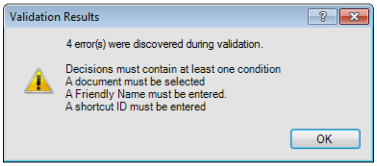
5 Click the OK button to add the campaign design to your diagram.

Tip Outreach also provides a number of predefined campaign templates that support common business processes. Refer to Campaign templates.

Validating campaigns

As you create a flow diagram for your campaign, Outreach validates all flow components to ensure all required attributes have been specified. Although validation occurs in real time as you add and update the components, you can also force validation manually at any time by clicking the Validate button on the Home tab.

You can choose to display validation flags by selecting the Validation Results check box on the View tab (see View tab). This way, valid components are flagged with a green check mark, while those found to be invalid are flagged with a red exclamation point and a small button you can click to view the validation error. If you attempt to launch a campaign without first addressing its validation errors, the flags automatically display (even if you have not selected the Validation Results option) along with a message summarizing the errors, as shown in the following figure.



Launching and suspending campaigns

After you have designed and validated your campaign, you must launch it to make it active. Once a campaign has been launched, you can suspend it and relaunch it at a later time.

To launch or suspend a campaign

1 To launch or relaunch the campaign, click the Launch button on the Home tab.

  a Click the OK button to save the campaign in a launched state.

2 To suspend the campaign, click the Suspend button.

  a Click the OK button to save the campaign in a suspended state.

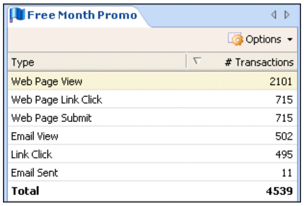
3 Click the Save button to save the campaign.

Important When you suspend a campaign, you do not suspend all of the mailings that are associated with the campaign. You are simply preventing new contacts from entering the flow.

If you want to suspend mailings that are included in the campaign flow, you must do so from the mailings. See Suspending broadcast mailings.

Viewing results

When you click the Results button on the Home tab, the content pane displays a report listing the type of transactions that have occurred over the life of the campaign, sorted by the number of instances.



Free Month Promo

Options

Type	# Transactions
Web Page View	2101
Web Page Link Click	715
Web Page Submit	715
Email View	502
Link Click	495
Email Sent	11
Total	**4539**

In addition to the campaign results, Outreach features a variety of reports for viewing detailed campaign performance statistics. See [Viewing reports](#).

Managing campaigns

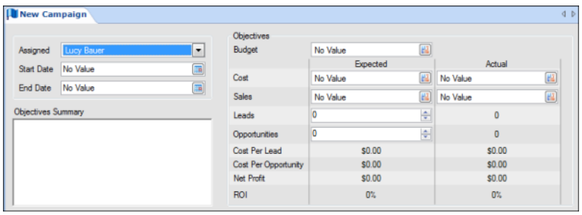
In addition to the flow diagram, campaigns can be further defined by a variety of other configuration options, including campaign objectives, tasks, notes, and file attachments. You can also view an **audit log** to see when a campaign was created and edited. This section describes how to create objectives and tasks for your campaign. For information about notes, file attachments, and the audit log, refer to [Working with records](#).

Setting campaign details

The campaign details settings let you assign a campaign to a staff member, set start and end dates, and define the campaign's objectives. Once a campaign is launched, this section also displays a report listing opportunities generated by the campaign.

To manage campaign details

1 Click the Details button on the Home tab. The campaign details display on the content pane.



2 To assign the campaign to another staff member (by default, the campaign is assigned to the staff member who creates it), click the Assigned drop-down menu and select the staff member.

a To search for a staff member, type the staff member's name in the Find field.

Tip Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.

3 Click the calendar next to the Start Date field to select the date the campaign is scheduled to start.

4 Click the calendar next to the End Date field to select the date the campaign is scheduled to end.

Note The Start Date and End Date fields are for planning purposes only. They do not affect campaign launch or suspend dates. See To launch or suspend a campaign.

5 Type a description of your campaign objectives in the Objectives Summary text box.

You can use the settings in the Objectives section to track key attributes of the campaign, such as its budget, its expected cost, and the number of leads the campaign is expected to generate. Once you know the actual cost and sales of your campaign, you can enter those figures as well, and the system uses them to calculate cost per lead, cost per opportunity, net profit, and return on investment (ROI).

6 Enter the following field information.

Table 499: Objectives Fields Description

Field	Description
Budget	Type the amount budgeted for the campaign, select the currency used, and click the Exchange Rates button to select the exchange period.

Table 499: Objectives Fields Description (Continued)

Field	Description
Expected Cost Actual Cost	Type the expected cost of the campaign, select the currency used, and click the Exchange Rates button to select the exchange period. Once the campaign has ended, type the actual cost of the campaign.
Expected Sales Actual Sales	Type the expected amount of sales resulting from the campaign, select the currency used, and click the Exchange Rates button to select the exchange period. Once the campaign has ended, type the actual amount of sales resulting from the campaign.
Expected Leads	Enter the number of leads expected to be generated from the campaign.
Actual Leads	This field displays the actual number of leads generated from the campaign through the Lead element.
Expected Opportunities	Enter the number of opportunities expected to be generated from the campaign.
Actual Opportunities	This field displays the actual number of opportunities generated from the campaign through the Opportunity element.
Expected Cost Per Lead Actual Cost Per Lead	These fields display the expected cost per lead, and once the campaign has ended, the actual cost per lead. The values are calculated by dividing the expected cost by the expected leads.
Expected Cost Per Opportunity Actual Cost Per Opportunity	These fields display the expected cost per opportunity, and once the campaign has ended, the actual cost per opportunity. The values are calculated by dividing the expected cost by the expected opportunities.
Expected Net Profit Actual Net Profit	These fields display the expected net profit, and once the campaign has ended, the actual net profit. The values are calculated by subtracting the expected cost from the expected sales.
Expected ROI Actual ROI	These fields display the expected return on investment, and once the campaign has ended, the actual return on investment. The values are the percentage difference between the expected cost and expected sales.

7 Click the Save button to save the campaign.

Note To view data associated with campaign objectives, you can view the Opportunities by Stage report located below the objectives section. For information about this report, click the Options button and select View Definition.

Adding tasks to campaigns

To manage other work related to a campaign, you can create and assign tasks to yourself and other staff members. You can then track the overall progress of those tasks by viewing their due date and completion percentage. This section describes the options available for creating and assigning tasks. Refer to Tasks overview.

To add a task

1 Click the Tasks button on the Home tab. The Tasks section opens on the content pane.

2 Perform task actions described in the following table.

Table 500: Tasks Toolbar Description

Button	Description
Tasks	Click this button to display a drop-down menu containing the following options.
Add New	Select this option to add a new task. Refer to To add a task for the procedure to complete the fields on this window.
Add Existing	Select this option to add an existing task. After finding and selecting a task, the task is added to the task list for the campaign. Refer to To search for a task from an open record.
Open	Click this button to open the selected task for editing.
Print	Click this button to print the selected task.

Table 500: Tasks Toolbar Description (Continued)

Button	Description
Copy	Click this button to copy the selected task.
Delete	Click this button to permanently delete the selected task.
Remove	Click this button to remove the selected task from the campaign (without deleting the task).
Complete	Click this button to mark the selected task completed.
Forward	Click this button to open the Task Forward window and send the task to specific recipients.
Options	Click this button to select an option for managing the output and display of information on the tab, such as print, forward, or export. Refer to Changing output options for information about other options, such as Auto Filter, Slice, Cross Tab, and Rollups.

Campaign templates

Outreach provides several predefined templates as a starting point for creating your campaign's flow diagram. When you choose a template, the elements and connectors associated with that template are added to your diagram. You can add and remove elements to further customize your campaign. You then open each element to assign its attributes and configure it to meet your business needs.

To apply a campaign template

1 From the Template group of the Insert tab, hover over each template button to see it previewed on the content pane. A tooltip displays a description of the template.

- **Ad Conversion**—This template updates a contact submitted through a web form to create a lead if the contact is interested in the promotion. Refer to Ad Conversion.
- **Email Promotion**—This template sends a broadcast email and actions are taken based on a contact's level of interest. Refer to Email Promotion.

- **Event Registration**—This template sends an invitation to an event and uses a web form for registration. Refer to Event Registration.
- **Information Request**—This template is used to gather information about contacts through a questionnaire. Refer to Information Request.
- **Subscription Management**—This template allows contacts to update their subscription preferences. Refer to Subscription Management.

2 Click a template button to add the template to the canvas. A message opens warning you that selecting a template overwrites the existing content on the canvas.

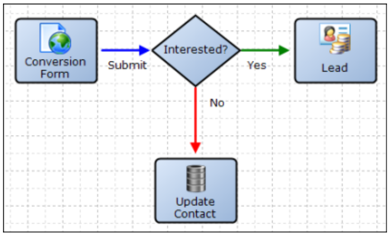
3 Click the OK button. The template is inserted in the diagram.

4 Double-click each element to edit its attributes. Refer to Designing flow diagrams in campaigns.

5 Click the Save button to save the campaign.

Ad Conversion

This template uses a web form to determine if a contact is interested in a promotion or product. Based on the web form, the contact record is either updated to set a field, or the contact is converted to a sales lead.



Each component of the template is described in the following table.

Table 501: Ad Conversion Description

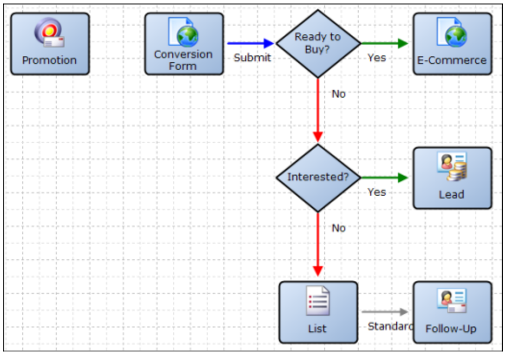
Component	Description
Conversion Form	This Serve Web Page element starts the campaign. Double-click the element to select or create a document that uses a web form to determine customer interest.

Table 501: Ad Conversion Description (Continued)

Component	Description
Interested?	This conditional element determines which path contacts should follow based on their interest. Double-click the element to choose a contact field to base the decision on.
Lead	This element creates a lead from the contact record for contacts who are interested. Double-click the element to set fields associated with the lead.
Update Contact	This element updates the contact record if the customer is not interested. Double-click the element to choose which contact field to update.

Email Promotion

This template sends a broadcast email and actions are taken based on a contact's level of interest in the promotion. The broadcast email sends a link to a web form. Based on two levels of interest (ready to buy and interested), the customer is either sent to the purchase page, added as a lead to Oracle RightNow Opportunity Tracking Cloud Service, or added to a contact list and sent a follow-up email.



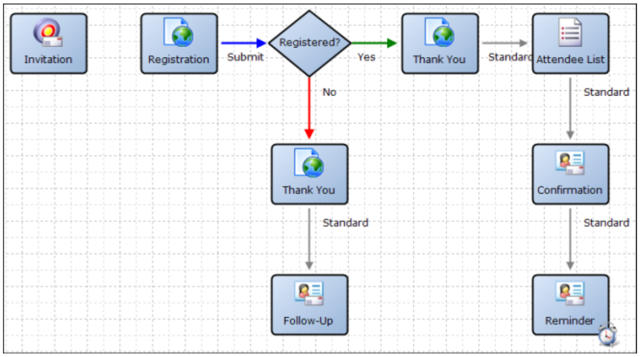
Each component of the template is described in the following table.

Table 502: Email Promotion Description

Component	Description
Promotion	This element sends a broadcast mailing to contacts inviting them to click through to the conversion form. Double-click the element to select or create a mailing that links to the conversion form.
Conversion Form	This element serves a document as a web page. Double-click the element to select or create a document that uses a web form to determine customer interest.
Ready to Buy?	This conditional element determines the path contacts should follow based on whether they are ready to buy the product. Double-click the element to choose a contact field to base the decision on.
E-Commerce	This element serves a document as a web page to contacts who are ready to buy. Double-click the element to select or create a document as a sales form.
Interested?	This conditional element determines the path contacts should follow based on interest. Double-click the element to choose a contact field to base the decision on.
Lead	This element creates a lead from the contact record for contacts who are interested. Double-click the element to set fields associated with the lead.
List	This element adds contacts who are not interested to a contact list. Double-click the element to select or create the list you want to add the contacts to.
Follow-Up	This element sends a transactional mailing to contacts who are not interested as a follow-up. Double-click the element to select or create a mailing and decide when to send it and how to filter it.

Event Registration

This template sends an invitation to an event and uses a web form for registration. When contacts register, they are added to a list and receive emails to thank them, confirm their registration, and remind them of the event. Contacts who do not register are sent a thank you email and an email to follow up.



Each component of the template is described in the following table.

Table 503: Event Registration Description

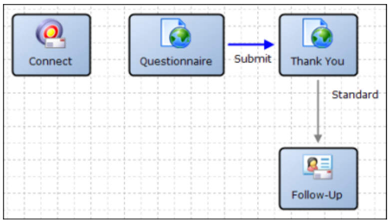
Component	Description
Invitation	This element sends a broadcast mailing to contacts inviting them to click through to the registration form. Double-click the element to select or create a mailing that links to the registration form.
Registration Form	This element serves a document as a web page. Double-click the element to select or create a document that uses a web form to register contacts for an event.
Registered?	This conditional element determines which path contacts should follow based on whether they registered for the event. Double-click the element to choose a contact field to base the decision on.
Thank You (Yes path)	This element serves a document as a web page to contacts who registered for the event. Double-click the element to select or create a document as a thank-you page.
Attendee List	This element adds contacts who registered for the event to a contact list. Double-click the element to select or create the list you want to add the contacts to.
Confirmation	This element sends a transactional mailing to contacts to confirm their registration. Double-click the element to select or create a mailing as a confirmation.

Table 503: Event Registration Description (Continued)

Component	Description
Reminder	This element sends a transactional mailing to contacts who registered to remind them of the event. Double-click the element to select or create a mailing as a reminder and decide when to send it.
Thank You (No path)	This element serves a document as a web page to contacts who did not register for the event. Double-click the element to select or create a document as a thank-you page.
Follow-Up	This element sends a transactional mailing to contacts who did not register as a follow-up. Double-click the element to select or create a mailing and decide when to send it and how to filter it.

Information Request

This template is used to gather information about contacts through a questionnaire. Contacts are sent a broadcast mailing inviting them to fill out a web form. After submitting the web form, contacts are redirected to a thank-you page and then sent a follow-up email.



Each component of the template is described in the following table.

Table 504: Information Request Description

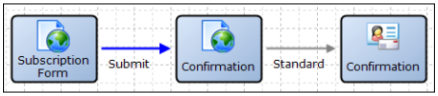
Component	Description
Connect	This element sends a broadcast mailing to contacts inviting them to fill out the web form. Double-click the element to select or create a mailing that links to the questionnaire.
Questionnaire	This element serves a document as a web page. Double-click the element to select or create a document that uses a web form to gather contact information.

Table 504: Information Request Description (Continued)

Component	Description
Thank You	This element serves a document as a web page to contacts who submitted the questionnaire. Double-click the element to select or create a document as a thank-you page.
Follow-Up	This element sends a transactional mailing to contacts who submitted the questionnaire. Double-click the element to select or create a mailing and decide when to send it and how to filter it.

Subscription Management

This template allows contacts to update their subscription preferences. Contacts can update their information through a web form. After submitting the web form, they are redirected to a web page that confirms their submission and then sent a transactional mailing as additional confirmation.



Each component of the template is described in the following table.

Table 505: Subscription Management Description

Component	Description
Subscription Form	This element serves a document as a web page. Double-click the element to select or create a document that uses a web form to gather contact information.
Confirmation (Serve Web Page)	This element serves a document as a web page to contacts who submitted the subscription form. Double-click the element to select or create a document as a confirmation page.
Confirmation (Transactional Mailing)	This element sends a transactional mailing to contacts who submitted the subscription form. Double-click the element to select or create a mailing and decide when to send it and how to filter it.

Note In addition to using predefined campaign templates, you can reuse flow diagrams from previously created campaigns. Refer to Choosing an existing design.

Customizing Outreach and Feedback settings

Outreach provides many options that can be enabled by editing configuration settings. These settings are used to set cookie expiration times, define default values for Serve Web Page element properties, and specify whether documents can be edited after having been sent in a mailing. You can also define the subject line of Forward to Friend emails and specify a default URL to load in cases where a blank page would display.

To access Outreach and Feedback settings

1 Double-click Configuration Settings under Site Configuration. The Search window opens, where you can filter your search results.

2 Clear the Select All check box under the Folders field and then select the Outreach and Feedback check box.

3 To search for a specific configuration setting in the Outreach and Feedback folder, type the setting name in the Key field. (The Key field is not case sensitive.)

Tip You can search part of a configuration setting name by appending a wildcard (either an asterisk or a percentage sign) to the end of your search term.

4 Click the Search button. The Configuration Settings editor displays the settings that match your search criteria.

Tip To display configuration settings in alphabetical order, click in the Key column header.

5 Expand the folders under Outreach and Feedback > General.

6 Customize the settings under the specific Campaigns and Miscellaneous folders.

For information about a setting, see the description that appears on the Configuration Settings editor. For complete details about the Configuration Settings editor, including searching, editing, and creating new configuration settings, see Site Configuration.

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Feedback Questions

Before you create **surveys** in Oracle RightNow Feedback Cloud Service (Feedback), you must first create the questions that your respondents will answer. You can choose different question types to gather responses of different qualities, and you can customize display characteristics of each question.

For example, you can provide space for your respondents to enter their answers in their own words, returning data that is often specific and insightful. Alternately, you can offer respondents a choice of prewritten answers to a question, which provides you with a consistent, easily interpreted data set. You can also **score** choice questions and use Oracle RightNow Analytics Cloud Service (Analytics) to evaluate responses as numerical values.

While some types of question may be more useful than others based on your needs, any combination of question types can be added to a survey. By presenting questions that are concise and meaningful, you can ensure that the feedback you receive will be clear and actionable.

Writing effective questions

When writing a question, it is important to respect your respondents' time and be clear about the information you are requesting. The following best practices can help you optimize survey completion rates while obtaining the most meaningful respondent feedback.

Adopt an engaging tone—Speak respectfully to respondents. The more welcoming your language, the more likely your audience is to complete each question.

Use common words—Choose your words carefully. To ensure comprehension and accuracy, it is best to assume that your respondents are not familiar with industry jargon and complex terminology. (One effective rule of thumb is to write for a sixth-grade reading level.)

Keep questions specific and short—State each question in a way that is meaningful to your respondents and your analysis. Rephrase questions that are vague or verbose. When creating a choice question, clearly define its lowest and highest values. For example, on a scale of 1 to 5, what 1 means and what 5 means.

Understand each question's goal—Refine your questions to provoke the answers most meaningful to your analysis. A well-framed question increases the significance of your data.

Limit the number of questions—Include only questions that are essential to your goal. If two questions would return similar answers, combine them to eliminate the redundancy. If you must include several questions that are similar in form and content, consider creating a **matrix question** to save space. When creating choice and matrix questions, keep the number of answer selections to a minimum while still accommodating all possible answers.

Spell check your questions—Remember to spell check your questions using the Spelling button available on the ribbon.

To learn more about writing effective survey questions, see *Best Practices for Improving Survey Participation*.

❖ Creating questionnaires in basic mode

Creating questions

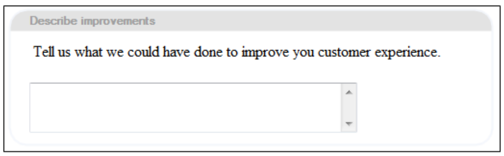
Feedback provides a flexible set of features for creating questions to add to your **surveys**. When you create a survey question, you define the question name, type, and text that respondents see on the survey. You can also assign a **score** to each question choice.

When creating questions, you can choose from three question types—text, choice, and matrix.

Important Questions can be edited after they have been created, even if they have been used in a survey. However, if you edit a question's text or choices, those changes appear immediately in any survey it has been included in. For this reason, if you want to preserve the integrity of the data returned by the original question, we recommend creating a new question rather than editing the existing question.

Text questions

Text questions let respondents type their answer to the question. You can create text questions when you want your respondents to be able to answer in their own words without having to choose from predefined options. For example, "Do you have any suggestions?" When you create a text question, you define only the question and the available space the respondent has to answer.



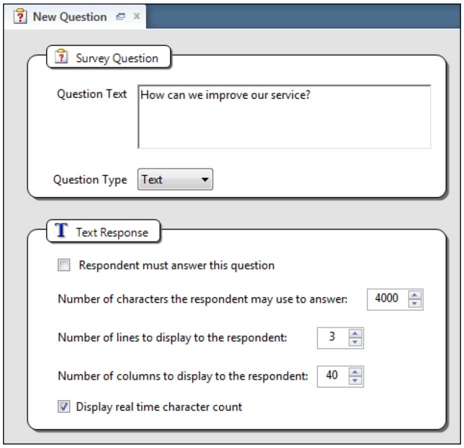
To create a text question

1. From the Questions explorer, click the New button on the ribbon. A new question opens on the content pane.

Tip You can also create questions from an open question by clicking the New button. Additionally, if your navigation set is configured to add questions from the file menu, click File and select Surveys > Question. See To configure the file menu.

2. Type the text of the question in the Question Text field. This will be the question you want the respondent to answer. For example, “How can we improve our service?”

3. Select Text from the Question Type drop-down menu.



4. Enter the following field information.

Table 506: Text Question Description

Field	Description
Respondent must answer this question	Select this check box to require the respondent to answer the question. The survey cannot be submitted without answering the question.

Table 506: Text Question Description (Continued)

Field	Description
Number of characters the respondent may use to answer	Type or use the arrows to select the number of characters the respondent can enter into the answer field. The maximum value is 4,000 characters, and the minimum value is 1 character. The default is 4,000 characters.
Number of lines to display to the respondent	Type or use the arrows to select the number of lines in the answer field. The maximum value is 30 lines, and the minimum value is 1 line. The default is 3 lines.
Number of columns to display to the respondent	Type or use the arrows to select the width of the answer field. The maximum value is 125 columns, and the minimum value is 1 column. The default is 40 columns.
Display real time character count	Clear this check box to remove the real-time character count that displays to survey respondents when they enter a text response. This check box is selected by default.

5 Click the Display Options button on the ribbon to define HTML properties for the question and answer. The Display Options window opens.

6 Enter the following field information.

Table 507: Text Question Display Options

Field	Description
Question Text Display Options	Enter information in this section to define how the question text appears in the survey. **Note:** Style and class must be defined in a CSS file that is available on your web server and linked to in the `<head>` tag of a survey template.
HTML Style	Type any HTML style and class attributes you want to assign to the question text in these fields. Style and class attributes define how the text appears, such as color and font. For example, color: red; font-weight: bold; font-style: italic.
HTML Class	

Table 507: Text Question Display Options (Continued)

Field	Description
Answer Text Display Options	Enter information in this section to define how the answer text appears in the survey. **Note:** Style and class must be defined in a CSS file that is available on your web server and linked to in the `<head>` tag of a survey template.
HTML Style	Type any HTML style and class attributes you want to assign to the answer text in these fields. Style and class attributes define how the text appears, such as color and font. For example, color: red; font-weight: bold; font-style: italic.
HTML Class	
Counter Options	Enter information in this section to define the appearance of the real-time character count that displays to respondents.
Counter Default Color	Click the color box to select a default color for the counter text or type the HTML hexadecimal value of the color in the field to the right of the color box.
Counter Warning Color	Click the color box to select a warning color for the counter text or type the HTML hexadecimal value of the color in the field to the right of the color box. The warning color is used when the number of characters in the answer field exceeds the maximum value allowed.

7 Click the OK button to save the display options.

8 To preview the question before saving it, click the Preview Question button on the ribbon. The Question Preview window opens.

a Click the OK button to close the window.

9 To spell check your question, click the Spelling button on the ribbon.

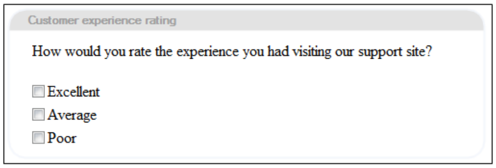
10 Click the Save and Close button. The Save As window opens.

11 Select the folder you want to save the question in and type the name of the question in the Name field.

12 Click the Save button to save the question.

Choice questions

Creating choice questions lets you define the available responses for the question, allowing respondents to choose their answer from a menu, radio button, check box, or list. Choice questions may be scored and evaluated in Analytics.



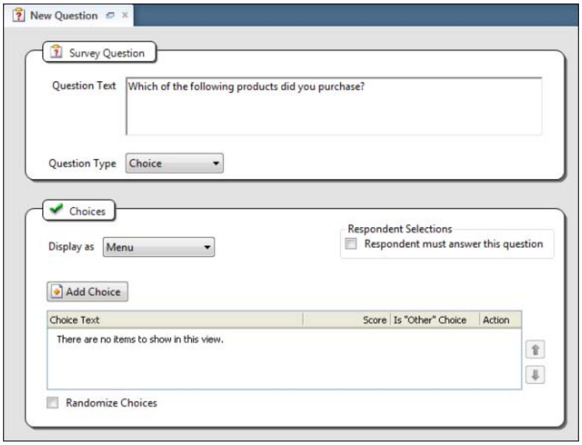
To create a choice question

1 From the Questions explorer, click the New button. A new question opens on the content pane.

Tip You can also create questions from an open question by clicking the New button. Additionally, if your navigation set is configured to add questions from the file menu, click File and select Surveys > Question. See To configure the file menu.

2 Type the text of the question in the Question Text field. This will be the question you want the respondent to answer. For example, "Which of the following products did you purchase?"

3 Select Choice from the Question Type drop-down menu. Choice is the default.



4 Click the Display As menu and select one of the following question display types.

- **Radio**—The choices appear as radio buttons following the question. Respondents can select only one of the predefined choices to answer the question.
- **Checkbox**—The choices appear as check boxes. Respondents can select as many check boxes as you define.
- **Menu**—The choices appear in a drop-down menu. Respondents click the drop-down menu to select one of the predefined choices to answer the question. Menu is the default for Choice questions.
- **List**—The choices appear in a list. Respondents can select as many list items as you define to answer the question.

Note The question display type affects which fields display in the Choices section.

5 Enter the following field information in the Choices section.

Table 508: Choices Section Description

Field	Description
Respondent Selections	Select whether respondents are required to answer this question and set the minimum and maximum number of choices respondents can select.

Table 508: Choices Section Description (Continued)

Field	Description
Respondent must answer this question	Select this check box to require respondents to answer the question. The survey cannot be submitted without answering the question.
Minimum	Type the minimum or maximum number of choices respondents must select in these fields or use the up and down arrows to select a number. The minimum number cannot be more than the maximum number. **Note:** These fields display only for List and Checkbox choice types.
Maximum	
Add Choice	Click this button to add a choice to the choice list.
Choices Panel	The choices panel displays all choices defined for the question. You can drag and drop the choices to reorder the list.
Choice Text	Type the text of the choice in this field.
Score	Type the score for the choice in this field or use the up and down arrows to select a number. The score value is used to assign a relative weight to each choice based on the contact's answers. Survey scores may be used as rule conditions or to trigger survey final actions. Refer to Adding actions with the Survey Final Action wizard.
Is "Other" Choice	Double-click this field and then click the drop-down menu and select Yes to set the choice to "other." This lets respondents type an additional choice in the list. **Note:** Only one choice can be set to "other" when the question is saved.
Action	This column displays actions that can be taken on choices.
Edit	Click this button to edit the choice in the choice list.
Remove	Click this button to remove the choice from the list.
	Click the up or down arrow to move the selected choice one position higher or lower in the list.

Table 508: Choices Section Description (Continued)

Field	Description
Randomize Choices	Select this check box to indicate whether the choices display to respondents in a random order. If the check box is not selected, the choices display in the order in which they are listed in the choice list.
Number of choices to display per line	Type the number of choices to display per line in this field or use the up and down arrows to select a number. **Note:** This field displays only for Radio and Checkbox choice types.

6 Click the Display Options button on the ribbon to define HTML properties for the question and answer. The Display Options window opens.

7 Enter the following field information.

Table 509: Choice Question Display Options

Field	Description
Question Text Display Options	Enter information in this section to define how the question text appears in the survey. **Note:** Style and class must be defined in a CSS file that is available on your web server and linked to in the `<head>` tag of a survey template.
HTML Style	Type any HTML style and class attributes you want to assign to the question text in these fields. Style and class attributes define how the text appears, such as color and font. For example, color: red; font-weight: bold; font-style: italic.
HTML Class	

Table 509: Choice Question Display Options (Continued)

Field	Description
Answer Text Display Options	Enter information in this section to define how the answer text appears in the survey. These attributes are applied to the question's listed choices. **Note:** Style and class must be defined in a CSS file that is available on your web server and linked to in the `<head>` tag of a survey template.
HTML Style	Type any HTML style and class attributes you want to assign to the answer text in these fields. Style and class attributes define how the text appears, such as color and font. For example, color: red; font-weight: bold; font-style: italic.
HTML Class	

8 Click the OK button to save the display options.

9 To preview the question before saving it, click the Preview Question button on the ribbon. The Question Preview window opens.

a Click the OK button to close the window.

10 To spell check your question, click the Spelling button on the ribbon.

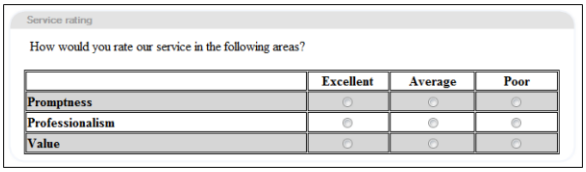
11 Click the Save and Close button. The Save As window opens.

12 Select the folder you want to save the question in and type the name of the question in the Name field.

13 Click the Save button to save the question.

Matrix questions

In cases where a series of questions can be responded to with the same set of answer choices, matrix questions can help streamline a survey's appearance by grouping the questions together in a table. Answer choices are displayed using either radio buttons (to permit only one answer to each question) or check boxes (to allow more than one answer). If you choose radio buttons, you can restrict selections to one choice per row, forcing respondents to rank their answers.



To create a matrix question

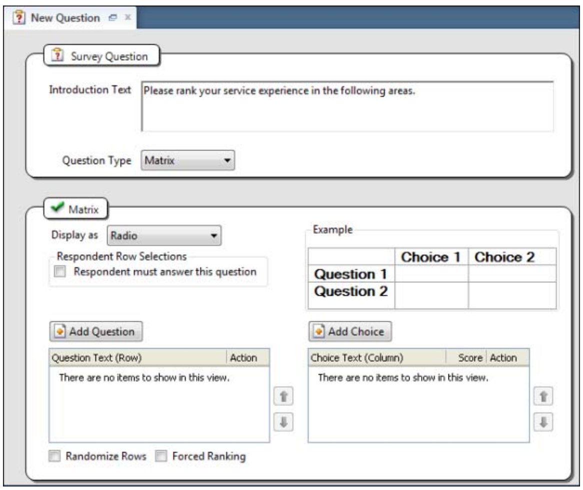
1 From the Questions explorer, click the New button. A new question opens on the content pane.

Tip You can also create questions from an open question by clicking the New button. Additionally, if your navigation set is configured to add questions from the file menu, click File and select Surveys > Question. See To configure the file menu.

2 Select Matrix from the Question Type drop-down menu.

3 Type the introductory text for the matrix in the Introduction Text field.

This text summarizes the group of questions in the matrix For example, “Please rank your service experience in the following areas.”



4 Enter field information in the Matrix section.

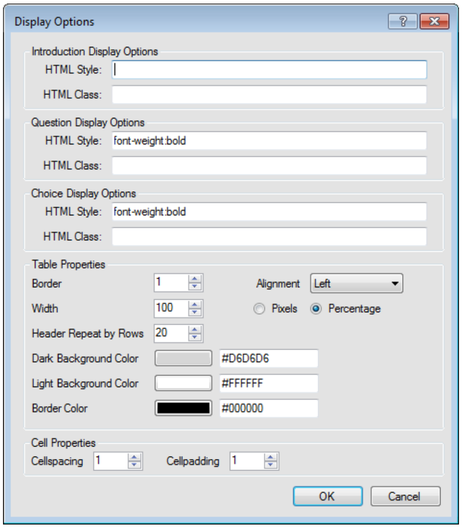
Table 510: Matrix Section Description

Field	Description
Display As	Click this drop-down menu to select how answer choices are displayed. Options include Radio or Checkbox. Radio is the default. **Note:** The question display type affects which fields display in the Matrix section.
Respondent Row Selections	These settings define whether matrix questions are required and the number of answers that can be selected per question.
Respondent must answer each question	Select this check box to require respondents to answer each of the questions in the matrix. The questionnaire cannot be submitted without answering all of the listed questions.
Minimum	Type the minimum or maximum number of choices respondents must select in these fields or use the up and down arrows to select a number. The minimum number cannot be more than the maximum number. **Note:** These fields display only for Checkbox choice type.
Maximum	
Example	This is a sample to illustrate the position of questions and choices in a matrix table. **Note:** This example does not display table, cell, or border styles defined in the display options, nor does it display questions or choices that have been added to the lists.
Questions Panel	The question list displays all questions defined for the matrix. You can drag and drop the questions to reorder the list.
Add Question	Click this button to add a question to the matrix.
Question Text (Row)	This column displays the question text. Question text entries appear as labels in the rows of the matrix table.
Action	This column displays actions that can be taken on questions.
Edit	Click this button to edit the question.
Remove	Click this button to remove the question.
	Click the up or down arrow to move the selected choice one position higher or lower in the list.

Table 510: Matrix Section Description (Continued)

Field	Description
Choices Panel	The choice list displays all choices defined for the matrix. You can drag and drop the choices to reorder the list.
Add Choice	Click this button to add a choice to the matrix.
Choice Text (Column)	This column displays the choice text. Choice text entries appear as labels in the columns of the matrix table.
Score	Type the score for the choice in this field or use the up and down arrows to select a number. The score value is used to assign a relative weight to each choice and allows for survey calculations to trigger rules or campaign actions based on the respondent's answers. For information about using rules with survey results, see Last Survey Score field description under Incident conditions. Also see Adding rules.
Action	This column displays actions that can be taken on choices.
Edit	Click this button to edit the choice.
Remove	Click this button to remove the choice.
	Click the up or down arrow to move the selected choice one position higher or lower in the list.
Randomize Rows	Select this check box to display the questions in the matrix in a random order. If the check box is not selected, the questions display in the order in which they are listed in the list of questions.
Forced Ranking	Select this check box with radio button choices to restrict survey respondents to select only one choice per column. This option is useful when designing a matrix containing rows of items that you want your respondents to rank. Since matrix questions with radio buttons allow only one choice to be selected per row, the additional restriction on columns forces respondents to rank their answers. **Note:** When Forced Ranking is selected, the matrix must contain the same number of rows (questions) as it does columns (choices).

5 Click the Display Options button on the ribbon to define HTML properties for the question and answer. The Display Options window opens.



6 Enter the following field information.

Table 511: Matrix Question Display Options

Field	Description
Introduction Display Options	Enter information in this section to define how the introduction text appears in the survey. **Note:** Style and class must be defined in a CSS file that is available on your web server and linked to in the `<head>` tag of a survey template.
HTML Style	Type any HTML style and class attributes you want to assign to the introduction text in these fields. Style and class attributes define how the text appears, such as color and font. For example, color: red; font-weight: bold; font-style: italic.
HTML Class	

Table 511: Matrix Question Display Options (Continued)

Field	Description
Question Display Options	Enter information in this section to define how the question text appears in the matrix. **Note:** Style and class must be defined in a CSS file that is available on your web server and linked to in the `<head>` tag of a survey template.
HTML Style	Type any HTML style and class attributes you want to assign to the question text in these fields. Style and class attributes define how the text appears, such as color and font. For example, color: red; font-weight: bold; font-style: italic.
HTML Class	
Choice Display Options	Enter information in this section to define how the choice options appear in the matrix. These attributes are applied to the question's listed choices. **Note:** Style and class must be defined in a CSS file that is available on your web server and linked to in the `<head>` tag of a survey template.
HTML Style	Type any HTML style and class attributes you want to assign to the choice options in these fields. Style and class attributes define how the text appears, such as color and font. For example, color: red; font-weight: bold; font-style: italic.
HTML Class	
Table Properties	Define the table's attributes in this section.
Border	Type the width, in pixels, of the table's border or use the up and down arrows to select a number.
Alignment	Click this drop-down menu and select the alignment of the table on the page. Your choices are Left, Centered, and Right.
Width	Type the width of the table, or use the up and down arrows to select a number, and select the unit from the radio buttons (Pixels or Percentage).
Header Repeat by Rows	Type the number of rows after which the header row will be repeated, or use the up and down arrows to select a number.
Dark Background Color	Click the color box to select a color for the table's dark background or type the HTML hexadecimal value of the color in the field to the right of the color box.

Table 511: Matrix Question Display Options (Continued)

Field	Description
Light Background Color	Click the color box to select a color for the table’s light background or type the HTML hexadecimal value of the color in the field to the right of the color box.
Border Color	Click the color box to select a color for the table’s borders or type the HTML hexadecimal value of the color in the field to the right of the color box.
Cell Properties	Define the table’s attributes in this section.
Cell Spacing	Type the spacing and padding, in pixels, of the table’s cells or use the up and down arrows to select a number.
Cell Padding	

7 Click the OK button to save the display options.

8 To preview the question before saving it, click the Preview Question button on the ribbon. The Question Preview window opens.

   a Click the OK button to close the window.

9 To spell check your question, click the Spelling button on the ribbon.

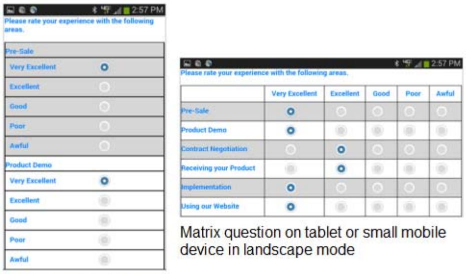
10 Click the Save and Close button. The Save As window opens.

11 Select the folder you want to save the question in and type the name of the question in the Name field.

12 Click the Save button to save the question.

Using matrix questions in mobile surveys

When matrix questions display on a small mobile device (400 pixels wide or less), questions and choices automatically reflow to display in a vertical table. Larger mobile devices, such as tablets (or when small devices are viewed in landscape mode), are wide enough to display matrix questions horizontally, in the same way they display when viewed on a desktop. See Mobile surveys.

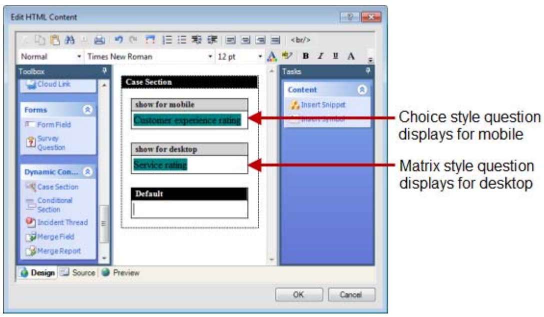


Matrix question on tablet or small mobile device in landscape mode

Matrix question on small mobile device

Instead of using matrix questions in your mobile surveys, consider adding a case section with conditional content using runtime variables to the HTML content of your questionnaire. This way, you can show different content for mobile devices from what you show for desktop mode. See Customizing surveys for use on mobile devices.

Following is an example of how you could use a case section with conditional content for both variables to hide a matrix question that wouldn't be effective when viewed on a small mobile device.



You could accomplish the same effect by adding a conditional section for each variable. Either way, the important takeaway is to create content for both variables on a single page. Otherwise, the variable for which no content is defined will display a blank page.

Important Remember to test and preview your survey in both mobile and desktop modes and on applicable mobile devices and browsers to ensure your conditional sections work the way you intend them to.

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Feedback Surveys

Once you have defined the **questions** you want to ask (see Creating questions), you can easily present them to your audience in surveys. Oracle RightNow Feedback Cloud Service (Feedback) contains flexible tools for creating custom surveys in a variety of formats. Surveys can be sent as mailings, served as web pages, or sent as events triggered by a campaign or business rule. With a wide range of formatting and customization options, including survey reminders, market testing, and full analytics integration for tracking results, surveys provide you with a powerful channel for inviting, gathering, and analyzing customer feedback.

Note Surveys are designed to comply with Oracle accessibility guidelines. For current information regarding our approach to accessibility, refer to Oracle's Accessibility Program.

- Creating questions
- Audiences

Creating surveys

You can create four types of surveys, distinguished by invitation method.

- **Broadcast surveys** are used to send broadcast invitations to specified **audiences** at a time you choose.
- **Transactional surveys** send invitations triggered by events that you define, such as an incident resolution or a campaign action.
- **Website link surveys** rely on separate invitation delivery mechanisms, such as a link to the survey placed on a web page.

- **Polling surveys** display as a single question on a **customer portal** page or any page that is external to the customer portal, such as a "Poll of the Day." After customers submit their response, they see a poll results chart or a thank-you message.

Although available features vary by invitation method, every survey is presented through a web page and can be linked to from outside of Oracle Service Cloud. With the exception of polling surveys, surveys can be added to **workspaces**, letting your agents complete surveys by proxy (on behalf of contacts) during telephone interactions (see Proxy surveys). Whatever methods you choose for delivering surveys, the basic steps for creating them are the same.

Important Keep in mind that if you want to use survey reminders, it is best to add them as a part of your initial survey creation process because reminders are scheduled based on when the initial survey is sent. The survey type (broadcast or transactional) also plays a role. For these reasons, we recommend implementing survey reminders into your strategy from the start. See Adding survey reminders.

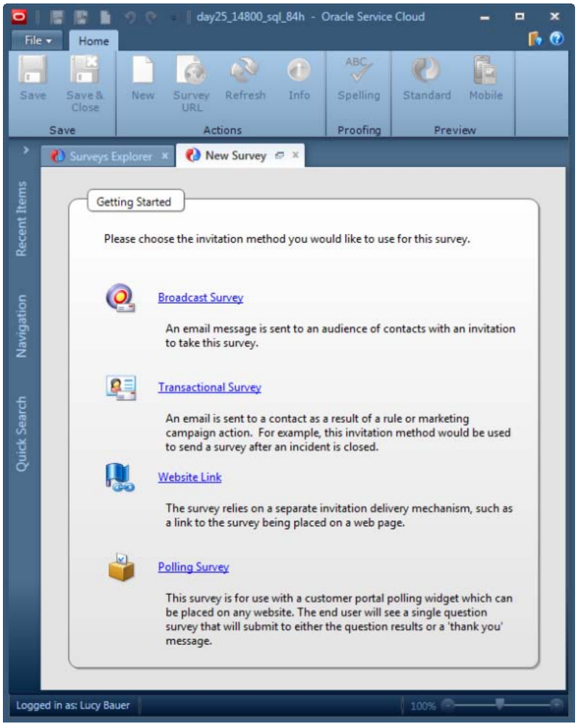
To create a survey

1 Click the Surveys button on the navigation pane and double-click Surveys Explorer.

Note The following procedure assumes that you access the Surveys explorer from the Surveys **navigation list**. However, this explorer might reside in another navigation list.

2 Click the New button on the ribbon. A new survey opens on the content pane.

Tip You can also create surveys from an open survey by clicking the New button. Additionally, if your navigation set is configured to add surveys from the file menu, click File and select Surveys > Survey. See To configure the file menu.



3 To create a broadcast survey, click Broadcast Survey and refer to Creating broadcast surveys.

4 To create a transactional survey, click Transactional Survey and refer to Creating transactional surveys.

5 To create a website link survey, click Website Link and refer to Creating website link surveys.

6 To create a polling survey, click Polling Survey and refer to Creating polling surveys.

7 Click the Save and Close button to save the survey.

Note You can click the Save button to save the survey without closing it.

8 Select the folder you want to save the survey in and type the name of the survey in the Name field.

9 Click the OK button to save the survey.

Survey delivery statuses

Your **broadcast** and **transactional surveys** must follow certain steps that are defined by the survey's delivery status. Delivery status indicates the survey's current state as it progresses through the distribution process.

The following table describes the delivery statuses for broadcast and transactional surveys and indicates whether the status is set by a staff member action or updated automatically by the system. For more about survey delivery, see Accessing broadcast delivery options and Accessing transactional delivery options.

Table 512: Broadcast and Transactional Survey Delivery Statuses Description

Status	Survey Type	Description
Draft	Broadcast Transactional	This is the preliminary status of a survey. When a survey is created, it is automatically set to the Draft status. The status reverts to Draft if a staff member unschedules a survey.
Scheduled	Broadcast	This status indicates a survey is ready to be sent at the scheduled send date and time. When a staff member selects the send time, the survey is automatically set to the Scheduled status.
Launched	Transactional	This status indicates a survey has been launched and can be included in a rule or campaign. Staff members launch a survey by clicking the Launch button on the Delivery tab. **Important:** By default, a launched survey can no longer be modified or sent. This ensures that you can accurately track the content you send your customers. You can, however, suspend the survey's invitation message, make edits, and then relaunch it. See Launching surveys.
Recurrence Scheduled	Broadcast	This status indicates a survey is scheduled for recurring runs. When a staff member selects a recurrence pattern, the survey is automatically set to the Recurrence Scheduled status.

Table 512: Broadcast and Transactional Survey Delivery Statuses Description (Continued)

Status	Survey Type	Description
Preparing to Send	Broadcast	This status indicates a survey is about to be sent. The status changes to Preparing to Send when a staff member clicks the Send Now button.
Sending	Broadcast	This status indicates a survey is currently being sent to customers. The system automatically sets the survey's status to Sending after the survey is done preparing to send or at the survey's scheduled date and time.
Suspended	Broadcast Transactional	This status indicates a survey is temporarily suspended from the Sending or Scheduled status. Staff members can change the status to Suspended by clicking the Suspend button on the Delivery tab.
Expired	Broadcast Transactional	This status indicates a survey has expired. Surveys can be set to expire based on date or maximum number of responses. Once the first expiration criterion is met, the status is set to Expired and cannot be changed. See Setting survey expiration.
Suspended by Error	Broadcast Transactional	This status indicates a survey encountered an error and was suspended by the system.
Canceled	Broadcast Transactional	This status indicates a survey was manually canceled. Staff members can cancel a survey by clicking the Cancel Invitation Message button on the Delivery tab. **Important:** By default, a canceled survey can no longer be modified or sent. This ensures that you can accurately track the content you send your customers. You can, however, copy a canceled survey, and then modify and send the copied survey. See Canceling broadcast surveys and Canceling transactional surveys.
Completed	Broadcast	This status indicates a survey was sent. The system automatically sets a survey's status to Completed from the Sending status.

Managing surveys

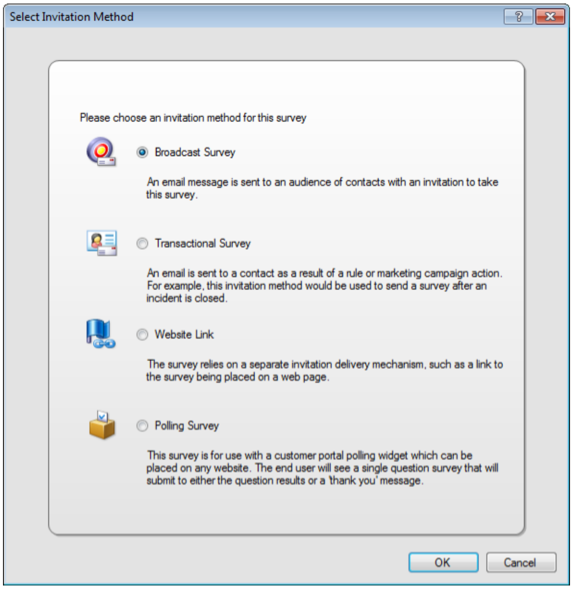
When creating or editing a survey, the Summary tab provides a variety of survey management functions. Most of these functions vary depending on the survey invitation method, but some can be used on any survey, including the following.

- **Changing the survey invitation method**—Once you create a survey, you can change its invitation method type. The invitation methods available are Broadcast, Transactional, Website Link, and Polling Survey. Broadcast surveys with an active recurrence are labeled Recurring Broadcast Survey.
- **Deactivating an active survey**—When you change the survey status to Inactive, customers cannot submit responses to the survey and receive a warning message when attempting to access the survey URL.
- **Setting survey expiration**—Customizing the availability of your surveys makes the feedback you receive from your customers more timely and actionable, and therefore, more meaningful for your organization. See Setting survey expiration.
- **Adding notes**—You may want to add notes to a survey that are not sent to audience members. You can use notes to provide additional information about the survey that can be viewed by staff members as they are working with the survey.
- **Adding tasks**—You can assign new or existing tasks to surveys and edit, delete, and forward tasks to other staff members. You can also view each task associated with the survey.

Other common functions available from the Summary tab include the ability to add file attachments or view the **audit log** to see when the surveys and broadcast survey reminders were created and edited and when delivery statuses changed. See Working with records.

To change the invitation method of a survey

1 On the Summary tab of an open survey, click Change next to Invitation Method. The Select Invitation Method window opens.



2 Select the Broadcast Survey, Transactional Survey, Website Link, or Polling Survey radio button.

3 Click the OK button. The survey invitation method changes to the type you select.

Note You can switch invitation methods only when the delivery status of the message is Draft and no rules or campaigns reference the survey. See Survey delivery statuses.

To deactivate a survey

1 On the Summary tab of an open survey, click Deactivate next to Survey Status. The Disable Survey window opens.

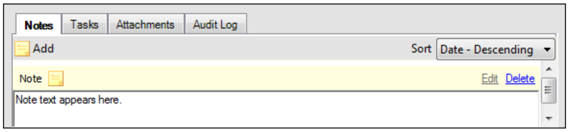
2 Click Yes to confirm you want to deactivate the survey. The survey status changes to Inactive.

3 To reactivate the survey, click Activate. The Activate Survey window opens.

   a Click Yes to confirm you want to activate the survey. The survey status changes to Active.

To add a note

1 On the Summary tab of an open survey, click the Notes tab.



2 Click the Add button and type the text of the note.

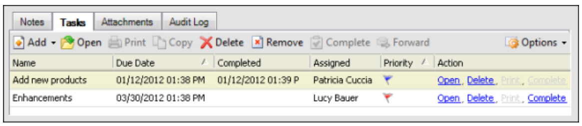
3 To sort the notes by either ascending or descending date, click the Sort drop-down menu and select the sort option.

4 To edit an existing note, click Edit next to the note.

5 To permanently delete a note, click Delete next to the note.

To add a task

1 On the Summary tab of an open survey, click the Tasks tab.



2 To add a new task to the survey, click the Add button, select Add New, complete the task information, and click the OK button. See Adding tasks for the procedure to complete the fields on this window.

3 To add an existing task to the survey, click the Add button, select Add Existing, search for the task you want to add, and click the Select button. See To search for a task from an open record.

You can perform other actions on the tasks on the Tasks tab. The following table describes the buttons on the Tasks tab toolbar and tells you what actions you can take on tasks.

4 Enter the following field information.

Table 513: Tasks Tab Toolbar Description

Button	Description
Add	Click this button to display a drop-down menu containing the following options.
Add New	Select this option to add a new task. See Adding tasks for the procedure to complete the fields on this window.
Add Existing	Select this option to add an existing task. After finding and selecting a task, the task is added to the task list for the survey. See To search for a task from an open record.
Open	Click this button to open the selected task for editing.
Print	Click this button to print the selected task.
Copy	Click this button to copy the selected task.
Delete	Click this button to permanently delete the selected task.
Remove	Click this button to remove the selected task from the survey (without deleting the task).
Complete	Click this button to mark the selected task completed.
Forward	Click this button to open the Task Forward window and send the task to specific recipients.
Options	Click this button to select an option for managing the output and display of information on the tab, such as print, forward, export, or display options. See Changing output options for information about other options, such as Auto Filter, Slice, Cross Tab, and Rollups.

Setting survey expiration

Because many surveys are needed for only a limited period of time, you can set an absolute date and time when a survey automatically expires. In addition to an absolute expiration date, broadcast and transactional surveys can be set to expire relative to the date you send the invitation message.

Relative expiration can help you capture feedback in a relevant time frame so that you can make decisions based on your insight. Say you create a recurring survey that filters every day for new customers to gather feedback about why your organization was selected. Also, you want to receive this feedback within 30 days. Since the survey is triggered daily, setting a relative expiration date instead of an absolute date keeps the survey active for all new customers, but also sets an expiration date relative to the contact it is sent to. See Setting survey recurrence.

You can also set survey expiration based on the maximum number of survey responses you have received. For instance, suppose you want to offer your customers an incentive for their feedback. You could offer a coupon to the first 1,000 responses you receive. This option is available for all survey types, including survey by proxy.

In addition, you can customize the expiration message, per survey, that recipients receive if they try to take an expired survey. This helps ensure your recipients know the right course of action to take when an expiration message displays.

Important Once the first expiration criterion is met, the survey status is set to Expired and the status cannot be changed. Therefore, if you want to make changes to your expiration criteria, you must do it before the first criterion is met.

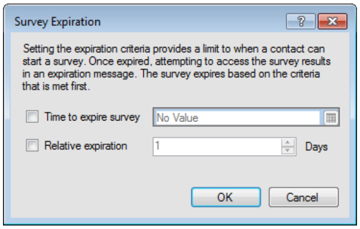
To set an absolute expiration date

Tip If you set both an absolute expiration date and a relative expiration date, the criteria that is met first triggers the survey to expire. For a scenario illustrating when it can be useful to set both, see the example at the end of this procedure.

1 On the Summary tab of an open survey, click Edit next to Expiration Date. The Survey Expiration window opens.

   Or

   To change an existing expiration date, click the expiration date.



2 Select the Time to Expire Survey check box and then type the date and time you want the survey to expire or click the calendar to select the date.

3 To expire a survey at the current date and time, click Today – [Date].

4 To cancel an existing survey expiration date, click No Value.

5 Click the OK button to save your changes. The window closes and the Expiration Date field displays the time and date the survey is scheduled to expire.

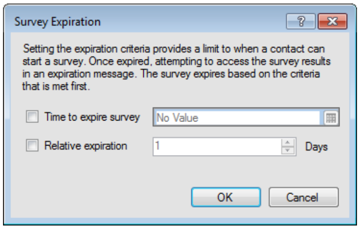
Example

In rare cases, you may want to set both an absolute and a relative expiration date. Suppose you set an absolute expiration for the last day of the year, but your survey is either transactional or recurring. In other words, either an event triggers the survey to send or it is scheduled to send daily. You also want your survey to expire 30 days from the send date. By setting both an absolute and a relative expiration, you ensure that you get your response within the 30-day time frame or before the end of the year.

To set a relative expiration date

Tip If you set both an absolute expiration date and a relative expiration date, the criteria that is met first triggers the survey to expire. For a scenario illustrating when it would be useful to set both, see the example at the end of the procedure To set an absolute expiration date.

1 On the Summary tab of an open survey, click Edit next to Expiration Date. The Survey Expiration window opens.



2 Select the Relative Expiration check box and then type the number of days you want to set the survey to expire after you send the invitation message. The maximum number of days you can set a survey to expire is 365.

3 Click the OK button to save your changes. The window closes and the Expiration Date field on the Summary tab displays the number of days after you send the invitation message that the survey is scheduled to expire.

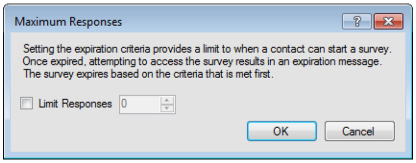
Note

- If a contact is past the first page of a survey and the survey expires, the survey will be accepted (as long as the contact finishes the survey in that session). This means there is a chance that responses will be logged after the expiration date.
- For recurring surveys, only an absolute expiration date will expire an entire survey because relative expiration applies only to the contact the survey is sent to. See Setting survey recurrence.

To set expiration based on maximum number of responses

Tip If you set both an absolute expiration date and a maximum number of responses, the criteria that is met first triggers the survey to expire.

1 On the Summary tab of an open survey, click Edit next to Expiration Max Responses. The Maximum Responses window opens.



2 Select the Limit Responses check box and then type the maximum number of responses you want to allow. The maximum number of survey responses you can define is one million.

3 Click the OK button to save your changes. The window closes and the Expiration Max Responses field on the Summary tab displays the maximum number of responses defined, the number of responses received, and the number of responses that are still allowed.

4 To update the number of received and remaining responses that display on the Summary tab, click the Refresh button on the ribbon.

Note A response is counted as soon as the answer to the first question is submitted.

To customize the expiration message

1 On the Summary tab of an open survey, click Edit next to Expiration Message. The Survey Expiration Message window opens.

2 Type the message you want recipients to see if they try to take an expired survey in the Expiration Message text box. You can use HTML tags in this text box.

Note If you do not define your own survey expiration message, the system's default message is used.

3 Click the OK button to save your changes.

Adding survey reminders

For broadcast and transactional surveys, you can now add up to four automatic reminder messages to create a sense of urgency for customers to complete surveys within a time frame you specify. Reminders prompt your audience to take the survey if they have forgotten about it or to finish it if they have already started but have not yet submitted it. This increases your participation rates and, ultimately, gives you more data about your customer experiences.

Tip To be most effective, survey reminders need to be a part of your initial survey creation process because reminders are scheduled based on when the initial survey is sent. The survey type (broadcast or transactional) also plays a role.

- For broadcast surveys (with the exception of recurring broadcast surveys), you cannot add reminders after the broadcast survey is sent.
- For transactional surveys, reminders will apply only to the invitation messages sent after the reminder has been added. For example, if you have a transactional survey that has been triggered to send by an external event and then you decide to add reminders, the reminders will start sending only after your next survey is triggered.

For these reasons, we recommend implementing survey reminders into your strategy from the start.

The audience for survey reminders can include recipients who have not started the survey, recipients who have started but have not completed the survey, or both. When a reminder is sent to a customer who has started the survey, the survey page that the customer was on is the page that opens (as long as cookies are enabled on the customer's computer) when the customer comes back to finish the survey.

You can also exclude segments of your audience from your reminders. For example, suppose you have a customer who unsubscribed from your list since the initial invitation message was sent. You could create a segment that uses a custom opt-out field in the filter criteria and then exclude that segment from your audience. See Creating segments.

Note

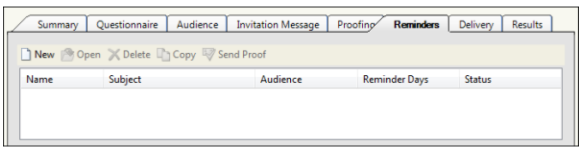
- Survey reminders apply global opt-in and external suppression list options to your reminder audience if those options are selected on the Audience tab of your survey. However, even if recency and frequency of communication options are selected for the initial audience, they are not applied to the reminder audience because the scheduling and frequency options you define for each reminder take precedence over any recency and frequency options that may be selected for the initial survey audience.
- The system is designed to prevent duplicates by allowing only one reminder to be sent to the same audience on the same day.

While there are two standard reports that apply to survey reminders (Survey Reminder Statistics and Broadcast Response Timeline), you can use the audit log to track your broadcast survey reminders without needing to run a report. When reminders are sent for broadcast surveys, a new row is added to the audit log, which is available on the survey's Summary tab. For details about survey reminder reports, see Best practices for survey reminders.

Tip Survey reminders can be scheduled to send between 1 and 365 days after your initial invitation message is sent. Since it takes at least one day before your first reminder can be sent, be sure to take this time factor into account when creating survey reminders.

To add a survey reminder

1 From an open survey, click the Reminders tab.

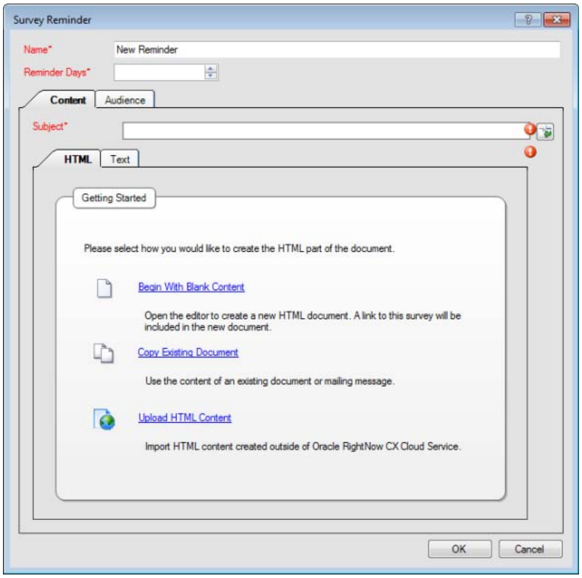


You can send up to four reminder messages to your audience. From the toolbar, you can create a reminder, edit, delete, and send proofs of your reminders.

Table 514: Reminders Tab Description

Column	**Description**
Name	This column displays the name of the survey reminder.
Subject	This column displays the email's subject line for the message that is sent to your audience about the survey reminder.
Audience	This column displays the recipients who are included in the reminder messages' audience. Options available include the following: • Not Started—Sends the invitation message to recipients who have not submitted any pages of the survey. • In Progress— Sends the invitation message to recipients who have started but have not completed the survey. **Note:** By default, both options are selected.
Reminder Days	This column displays the number of days after the initial invitation message was sent that the reminder message will be sent. **Note:** The minimum value of this field is 1 day and the maximum value is 365 days.
Status	This column displays the delivery status of the reminder. See Survey delivery statuses. **Note:** This column is available only for broadcast survey reminders.

2 Click the New button to add your first reminder message. The Survey Reminder window opens.



3 Type the name of the reminder message in the Name field.

Tip Be specific when naming your reminder messages to help keep track of the different reminders you create. For example, "1st reminder sent 7 days after invite."

4 Type the number of days after the initial invitation message is sent that the reminder message will be sent in the Reminder Days field.

Note This value must be unique for each reminder that you add. This prevents duplicates by allowing only one reminder to be sent to the same audience on the same day.

5 Type the subject your audience will see in the reminder message's email subject line in the Subject field.

6 To insert a merge field into the subject line of your reminder message, click the Merge Field button (to the right of the Subject field) and select the field. For example, you could use the special field, Survey Expiration Date, to let your audience know when the survey expires. See Inserting merge fields.

7 Define your message text and any other content or formatting options for your reminder using either the HTML editor or the text editor on the Content tab. See [Using the HTML editor] and [Creating and editing text].

8 Click the Audience tab to define the audience for your reminder.

By default, both the Not Started and the In Progress check boxes are selected in the Included section.

a Clear the Not Started check box to send the reminder message only to recipients who have started the survey.

b Clear the In Progress check box to send the reminder message only to recipients who have *not* started the survey.

9 To exclude a segment from the audience, click Add Segment in the Excluded section. The Select Segment window opens where you can select segments you want to exclude.

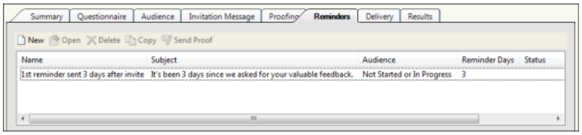
10 To edit a segment that is excluded from the reminder, click Open next to the segment name. See [Adding segment filters].

11 To remove a segment from the Excluded section, click Remove next to the segment name.

12 To count the number of contacts who will receive the reminder, click Refresh in the Count section.

Note Keep in mind that the Count section is available only for broadcast surveys and data is available only after the survey reminder is sent.

13 Click the OK button to save the reminder. The new reminder is added to the Reminders tab.



14 To add another reminder, click the New button and repeat steps 3-13.

15 To copy a message to create another reminder, select the message and click the Copy button. You can then open the copy and make your edits.

Important A document is automatically created and stored in the Automatically Generated folder in the Documents explorer for every copy of a reminder message. Changes made to content in any of the copied reminder messages are not shared with the original reminder message or subsequent copies. See Automatically generated folders.

16 To open a reminder for editing, select the reminder and click the Open button.

17 To delete a reminder, select the reminder and click the Delete button.

18 To send a proof of a reminder message, select the message and click the Send Proof button. See Sending a proof survey.

Important After a reminder is sent, you cannot edit, proof, or delete that reminder. However, for transactional surveys, you can suspend the reminder, make edits, and then re-launch it. See Survey delivery statuses.

Best practices for survey reminders

To be most effective, survey reminders need to be a part of your initial survey creation process because reminders are scheduled based on when the initial survey is sent. The survey type (broadcast or transactional) also plays a role.

- For broadcast surveys (with the exception of recurring broadcast surveys), you cannot add reminders after the broadcast survey is sent.
- For transactional surveys, reminders will apply only to the invitation messages sent after the reminder has been added. For example, if you have a transactional survey that has been triggered to send by an external event and then you decide to add reminders, the reminders will start sending only after your next survey is triggered.

For these reasons, we recommend implementing survey reminders into your strategy from the start.

Other best practices for using survey reminders include the following.

- **Add reminders quickly**—An efficient way to add more than one reminder is to simply copy your first reminder, and then open each new reminder to edit the Name, Reminder Days, and Subject fields, as well as any message text you may want to change.
- **Plan message delivery timing**—Since it takes at least one day before your first reminder can be sent, be sure to take this time factor into account when creating survey reminders.
- **Protect your reputation**—Even though you can add four survey reminders to each survey, be careful not to overwhelm your customers with too many reminders. For example, if you've sent a survey that expires in seven days, you probably don't need to send four reminders. Seriously consider the appropriate number of reminders to send for your specific situation. Otherwise, you risk harming your reputation with your customers. For more information about protecting your reputation, see *Best Practices for Email Marketing*.

- **Track reminder success**—View the effectiveness of survey reminders using our standard reports. See Viewing survey results.
  - ▷ **Survey Reminder Statistics**—This report lets you see the total number of email messages that were sent, viewed, and clicked (opened) for both the initial invitation message as well as for all of the reminders. Being able to see both the viewed and clicked statistics lets you evaluate which reminder prompted the customer to open the survey. In other words, which one was most effective. This report also returns the number of emails that bounced.
  - ▷ **Broadcast Response Timeline**—This report lets you see trends by using a time line to show the peaks and valleys in your survey response numbers. Available only for broadcast survey reminders, responses received from the date the initial invitation message was sent through the date the survey was last submitted display on the report. It also shows both the number of survey invitations and the number of reminders sent. (This report is not available on the Results tab if the broadcast survey is a recurring survey or if it uses market testing.)

Mobile surveys

Surveys are automatically optimized for readability and touchscreen compatibility making them user-friendly on mobile devices. The system detects whether the survey is being taken on a mobile device or a standard web device, such as a desktop or laptop. When a mobile device is detected, the survey is optimized so that taking it from that device is easy. For example, text is larger so it is readable without needing to zoom into the page, and answer choices and buttons are easy to select with the touch of a finger.

Landing pages, including Thank You, Forward to Friend, and Unsubscribe, have also been optimized for mobile.

While there are many features available for mobile optimization, the following example shows styling differences that would make this particular survey more difficult to take if mobile optimization was not applied. The screen shot on the right shows a survey that has not been optimized for mobile.

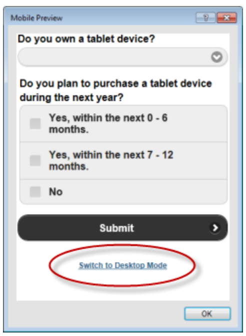
Mobile optimization is enabled, by default, on the Survey Options window. See [Specifying survey options].

Tip Because different mobile devices and browsers display surveys in different ways, we recommend testing your surveys on applicable mobile devices and browsers before you launch them.

To preview your survey for mobile

1 From an open survey, click the Mobile button on the ribbon. The Mobile Preview window opens as it would display if viewed from a mobile device.

2 To see how the survey would look on a mobile device without mobile optimization applied, click the Switch to Desktop Mode link at the bottom of the Mobile Preview window.



3 Click OK to close the window.

Best practices for mobile surveys

When designing surveys for use on mobile devices, keep the following points in mind.

If a survey uses a **template**, the template is not applied when the survey is viewed on a mobile device because most templates are not optimized for mobile. If you want to create an appropriately sized template to be used for mobile, you could add HTML content with a conditional section for mobile runtime that included a smaller image. See Customizing surveys for use on mobile devices.

Mobile optimization automatically resizes fonts for a user-friendly mobile experience. Therefore, **font size**, even if you modify the default setting, is ignored on mobile devices when mobile optimization is enabled.

Keep in mind that certain fonts are not supported or consistently displayed on every mobile device. The list of widely **supported fonts** for most mobile devices includes the following.

- Arial
- Courier and Courier New
- Georgia (with the exception of Android)
- Helvetica
- Times and Times New Roman
- Trebuchet MS (with the exception of Android)
- Verdana

For basic surveys, **class and style button properties** are ignored on mobile devices when mobile optimization is enabled. However, you can modify button properties on advanced surveys by using a WebDAV client to access your Customer Portal file structure, and then opening the */cp/customer/assets/feedback* folder to edit the *mobile.css* file. See WebDAV for the Customer Portal and The customer folder.

When using **case** and **conditional sections** with runtime variables, it's important to remember the following.

- Mobile conditional sections work when a mobile device is detected even if mobile optimization is disabled on the survey.
- If the mobile user selects the Switch to Desktop Mode link, available on the first survey page, all content that displays will be desktop content, even if a mobile device is being used. (Switch to Desktop Mode is available only on the first page of the survey.)
- When using desktop and mobile runtime variables, we recommend that you create content for both variables on one page. You can do this either with a conditional section for each variable, or by adding content that appears for both variables. Otherwise, the runtime variable for which no content is defined will display a blank page.

See Customizing surveys for use on mobile devices.

Mobile preview is a limited, browser-based preview that gives you a general idea of how your survey might look on a smaller device when you are designing your survey from your desktop. With that in mind, always test your surveys on applicable mobile devices and browsers before you launch them. See To preview your survey for mobile.

Track mobile survey use by analyzing usage trends with our standard reports. In addition, the **Mobile Survey Trends Dashboard** displays all three mobile survey reports in one place for easy analysis. See Viewing survey results.

The three mobile survey reports (Mobile Survey Trend, Mobile Survey Browser Trend, and Mobile Survey Operating System Trend) and the dashboard are located in Public Reports > Feedback > Survey Responses > Mobile Surveys. A fourth report (Standard Versus Mobile Survey Trend), which is not included on the dashboard, is located in Public Reports > Feedback > Survey Responses.

- **Mobile Survey Trend** shows the number of mobile surveys started and completed over time as well as the completion rate.
- **Mobile Survey Browser Trend** shows the number of mobile surveys submitted per browser over time.
- **Mobile Survey Operating System Trend** shows the number of mobile surveys submitted per operating system over time.
- **Standard Versus Mobile Survey Trend** shows the number of surveys taken on a mobile device versus surveys taken on a standard web device, such as a desktop. If no columns for mobile devices display on the report, either the survey was not enabled for mobile optimization or no mobile devices were used to take the survey.

Because different mobile devices and browsers display surveys in different ways, we recommend testing your surveys on applicable mobile devices and browsers before you launch them.

Proxy surveys

Any broadcast, transactional, or website link survey can be added to a **workspace**, letting your agents complete surveys on behalf of contacts during telephone interactions. Surveys can be embedded in contact, organization, incident, or opportunity workspaces by inserting a Survey By Proxy control. See Adding controls to workspaces and scripts.

Together with Feedback's **advanced mode** features, proxy surveys can be used to initiate more complex processes, such as creating leads and tasks, setting contact field values, sending staff notifications, and triggering external events. This makes proxy surveys useful for meeting a variety of key business needs.

- An incident-based proxy survey can be used by customer support agents to invite feedback about how a support call was handled or assess interest in new service offerings.

- An organization-based or contact-based proxy survey can be used by marketing personnel to prequalify leads and opportunities for the sales team or add contacts to segments based on their explicitly confirmed interests.
- Opportunity-based proxy surveys can be used by sales reps to gather feedback about specific sales interactions or assess how well a product fits a given area of need.

Creating broadcast surveys

You can create a broadcast survey if you want to survey a group of contacts in your knowledge base. Similar to **mailings**, broadcast surveys are sent at a certain time to an audience you define. A link to the survey is sent by email using your own content or a previously defined document (see Creating documents). Customers can then click the link to complete the survey.

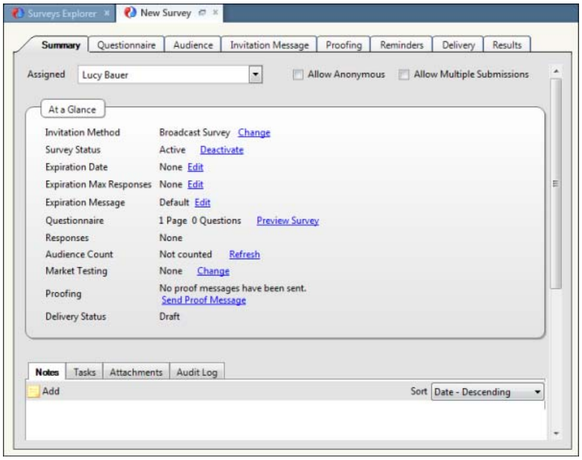
Important The delivery and participation rates of survey invitation emails can be impaired by factors beyond the scope of Feedback. For a description of these issues and how best to optimize your message delivery, see *Best Practices for Email Marketing*.

To create a broadcast survey

1 From the Surveys explorer, click the New button on the ribbon. A new survey opens on the content pane.

Tip You can also create surveys from an open survey by clicking the New button. Additionally, if your navigation set is configured to add surveys from the file menu, click File and select Surveys > Survey. See To configure the file menu.

2 Click Broadcast Survey.



By default, the Summary tab is active. From here, you can review general information about the survey in the At a Glance section, as well as manage the survey's notes, tasks, and attachments (see Managing surveys). As you create the survey, you move through each tab to complete the survey's elements.

3 To assign the survey to another staff member (by default, the survey is assigned to the staff member who creates it), click the Assigned drop-down menu and select the staff member.

a To search for a staff member, type the staff member's name in the Find field.

Tip Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.

4 To let customers answer the survey anonymously, select the Allow Anonymous check box. Contact information is not required to answer the survey.

Note Selecting Allow Anonymous in your survey does not mean that all responses are anonymous. If a survey invitation is sent to a contact or an Oracle Service Cloud cookie is detected on the contact's computer, or the survey itself contains an email address field, Feedback attempts to use that information to identify the contact. For information about using cookies to identify contacts, see Specifying survey options.

5 To let customers submit the survey more than once, select the Allow Multiple Submissions check box.

Note The Allow Multiple Submissions option is not visible for recurring surveys, which always allow multiple submissions. However, recurring surveys can be configured to exclude contacts from the audience that were included in a previous instance of the recurrence. See Setting survey recurrence.

6 Click the text in the At a Glance section described in the following table to perform common survey functions.

Table 515: At a Glance Section Description

Field	Description
Invitation Method	This field displays the invitation method currently selected for the survey. Click Change to change the method and see To change the invitation method of a survey.
Survey Status	This field displays whether the survey is active or inactive. Customers cannot submit responses to an inactive survey and receive a warning message when attempting to access the survey URL. See To deactivate a survey.
Expiration Date	This field displays the survey's expiration date and time. By default, no expiration date is set. See To set an absolute expiration date and To set a relative expiration date.
Expiration Max Responses	This field displays the number of responses a survey can accept. If set, this field also displays the number of responses received, as well as the number of surveys that are still allowed. The maximum number of survey responses you can define is one million. See To set expiration based on maximum number of responses.
Expiration Message	Click Edit to customize the survey's expiration message. See To customize the expiration message. **Note:** If you do not define your own survey expiration message, the system's default message is used.
Questionnaire	This field displays how many pages and questions are in the survey. Click Preview Survey to preview the survey.
Responses	This field displays how many surveys were started and completed by customers.

Table 515: At a Glance Section Description (Continued)

Field	Description
Audience Count	This field displays the most current audience count and when the last count was performed. Click Refresh to update the audience count. To view the details of the audience count, click Details and see Viewing audience count details in surveys. **Note:** Occasionally, the **replication database** used to process mailings can fall slightly behind the **operational database**. If the system determines that the replication contact data is not current, the audience count is labeled “Estimated.”
Market Testing	This field displays the market testing mode of the survey. Click Change to change market testing modes. See Market testing in broadcast surveys.
Proofing	This field displays the number of proofs that have been sent, approved, and rejected. Click Send Proof Message to send a proof. See Sending a proof survey.
Delivery Status	This field displays the delivery status of the survey and the number of emails sent and delivered. See Survey delivery statuses.

7 Click the Questionnaire tab to add questions and HTML content to the survey. See Creating questionnaires in basic mode and Creating questionnaires in advanced mode.

8 Click the Audience tab to define an audience for the survey. See Defining the broadcast survey audience.

9 Click the Invitation Message tab to create the message sent to the survey audience. See Customizing the invitation message in broadcast surveys.

10 Click the Reminders tab to create automatic email messages that will prompt your customers either to start taking the survey or to finish it if they have already started. See Adding survey reminders.

11 Click the Proofing tab to send a proof of the email for internal review before sending it to the entire audience. See Sending a proof survey.

12 Click the Delivery tab to select delivery options. See Accessing broadcast delivery options.

13 To view the reports associated with the survey, click the Results tab. See Viewing survey results.

14 To preview the survey as it would be viewed on a standard web device, such as a desktop or a laptop, click the Standard button on the ribbon. The survey preview opens in a web browser.

Important If a survey contains an email address field and you submit a value for the field in the survey preview, the form creates or updates contact records so that advanced survey functions can be tested. For this reason, be sure to use only test contact addresses to avoid updating production contacts when testing survey previews.

Also, be careful not to use the preview survey URL in place of the URL of your completed survey (described in step 16). Information submitted on a preview survey is discarded and has no effect on the data collected by the live survey. For identification purposes, each preview survey displays a watermark to ensure it is not confused with a live survey.

15 To preview the survey as it would be viewed from a mobile device, click the Mobile button on the ribbon. See Mobile surveys.

Note Mobile preview is a limited, browser-based preview that gives you a general idea of how your survey might look on a smaller device when you are designing your survey from your desktop. With that in mind, always test your surveys on applicable mobile devices and browsers before you launch them.

16 To copy the URL of the survey to your clipboard, click the Survey URL button on the ribbon. The Survey URL message opens.

A URL is automatically assigned to the survey. This is the URL that your invitation message links to and your customers visit to complete the survey. From this window, you can view the URL and it is automatically copied to your workstation's clipboard.

a Click the OK button when you are finished viewing the URL to close the window.

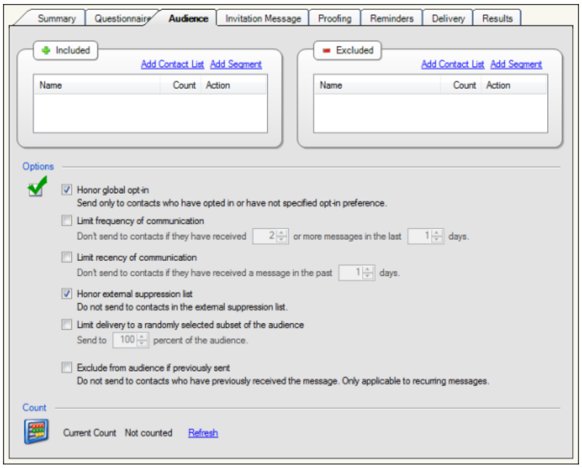
17 Click the Save and Close button to save the survey.

Defining the broadcast survey audience

You specify the **audience** your survey invitations are sent to from the Audience tab. You can include and exclude a total of fifty contact lists and segments, each containing a vast number of contacts. For example, you could include twenty-two segments of contacts and exclude twenty-eight contact lists for a total of fifty lists. You can also restrict the scope of your audience, set survey frequency and recency limits, and specify how to handle global opt-in and suppression options. See Audiences for complete details and procedures about using contact lists and segments in surveys and mailings.

To define the audience

1 From an open survey, click the Audience tab.



2 To include a list in the audience, click Add Contact List in the Included section. The Select Contact List window opens.

- **a** To add a contact list, click New Contact List and refer to Adding contact lists.
- **b** Select the list you want to include in the survey's audience and click the OK button. The list is added to the Included grid. Contacts belonging to the list receive the survey.

3 To include a segment in the audience, click Add Segment in the Included section. The Select Segment window opens.

- **a** To add a segment, click New Segment and refer to Creating segments.

b Select the segment you want to include in the survey's audience and click the OK button. The segment is added to the Included grid. Contacts belonging to the segment receive the survey.

4 To exclude a list from the audience, click Add Contact List in the Excluded section. The Select Contact List window opens.

a Select the list you want to exclude from the survey's audience and click the OK button. The list is added to the Excluded grid. Contacts belonging to the list do not receive the survey.

5 To exclude a segment from the audience, click Add Segment in the Excluded section. The Select Segment window opens.

a Select the segment you want to exclude from the survey's audience and click the OK button. The segment is added to the Excluded grid. Contacts belonging to the segment do not receive the survey.

6 To edit a list or segment that is included in or excluded from the survey, click Open next to the list or segment name. See Managing contact lists and Adding segment filters.

7 To remove a list or segment from the Included or Excluded sections, click Remove next to the list or segment name.

8 Enter the following field information in the Options section.

Table 516: Options Description

Field	Description
Honor global opt-in	Select this check box to send the survey to contacts who did not explicitly opt out of receiving surveys or mailings. Clear this check box to send the survey to all contacts in the audience, regardless of their opt-in preference.

Table 516: Options Description (Continued)

Field	Description
Limit frequency of communication	Select this check box to set a frequency limit, then enter a maximum number of surveys and mailings and a number of days in which contacts can receive messages before they are excluded from surveys. The survey is not sent to any contacts who have received the maximum number of surveys and mailings within the designated time period. For more information about how this setting works, see Frequency and recency limits. **Note:** The minimum you can enter is 2 in the last 1 day. The maximum number of days you can enter is 90. **Tip:** To ensure contacts receive only 1 email every "x" number of days, use the Limit recency of communication setting described next.
Limit recency of communication	Select this check box to set a recency limit. Enter the minimum number of days that should elapse before contacts receive another email. The survey is not sent to any contacts who have received a survey or mailing email in the past specified number of days. For more information about how this setting works, see Frequency and recency limits. **Note:** The maximum number of days you can enter is 90. The default value is 1 day. **Tip:** Use this check box to ensure contacts receive only one email every "x" number of days. For instance, if you want your contacts to receive only one email per week, you can select this check box and then set the field to seven.
Honor external suppression list	Select this check box to exclude contacts in the external suppression list from receiving the survey. Clear this check box to send the survey to all contacts in the audience, even if they are in the external suppression list. See External Suppression List for complete details and procedures about the external suppression list.
Limit delivery to a randomly selected subset of the audience	Select this check box to send the survey to a random subset of the audience. Type a percentage or use the up and down arrows to select a percentage of the audience to send the survey to.

Table 516: Options Description (Continued)

Field	Description
Allow delivery of messages to multiple contacts sharing the same email address	**Caution:** Because duplicate messages sent to a single address are a common characteristic of spam, you should select this check box only when necessary. When the check box is selected and you attempt to schedule or send a mailing, survey, or proof, and duplicate email addresses exist in your audience, a message warns you that your reputation as a bulk email sender may be adversely affected and impact your ability to send future communications. See *Best Practices for Email Marketing*. Select this check box to send messages to multiple contacts sharing the same email address. If this check box is cleared, the message is sent only to the contact most recently updated. This option is available only when email address sharing is enabled. See Email address sharing.
Exclude from audience if previously sent	Select this check box to exclude contacts from the audience that were previously sent an invitation from the same survey. **Note:** This option applies only to recurring surveys. Contacts excluded in this manner are also excluded from the audience count. See Setting survey recurrence.

9 To count the number of contacts who will receive the survey, click Refresh in the Current Count section. Once the audience has been counted, the last count also displays in this section.

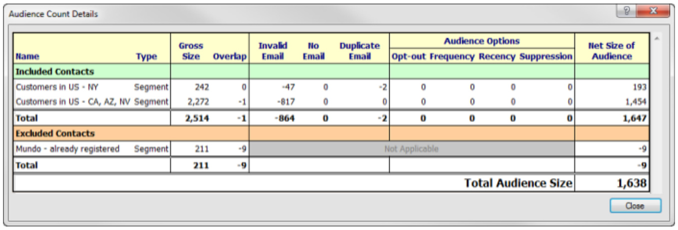
Note Occasionally, the **replication database** used to process mailings can fall slightly behind the **operational database**. If the system determines that the replication contact data is not current, the audience count is labeled “Estimated.”

10 To view the details of an audience count, click Details in the Current Count section after the count has been performed.

❖ Audiences

Viewing audience count details in surveys

You can view the audience count to see how the count is calculated. You can see the included and excluded lists and segments, along with the number of invalid emails and opt-outs. When you click Details after counting the audience, the Audience Count Details window opens.



Audience Count Details

Name	Type	Gross Size	Overlap	Invalid Email	No Email	Duplicate Email	Audience Options				Net Size of Audience
							Opt-out	Frequency	Recency	Suppression	
Included Contacts											
Customers in US - NY	Segment	242	0	-47	0	-2	0	0	0	0	193
Customers in US - CA, AZ, NV	Segment	2,272	-1	-817	0	0	0	0	0	0	1,454
Total		**2,514**	**-1**	**-864**	**0**	**-2**	**0**	**0**	**0**	**0**	**1,647**
Excluded Contacts											
Mundo - already registered	Segment	211	-9	Not Applicable							-9
Total		**211**	**-9**								**-9**
										Total Audience Size	**1,638**

Close

The following table describes the columns on the Audience Count Details window.

Table 517: Audience Count Details Window Description

Column	Description
Name	Lists the name of each segment or contact list included in or excluded from the survey.
Type	Lists whether the audience subset is a contact list or segment.
Gross Size	Lists the number of contacts belonging to the list or segment.
Overlap	Lists the number of contacts belonging to the list or segment who also belong to another list or segment in the audience.
Invalid Email	Lists the number of contacts belonging to the list or segment who have an invalid email address.
No Email	Lists the number of contacts belonging to the list or segment who do not have an email address.
Duplicate Email	Lists the number of email addresses shared by multiple contacts. If the check box is selected on the Audience tab, allowing delivery to multiple contacts sharing the same email address, this count is included in the net size count of the audience. If the check box is not selected, it is subtracted from the gross size when calculating the net size of the audience. **Note:** This option is available only when email address sharing is enabled. See Email address sharing.
Opt-out	Lists the number of contacts belonging to the list or segment who have opted out of surveys.
Frequency	Lists the number of contacts belonging to the list or segment who are filtered by the survey frequency settings.

Table 517: Audience Count Details Window Description (Continued)

Column	Description
Recency	Lists the number of contacts belonging to the list or segment who are filtered by the survey recency settings.
Suppression	Lists the number of contacts belonging to the list or segment who belong to the external suppression list.
Net Size of Audience	Lists the number of contacts in each list or segment who are included in or excluded from the survey.
Total Audience Size	Lists the net total number of contacts who receive the survey.

Audiences are filtered from invitation emails in the following order.

- Excluded segments and contacts
- Contacts without an email address
- Contacts with an invalid email address
- Contacts who have opted out
- Shared email addresses and duplicate contacts (overlaps in included lists or segments)
- Contacts in the external suppression list
- Contacts filtered by recency settings
- Contacts filtered by frequency settings

❖ Audiences

Customizing the invitation message in broadcast surveys

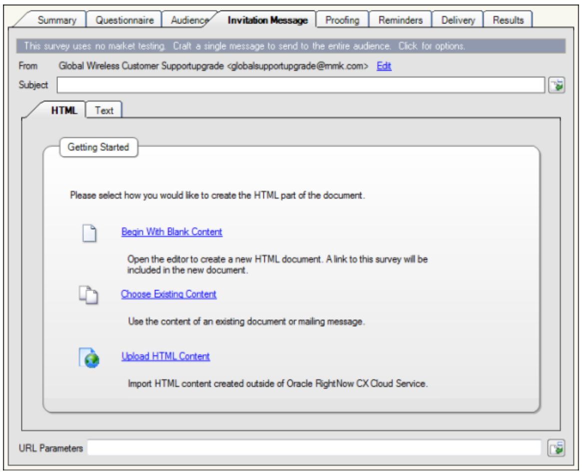
The invitation message is what your customers receive in the email to invite them to participate in the survey. From the Invitation Message tab, you can activate market testing, specify the mailbox settings for the message, the subject of the email, and any URL parameters you want to attach to the survey link in the message. In addition, you can create either plain text or HTML messages from scratch, from existing content, or by uploading HTML from another site.

Important By default, a canceled survey can no longer be modified or sent. This ensures that you can accurately track the content you send your customers. You can, however, copy a canceled survey and then modify and send the copied survey. See To cancel a survey invitation message.

Alternately, you can enable the RNM_MOD_SENT_DOCS configuration setting (Outreach and Feedback > General > Miscellaneous) to allow edits to documents that have been used in sent messages. Just be aware when you enable this setting, you will no longer be able to view the original content sent to your customers, and your reporting will not be as accurate.

To create an invitation message

1 From an open survey, click the Invitation Message tab.



2 To activate market testing, click the information bar (just above the From address field) and select Change Market Testing Mode. See Market testing in broadcast surveys.

3 To change the mailbox sending the message or the From and Reply-To addresses, click Edit next to the From address. See Customizing survey invitation message headers.

4 Type the subject of the message in the Subject field.

Writing effective subject lines

Because most mail clients list new messages by From address and subject, the contents of these fields are critical to having your message read. Refine your message subject to be concise yet informative and make sure it clearly states your purpose. If it isn't clear who you are or what you want, your message can be easily passed over.

5 To add a **merge field** to the subject, click the Merge Field button (to the right of the Subject field) and select the field. See Inserting merge fields.

6 To create an HTML invitation message from scratch, click Begin with Blank Content and see Using the HTML editor.

7 To create an HTML invitation message by copying an existing document, click Choose Existing Content and see Choosing existing content.

8 To create an HTML invitation message by uploading your own HTML page, click Upload HTML Content and see Uploading HTML content.

9 To create a text version of the invitation message, click the Text tab.

   a To create a text invitation message from scratch, click Begin with Blank Content and see Creating and editing text.

   b To create a text invitation message by copying an existing document, click Choose Existing Content and see Choosing existing content.

   c To create a text invitation message by converting an HTML page to text, click Convert HTML Content and see Converting HTML content.

Note The system automatically creates a document containing the content created on the Invitation Message tab and stores it in the Automatically Generated folder in the Documents explorer. When you update the document in the survey, those changes are also made to the automatically generated copy. In addition, if you make any changes to the copy in the Automatically Generated folder, those changes are also made to the text on the Invitation Message tab in the survey. See Automatically generated folders.

10 To add URL parameters, type any parameters you want to append to the links in your message (for example, p1=v1&p2=v2) in the URL Parameters field.

11 To add a merge field to the URL parameters, click the Merge Field button to the right of the URL Parameters field and select the field. See Inserting merge fields to URL parameters.

Customizing survey invitation message headers

By default, Oracle RightNow Feedback Cloud Service (Feedback) uses the name and email addresses specified in the outgoing email settings of your default Outreach mailbox (see Adding and editing mailboxes). If you want to use a different name and email address for your survey's invitation message, such as a branded email address, you can do so by customizing the message header. When a recipient views your invitation message, the name and email addresses defined in the customized header are used instead of those specified in the default Outreach mailbox.

Using branded email domains

Using email addresses branded with your company's domain name can help recipients recognize your organization as the sender, improving **deliverability**. However, care must be taken to ensure that bounce notifications are processed correctly. Review the following recommended best practices when using branded domains to send survey invitations.

1. **Keep the mailbox configuration provided by Oracle**—At the time your site was created, an Oracle representative probably helped configure your Outreach mailbox settings using a mail account with an Oracle domain, such as rnmk.com. These settings should be left as is to ensure bounce errors are processed. See Email bounce handling.

2. **Customize the message header**—When creating the survey invitation message, add your branded email address by customizing the message header. Customizing the message header does not affect **bounce** processing, but contact replies to your email are sent to the branded address.

3. **Implement email authentication**—Implementing a form of authentication for your branded email accounts can help protect your reputation and secure your mail delivery rates. Authentication options include the following:

   - **Sender Policy Framework**—Sender Policy Framework (SPF) is an email authentication option that designates permitted senders of email originating from your domain, excluding those with mis-matched or incorrectly specified SPF records. See Answer ID 2489 on our support site for information about implementing SPF on your site.

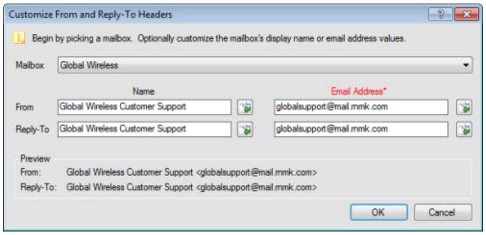
   - **DomainKeys/DomainKeys Identified Mail**—DomainKeys (DK) and DomainKeys Identified Mail (DKIM) are email authentication options that use cryptographic signatures to designate email as originating from an authorized email delivery provider, excluding messages sent from those with unsigned or incorrectly assigned signatures. See Answer ID 2701 on our support site for information about implementing DK and DKIM on your site.

Important Be sure to regularly monitor mail received by the email addresses specified in your custom message header. If you want replies to your survey invitations to be converted to incidents, your mail administrator must configure SMTP forwarding from that mail account to an account configured in Oracle Service Cloud. See Adding and editing mailboxes.

Also note that when an email message cannot be delivered, it usually results in a "bounce" error notification. Bounce notifications are sent to the Envelope From/Bounce Address defined in your Outreach mailbox's outgoing email settings even if the message header is customized using the following procedure. See Email bounce handling.

To customize the survey invitation message header

1 From the Invitation Message tab of an open survey, click Edit next to the From field.



2 Enter the following field information.

Table 518: Customize From and Reply-To Headers Window Description

Field	Description
Mailbox	Click this drop-down menu and select a mailbox to change the mailbox from the default. See Email Management for complete details and procedures about email handling.
From	Type the name and email address that you want the message to appear from in the From text boxes.
Name	Type the name you want the message to appear from.
*Email Address	Type the email address you want the message to appear from.

Table 518: Customize From and Reply-To Headers Window Description (Continued)

Field	Description
Reply-To	Type the name and email address that you want the message to reply to in the Reply-To text boxes.
Name	Type the name you want to appear as the reply-to address.
*Email Address	Type the email address you want to appear as the reply-to address. **Important:** If you use incidents, the Reply-To Address must match the Envelope From/Bounce Address unless your own mail administrator has set up SMTP forwarding for this address to automatically forward to the Envelope From/Bounce Address in the mailbox's outgoing emails settings. See Outgoing Email Settings and Answer ID 1272 on our support site.
Merge Field	Click this button to add merge fields to the from name and address or reply-to name and address.
Preview	This section displays how the from and reply-to addresses appear.

3 Click the OK button to save your settings and close the window.

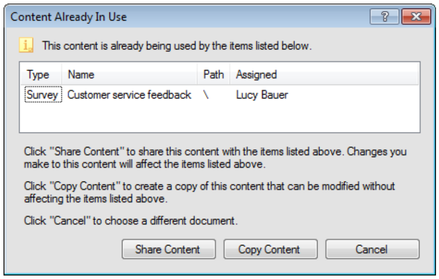
Choosing existing content

As an alternative to creating a message from scratch, you can base your message on existing content. You can choose to copy a document's content into your message and customize it, or share the content with other surveys and messages that use the document. See Creating documents.

To insert existing content

1 From an open survey, click Choose Existing Content on the Invitation Message tab. The Choose Document window opens.

2 Select the document you want to use and click the OK button. If it is not already in use by another mailing, campaign, or survey, the content is added to your message. Otherwise, the Content Already in Use window opens.



a To share the document with the items indicated in the grid, click the Share Content button. When you share a document, you can edit the content of the document, but all other messages that share it are also modified. Likewise, if another staff member edits the document, your message is also modified.

b To create a copy of the document, click the Copy Content button. If you edit the copied content, the original document is not affected. Conversely, if the content of the original document is modified, it does not affect your copy of the message.

Caution The system automatically creates a document containing the copied content and stores it in the Automatically Generated folder in the Documents explorer. When you update the document in the survey, those changes are also made to the automatically generated copy. In addition, if you make any changes to the copy in the Automatically Generated folder, those changes are also made to the content on the Invitation Message tab in the survey. See Automatically generated folders.

Uploading HTML content

You can upload an HTML file into your survey to create your invitation message. The HTML document must be stored in a file accessible through your local workstation. You cannot access the HTML of a web page.

To upload HTML content

1 From an open survey, click Upload HTML Content on the Invitation Message tab.

2 Select the HTML file you want to upload.

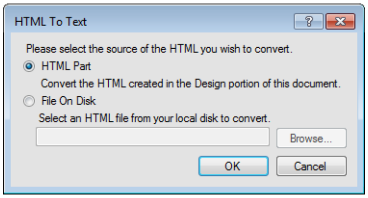
3 Click the Open button. The HTML is inserted in your invitation message.

Converting HTML content

When creating a text invitation message, you can take HTML content from the HTML message or from an HTML file and convert it to plain text.

To convert HTML content

1 From the Invitation Message tab of an open survey, click the Text tab and click Convert HTML Content.



2 To convert the HTML invitation message to text, select the HTML Part radio button.

3 To convert an HTML file to text, select the File On Disk radio button and browse for the file.

4 Click the OK button to insert the converted HTML in the text part of your message.

Market testing in broadcast surveys

When creating a broadcast survey, you can test different content and designs on a subset of your audience by using **market testing**. Market testing is available in two modes.

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- **Even split**—This mode sends your test message to equal portions of your audience. For example, if you created four messages, each message would be sent to twenty-five percent of your audience. In this way, you can test different content and designs for use in future messages.

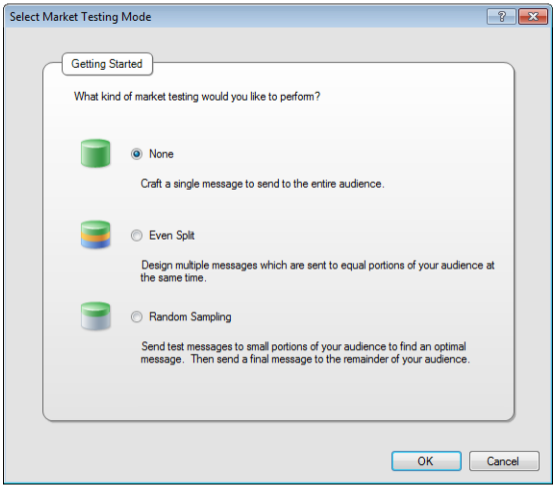
- **Random sampling**—This mode sends test messages to a percentage of the audience you specify. After the test messages are sent, you send a final message to remaining audience members. For example, you could send two messages to five percent of your audience each. After determining the most effective message, you would send a final message to any audience members who had not received a test message.

Important By default, the Invitation Message tab is set up without market testing. This means you create and send only one invitation message.

To activate market testing

1 On the Invitation Message tab of an open survey, click the information bar (just above the From address field) and select Change Market Testing Mode. The Select Market Testing Mode window opens.

Note You can also access this window on the Summary tab by clicking Change next to Market Testing.



2 To send test messages to equal portions of your audience, select the Even Split radio button. See [Creating messages in even split mode](#).

3 To send test messages to a percentage of your audience, select the Random Sampling radio button. See [Creating messages in random sampling mode](#).

4 To disable market testing, select the None radio button.

Note If you have created more than one test messages, the Select Message To Keep window opens asking you which message you want to use. You must select a message to keep before you can disable market testing.

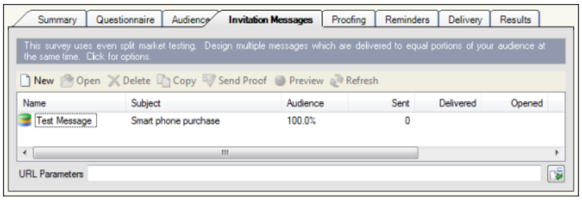
5 Click the OK button.

Creating messages in even split mode

When creating messages in even split mode, you define different message content and proofing options for each version of your message. Your audience is split evenly between the messages. The messages are sent at the same time and share delivery options.

To create messages in even split mode

1 From the Select Market Testing Mode window, select the Even Split radio button and click the OK button. The market testing page displays in even split mode.



By default, you send one test message to 100 percent of the audience. You can add additional messages, edit the messages, send proofs, or view results. From here, you can also see information about each message, described in the following table.

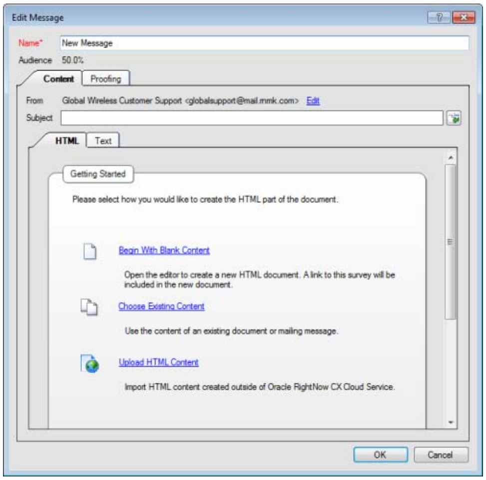
Table 519: Invitation Messages Description

Column	Description
Name	This column displays the name of the message.
Subject	This column displays the email's subject line for the message.
Audience	This column displays the percentage of the audience the message is sent to.
Sent	This column displays the number of emails sent with the message.

Table 519: Invitation Messages Description (Continued)

Column	Description
Delivered	This column displays the number of emails sent with the message that did not bounce.
Opened	This column displays the number of unique email recipients who opened the message.
Clicked	This column displays the number of unique email recipients who clicked a tracked link.
Unsubscribed	This column displays the number of email recipients who chose to unsubscribe from future emails. **Note:** Unsubscribe sets global opt-in in both Outreach and Feedback. See Inserting unsubscribe links.
Replied	This column displays the number of times the survey message was replied to.

2 Click the New button to add a second test message. The Edit Message window opens.



3 Type the name of the message in the Name field.

4 Type the subject of the message in the Subject field on the Content tab. See Customizing the invitation message in broadcast surveys.

5 Define any other content or formatting options you may want to test using either the HTML editor or the text editor on the Content tab. See Using the HTML editor and Creating and editing text.

6 To send a proof message, click the Proofing tab on the Edit Message window. See Sending a proof survey.

7 Click the OK button to save the message. The new message is added to the Invitation Messages tab.

8 To open a message for editing, select the message and click the Open button.

9 To delete a message, select the message and click the Delete button.

10 To copy a message to create another test message, select the message and click the Copy button.

Important A document is automatically created and stored in the Automatically Generated folder in the Documents explorer for every copy of a test message. Changes made to content in any of the copied test messages are not shared with the original test message or subsequent copies. See Automatically generated folders.

11 To send a proof of a message, select the message and click the Send Proof button. See Sending a proof survey.

12 To preview the content of a message, select the message and click the Preview button.

13 To refresh the message statistics, click the Refresh button.

14 To add URL parameters, type any parameters you want to append to the links in your message (for example, p1=v1&p2=v2) in the URL Parameters field.

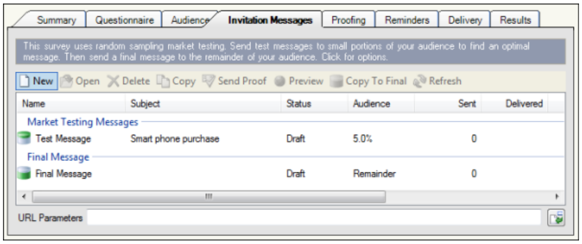
15 To add a merge field to the URL parameters, click the Merge Field button to the right of the URL Parameters field and select the field. See Inserting merge fields to URL parameters.

Creating messages in random sampling mode

You should use random sampling mode when you want to send a sample of test messages to your audience before determining the best one to use as a final message. When creating messages in random sampling mode, you define different message content, designs, delivery, and proofing options for each version of your message. Once you evaluate the effectiveness of your test messages, you can create a final message and send it.

To create messages in random sampling mode

1 From the Select Market Testing Mode window, select the Random Sampling radio button and click the OK button. The market testing page displays in random sampling mode.



By default, you send one test message to five percent of the audience, and one final message sent to the remainder of the audience. You can add additional messages, edit the messages, send proofs, or view results. From here, you can also see information about each message, described in the following table.

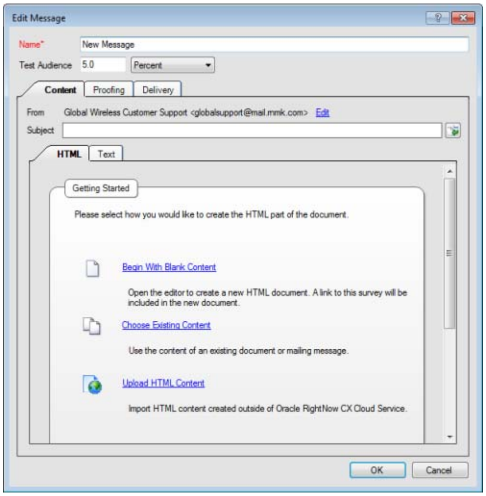
Table 520: Invitation Messages Description

Column	Description
Name	This column displays the name of the message.
Subject	This column displays the email's subject line for the message.
Status	This column displays the status of the message. See Survey delivery statuses.
Audience	This column displays the percentage of the audience the message is sent to.
Sent	This column displays the number of emails sent with the message.
Delivered	This column displays the number of emails sent with the message that did not bounce.
Opened	This column displays the number of unique email recipients who opened the message.
Clicked	This column displays the number of unique email recipients who clicked a tracked link.

Table 520: Invitation Messages Description (Continued)

Column	Description
Unsubscribed	This column displays the number of email recipients who chose to unsubscribe from future emails. **Note:** Unsubscribe sets global opt-in in both Outreach and Feedback. See Inserting unsubscribe links.
Replied	This column displays the number of times the survey message was replied to.

2 Click the New button to add a second test message. The Edit Message window opens.



3 Type the name of the message in the Name field.

4 Type the number or percentage of recipients you want to receive the message in the Test Audience field and select Percent or Recipients from the drop-down menu.

5 Type the subject of the message in the Subject field on the Content tab. See Customizing the invitation message in broadcast surveys.

6 Define any other content or formatting options you may want to test using either the HTML editor or the text editor on the Content tab. See Using the HTML editor and Creating and editing text.

7 To send a proof message, click the Proofing tab on the Edit Message window. See Sending a proof survey.

8 Click the Delivery tab on the Edit Message window to define the delivery options for the test message. See Accessing broadcast delivery options.

Note When sending multiple test messages, we recommend scheduling them to be sent all at one time rather than a few minutes apart. This minimizes any performance impact on your database by sharing audience segmentation processes across all of the sending cells instead of performing them multiple times.

9 Click the OK button to save the test message. The new message is added to the Invitation Messages tab.

10 To open a message for editing, select the message and click the Open button.

11 To delete a message, select the message and click the Delete button.

Note You cannot delete the final message.

12 To copy a message to create a new message, select the message and click the Copy button.

Important A document is automatically created and stored in the Automatically Generated folder in the Documents explorer for every copy of a test message. Changes made to content in any of the copied test messages is not shared with the original test message or subsequent copies. See Automatically generated folders.

13 To send a proof of a message, select the message and click the Send Proof button. See Sending a proof survey.

14 To preview the content of a message, select the message and click the Preview button.

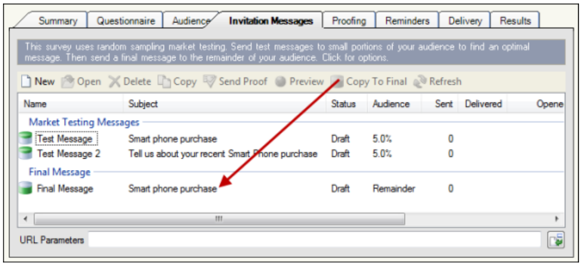
15 To refresh the message statistics, click the Refresh button.

16 To add URL parameters, type any parameters you want to append to the links in your message (for example, p1=v1&p2=v2) in the URL Parameters field.

17 To add a merge field to the URL parameters, click the Merge Field button to the right of the URL Parameters field and select the field. See Inserting merge fields to URL parameters.

18 Once you are satisfied with your message, you must copy it as your final message and then define delivery options.

a Select the message and click the Copy To Final button. The message you selected is copied to the Final Message section of the Invitation Messages tab.



b Select the final message and click the Open button.

c Click the Delivery tab on the Edit Message window to define delivery options.

Scheduling surveys for market testing

Market testing your surveys works best when you schedule the test messages at the same time rather than sending them a few minutes apart. By scheduling test messages at the same time, the database and servers only have to process data once instead of multiple times.

Sending a proof survey

An important step in creating a survey is proofing the content to ensure the survey is approved by the necessary contacts and staff members and as a final check for any mistakes. You can send a proof to any combination of staff accounts, staff groups, **proof lists**, **distribution lists**, and distribution list available addresses, and then view the results of the proof from the Proofing tab. See To add or edit a distribution list.

Once a reviewer has approved or rejected the proof, the survey's assigned staff member will receive a Survey Proof Response Notification. This notification can be customized using message templates and is found in the Administrator Notifications message type under the Feedback category. See Customizing messages.

Proof surveys are subject to the following behaviors and limitations.

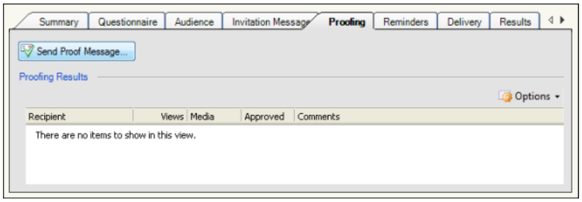
- If your message contains **conditional sections**, all conditional sections display in the proof message. However, reviewers see the conditional sections only if they can be mapped to contact records that allow access to those conditional sections.
- If a form on the proof contains an email address field and a reviewer submits a value for the field in the survey preview, a contact record is created or updated so that advanced survey functions can be tested. For this reason, be sure that your reviewers use only test contact addresses to avoid updating production contacts when testing survey proofs.
- To ensure the proofing process does not impact statistics once the survey has been sent, Feedback does not retain data submitted from proof surveys. If you want to submit test responses without impacting a survey's statistics, you can copy the survey and test using the copy instead.

Send proofs to key staff

When sending proofs, consider adding key members of your customer support, sales, and marketing teams. Sharing a sample of each mailing can help you ensure that all contact "touch points" (groups in your organization that work directly with customers) are aware of the messages being communicated to your customers. Providing a consistent message across all channels is key to providing a world-class customer experience.

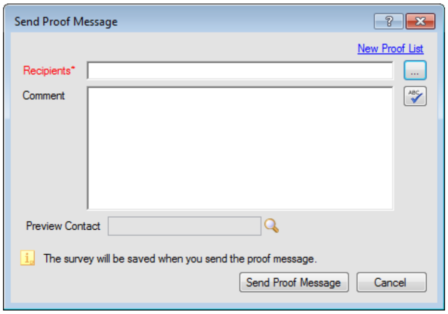
To send a proof

1 From an open survey, click the Proofing tab.



2 Click the Send Proof Message button to select proof recipients. The Send Proof Message window opens.

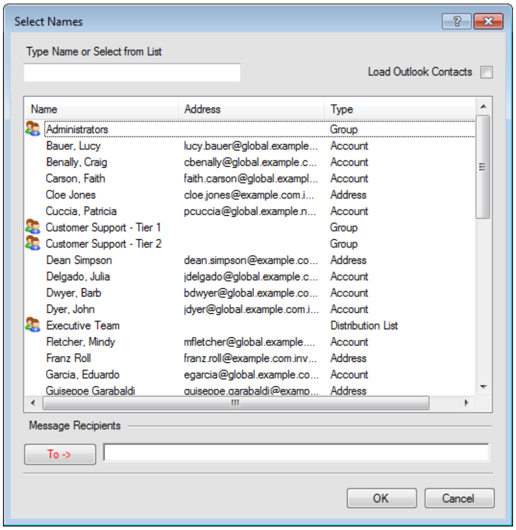
Note From the Summary tab, clicking Send Proof Message opens the Send Proof Wizard where you can select the survey you want to send for a proof, and then follow the wizard as it steps you through the process of sending your message.



3 To create a proof list, click New Proof List and refer to Adding contact lists.

4 Type an email address or the name of a group or proof list in the Recipients field.

5 To select proof recipients from a list, click the Select Recipients button (to the right of the Recipients field). The Select Names window opens.



a Select a staff member, address, group, or proof list and click the To button to add it to the To field.

b To find a specific staff member, address, group, or proof list, type the name in the text box above the list. The first item matching those letters is selected in the grid.

c To import your contacts from the default Contacts folder in Outlook, select the Load Outlook Contacts check box. This is useful for displaying contacts that are not included in Oracle Service Cloud. See Synchronizing contacts.

d Click the OK button to close the window.

6 Type any comments you want to appear in the message in the Comment text box.

7 To spell check the Comment field, click the Spell Check button (to the right of the Comment field) and refer to Spell checking.

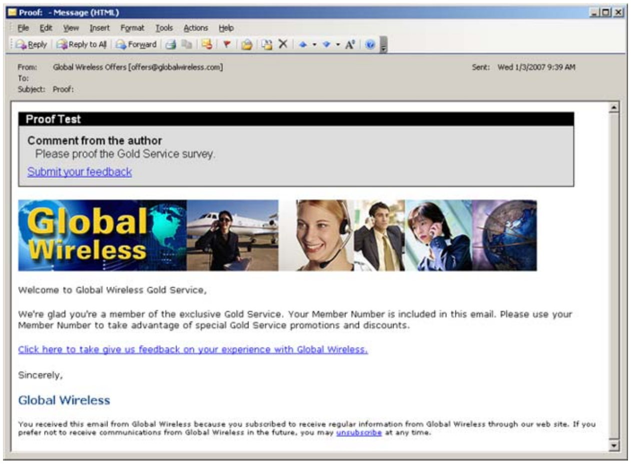
8 To customize your proof message by contact record, which lets your reviewers see how dynamic content will look for a specific contact, click the Search button next to the Preview Contact field on the bottom of the window. The Contact Search window opens.

a Type your search criteria in one or more of the available fields and click the Search button. A list of contacts that match your search criteria displays in the grid below the search criteria fields. You can then select a contact and click the Select button. The Contact Search window closes and the contact name you selected populates the Preview Contact field on the Send Message Proof window.

9 Click the Send Proof Message button send the proof message to the specified recipients.

Accepting or rejecting proof surveys

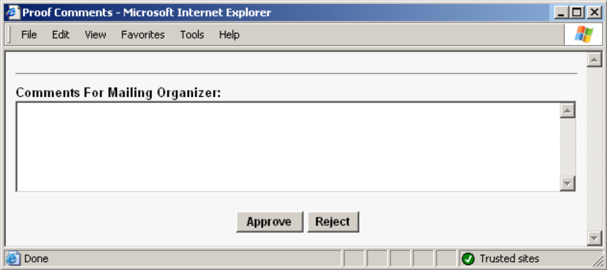
After you send a proof, the recipients can accept or reject the survey. The proof email automatically displays a link to a web page where the tester can accept or reject the survey. The following figure shows an email with the proof test link.



The survey's assigned staff member receives a Survey Proof Response Notification every time a reviewer submits feedback.

To accept or reject a proof email

1 In a proof email, click the Submit Your Feedback link. A new window opens where you can make comments and accept or reject the proof. The following figure shows the Proof Comments page.



2 Type any comments related to the proof survey in the Comments for Mailing Organizer text box.

3 To approve the survey, click the Approve button.

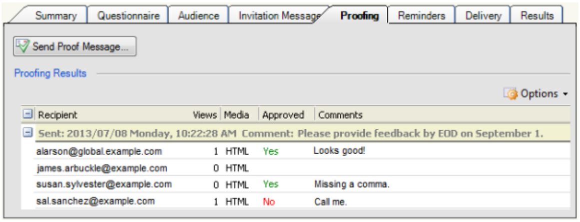
Or

To reject the survey, click the Reject button.

A message displays confirming your submission.

Viewing proof results

Once you have sent out the proof message, you can easily check the proof results from the Proofing tab. The Proofing Results section lists all message proofs that were previously sent for the selected survey, grouped by date and time. You can see how many times the proof was viewed, who accepted and rejected the proof, and any comments from the proof testers.



The columns in this section are described in the following table.

Table 521: Proofing Results Description

Column	Description
Recipient	This column displays all recipients of the proof survey.
Views	This column displays the number of times each recipient has viewed the message.
Media	This column displays the media the proof was sent in (HTML, text, or multipart).
Approved	This column displays whether each recipient approved the test proof (Yes or No).
Comments	This column displays the recipient’s comments.

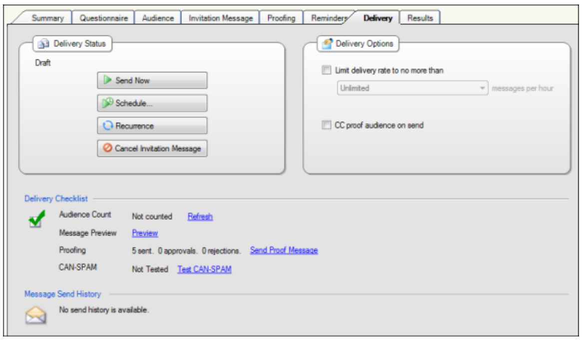
Accessing broadcast delivery options

After you have created the **questionnaire**, defined the audience, created an invitation message, and sent proofs of the survey, you can send the survey to your customers. The Delivery tab lets you choose to send the survey immediately or schedule its delivery for sometime in the future. In addition, you can control the speed of the delivery and access common administration tasks for the survey.

Note You must create a questionnaire before delivering the survey. See Creating questionnaires in basic mode.

To access broadcast delivery options

From an open survey, click the Delivery tab.



The Delivery tab is divided into sections. The Delivery Status section displays the status of the survey (see Survey delivery statuses) and contains buttons for controlling the sending of the survey. You can perform the following tasks from this section.

- **Send a survey**—See Sending surveys.
- **Schedule a survey**—See Scheduling surveys.
- **Unschedule a survey**—See Scheduling surveys.
- **Reschedule a survey**—See Scheduling surveys.
- **Set a recurring survey**—See Setting survey recurrence.
- **Suspend a survey**—See Suspending broadcast surveys.

- **Cancel a survey**—See [Canceling broadcast surveys].

Important Some high-volume sites are configured to send surveys from a **replication database** to reduce the impact of large processes on the **operational database**. Because the sync between the replication database and the operational database can occasionally fall behind, the **mailer daemon** (also called RNMD) uses a fail-safe function before sending to ensure that the replication database is caught up. If it is not, the survey is delayed until the replication database has been synchronized. The fail-safe function ensures that the survey reflects the current state of your production contact records (including those that are opted out or have email addresses marked as invalid) at the time the survey is sent. If you are uncertain whether your site uses the replication database to send surveys, contact support or your Oracle account manager.

The Delivery Options section lets you set options related to sending the survey. See Sending surveys.

On the bottom of the tab, delivery information about the survey is available for you to quickly scan and assess in the Delivery Checklist and Message Send History sections. The following table describes these sections.

Table 522: Delivery Sections Description

Section	Description
Delivery Checklist	This section displays the audience count and proof history and provides a link to preview the survey.
Audience Count	Once an audience count has been performed, this section displays the most recent count and the time and date it was performed. Click Refresh to perform an updated audience count. See Defining the broadcast survey audience. **Note:** Occasionally, the **replication database** used to process mailings can fall slightly behind the **operational database**. If the system determines that the replication contact data is not current, the audience count is labeled “Estimated.”
Message Preview	This section contains a link to preview the message that is sent with the survey. Click Preview to preview the message.
Proofing	This section displays a summary report of message proofs associated with the survey. Click Send Proof Message to send the message as a proof. See Sending a proof survey.

Table 522: Delivery Sections Description (Continued)

Section	Description
CAN-SPAM Compliance	This section contains a link to test the survey's compliance with the CAN-SPAM Act of 2003. If you have already tested CAN-SPAM compliance, the test results and a link to the details of the test display. See CAN-SPAM compliance in surveys.
Message Send History	This section displays a log of events relating to the delivery status of the survey. If the survey has not been sent, it is noted here.

Sending surveys

Broadcast surveys can be sent immediately from the Delivery tab. The status changes to Preparing to Send and then the survey is sent to your defined audience. Once the survey is finished sending, it is marked Completed.

To send a survey

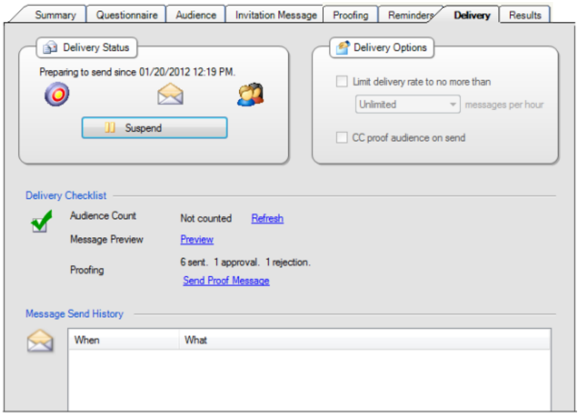
1 From the Delivery tab of an open survey, enter the following field information in the Delivery Options section.

Table 523: Delivery Options Section Description

Field	Description
Limit delivery rate to no more than x messages per hour	Select this check box to control the rate of delivery and then click the drop-down menu to select the number of emails to send per hour.
CC proof audience on send	Select this check box to copy the sent survey to your proof message recipients. The phrase "Proof Copy:" is prepended to the message subject. **Note:** Proof members may receive two messages if they are also part of the audience.

2 Click the Send Now button. A window opens asking you to confirm that you want to send the survey.

3 Click the Yes button to send the survey. The delivery status on the Delivery tab changes to Preparing to Send and you can see the delivery progress of the survey.



a When the survey is finished sending, the status changes to Completed and the Delivery Status section displays the number of emails sent and delivered.

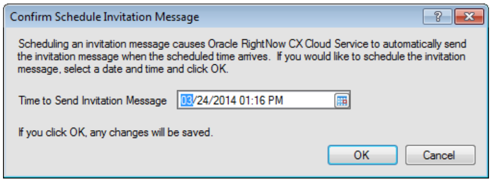
Scheduling surveys

You can schedule broadcast surveys to be sent on a specified date and time. This lets you coordinate sending a survey before the actual send date. For example, to send a survey that coincides with a product launch. Once scheduled, the survey automatically sends.

To schedule a survey

1 From the Delivery tab of an open survey, enter field information in the Delivery Options section. Click here for field descriptions.

2 Click the Schedule button. The Confirm Schedule Invitation Message window opens.



3 Type the date and time you want to send the survey or click the calendar (to the right of the Time to Send Invitation Message field) and select the date.

4 Click the OK button to save the schedule. The Delivery Status section displays the time and date the survey is scheduled to send.

5 To unschedule a survey without canceling it, click the Unschedule button. This way, the survey can be scheduled later.

6 To reschedule the survey, click the Reschedule button.

7 To cancel a survey schedule, click the Cancel Invitation Message button.

   a Click the OK button to confirm you want to cancel the invitation message.

Tip To edit or send a survey that has been canceled, first copy the survey and then edit or send the survey copy. See Canceling broadcast surveys.

Setting survey recurrence

Survey recurrence lets you send broadcast survey invitations at regular daily, weekly, monthly, or yearly intervals with a number of flexible options.

- You can schedule invitations to send during a specific date range, or set no end date to allow recurrences to run indefinitely.
- You can schedule invitations to send on specific days of the month or specific months of the year.
- You can send an invitation to each contact in your audience only once or include all matching contacts every time the recurrence is initiated.
- You can select the time of day that you want invitations to begin sending.

Note Occasionally, the **replication database** used to process surveys can fall slightly behind the **operational database**. If the system determines that the replication contact data is not current at the scheduled recurrence time, it waits until the data is appropriately synchronized before sending.

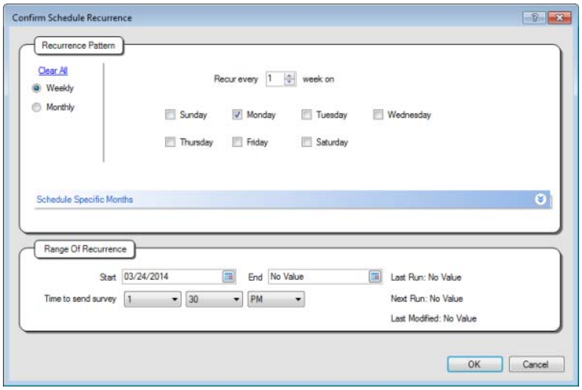
Before you set a recurring schedule, you must first define the audience and the invitation message subject and content. Once recurrence has been set, you can click the Suspend button to suspend recurrences. This saves the recurrence information so it can be edited or reactivated.

Information about past recurrences—such as the time last run, next scheduled run time, the time the schedule was last updated, and basic results data—is stored in the knowledge base and tracked in the Recurring Surveys Summary report (Public Reports > Feedback > Survey Performance). Also, each recurrence is tracked in the survey's **audit log** along with a description of how many invitations were sent. See Audit logs.

To add or edit a recurring schedule for a broadcast survey

1 From an open survey, click the Delivery tab.

2 Click the Recurrence button. The Confirm Schedule Recurrence window opens.



3 Enter the following field information.

Table 524: Confirm Schedule Recurrence Window Description

Field	**Description**
Recurrence Pattern	Select the weekly or monthly interval when the survey should be sent. For example, a survey could be sent every two weeks on Tuesday, or every month on the 7th and 19th.
Clear All	Click this text to clear all selected recurrence pattern check boxes.
Monthly	Select this radio button to display check boxes for the days of the month. You can then select the days of the month when the survey should be sent.
Weekly	Select this radio button to display check boxes for each day of the week. You can then select the check boxes next to the days when you want the survey to be sent. When you select this radio button, a Recur drop-down menu displays where you can specify the frequency of the weekly survey. For example, if you want to send a survey every week on the days selected, enter 1 in the field. If you want the survey to send every third week on the days selected, enter 3 in the field. This field accepts values from 1 to 99.

Table 524: Confirm Schedule Recurrence Window Description (Continued)

Field	Description
Schedule Specific Months	Click this header to display check boxes for the months of the year. Select the months during which the survey should send. By default, every month is selected, but if you do not want to send during a specific month, you can clear the check box for that month.
Clear All	Click this text to clear all check boxes for the selected months.
Range of Recurrence	Options in this section let you specify a date range for the recurrence and time of day at which the survey is sent.
Start	Enter the start and end dates of the schedule or click the calendars to select the dates. The current day is the default start date.
End	
Time to send survey	Enter the time of day to begin sending the survey.

4 Click the OK button to save the recurrence settings and return to the Delivery tab.

5 To suspend the recurrence, click the Suspend button. The Confirm Suspend window opens.

a Click the OK button to confirm you want to suspend the recurrence.

Note Once recurrence is suspended, you can click the Recurrence button again to edit or reactivate it.

6 To exclude contacts from the audience that were included in a previous instance of the recurrence, click the Audience tab and select the Exclude From Audience if Previously Sent check box.

Note By default, a recurring survey sends on every recurrence to every contact that matches your audience, even contacts who previously received an instance of the same message. If you want each contact to receive only one instance of a recurring survey, you must exclude contacts from the audience that were previously sent to. This is often helpful when sending a one-time offer—for example, to all contacts who are having a birthday in the next month.

Suspending broadcast surveys

You may want to stop sending a survey while it is sending or preparing to send. You can temporarily stop a survey from sending by suspending it.

To suspend a survey

1. From the Delivery tab of an open survey, click the Suspend button. This button appears only when a survey is in the process of sending. The Confirm Suspend message opens asking you to confirm that you want to suspend the survey.
2. Click the Yes button to confirm suspending the survey.

   The status changes to Suspended and the Delivery Status section displays the number of audience members the survey was already sent and delivered to.

Canceling broadcast surveys

You can cancel a survey invitation message at any time. When you cancel the survey invitation message, the survey is saved and you can still view survey results. However, the invitation message cannot be sent or further modified.

Important By default, a canceled survey can no longer be modified or sent. This ensures that you can accurately track the content you send your customers. You can, however, copy a canceled survey and then modify and send the copied survey.

Alternately, you can enable the RNM_MOD_SENT_DOCS configuration setting (Outreach and Feedback > General > Miscellaneous) to allow edits to documents that have been used in sent messages. Just be aware when you enable this setting, you will no longer be able to view the original content sent to your customers, and your reporting will not be as accurate.

To cancel a survey invitation message

1. From the Delivery tab of an open survey, click the Cancel Invitation Message button. The Confirm Cancel Invitation Message window opens asking you to confirm that you want to cancel the invitation message.
2. Click the Yes button to cancel the survey. The delivery status changes to Canceled.

Viewing survey results

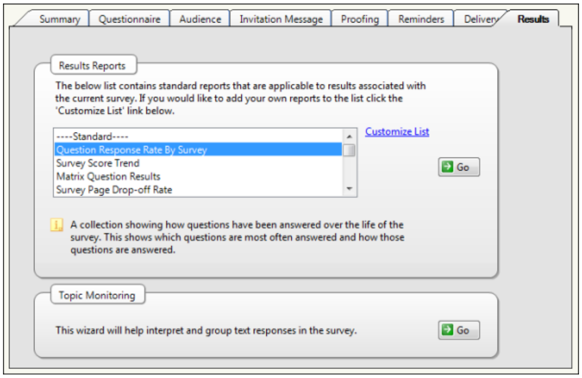
In addition to helping you create and send effective surveys, Feedback provides a comprehensive set of reports and monitoring tools to help you process and analyze the results. The Results tab displays a list of standard reports that present survey response data as well as information about the effectiveness of your survey invitation messages, such as total emails sent and delivered, survey link clicks, unsubscribes, **bounces**, and forwards. You can also track question response rates, survey reminder statistics, mobile survey trends, and trending information based on timeline. Other reports can be added to the list to provide more analytical options for your survey.

Important The email gateway must be activated in order for the **Techmail** utility to capture bounce data for analytics. See Email bounce handling.

Feedback also features topic monitoring for text responses in the survey. Topic monitoring helps you analyze text responses by grouping them into topics and identifying them by common keywords. See Topic monitoring.

To view survey results

1 From an open survey, click the Results tab.



2 Select a report from the Results Reports list.

Tip When you select a report, the report description displays in the area below the list to help you understand the purpose of the report.

3 Click the Go button. The report displays on the content pane in a new tab.

4 To view a definition of the report, including its tables, filters, and column descriptions, click the Definition button on the ribbon and select View.

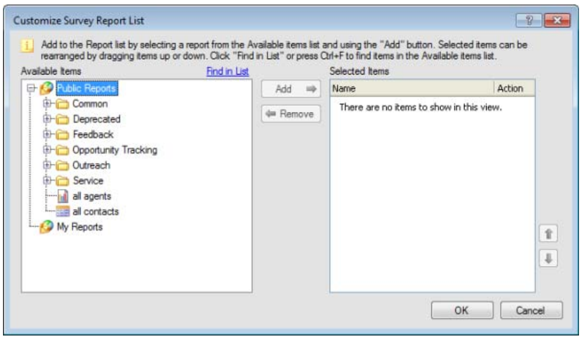
5 To view the same report for a different survey, select the survey from the Survey Name drop-down menu and click the Search button.

Customizing the survey report list

The survey reports list provides a set of useful standard reports that display results information about the survey you are editing. However, you can add or remove reports to customize the list.

To customize the survey report list

1 From the Results tab of an open survey, click Customize List next to the reports list. The Customize Survey Report List window opens.



2 To add a report to the survey report list, select a report from the Available Items list and click the Add button.

Or

Press **Ctrl** while selecting each report you want to add at the same time. You can also press **Shift** to select multiple consecutive reports.

3 To search for a report in the Available Items list, click Find In List and enter the name of the report you are looking for.

4 To remove a report from the survey report list, select the report in the Selected Items list and click the Remove button.

5 To rearrange the order of the reports you are adding, select a report in the Selected Items list and click the up or down arrow.

Tip You can also drag and drop reports to adjust their position.

6 Click the OK button to close the window and update the list. Added reports display at the bottom of the list.

Tracking transactional survey results by agent

Tracking which agent was assigned to the incident (or opportunity) at the time the transactional survey was sent is important for gauging agent success rates. The *question_sessions.acct_id* field is used to track this information, and is available when reporting on survey results. The account ID value *(acct_id*) is added directly to the Question Sessions *(question_sessions)* table. Because system processes can ultimately change the agent assignment at any point in its lifecycle, even after a related transactional survey is sent, this ensures that the agent the survey results are tied to are accurate.

When the survey is sent, the account ID for the related record is encrypted in the URL that is included in the survey's invitation message. When the survey is submitted, that account ID value is set in the *question_sessions.acct_id* field of the Question Sessions table. Since the account ID is included in the URL at the time the survey is sent, even if the agent assigned to the record changes between when the survey is sent and submitted, the account ID value submitted for the survey does not change from the send time value.

Note This functionality also applies to surveys popped at the end of a chat session. In this case, however, *question_sessions.acct_id* is based on the final agent assigned at the end of the chat session and is set when the survey is completed.

See Creating transactional surveys.

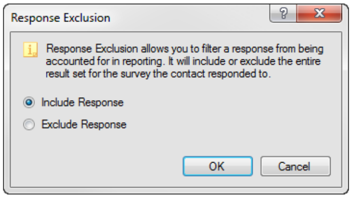
Excluding survey responses

If you find a survey response that is invalid—for example, a question appears to have been misunderstood or answered incorrectly—you can improve the accuracy of your data by excluding the response from your survey results. The following procedure describes how a response can be excluded from (or included back into) a survey results report.

Note When you exclude a survey response, you exclude all answers submitted by the contact during the entire survey response session. Excluded responses are not actually deleted from the system. Instead, the *question_sessions.ac_ignore* field is set to Yes, which excludes the response session from any reports that include this filter. For this reason, excluding (or including) a survey response affects its visibility across all reports that filter on the *question_sessions.ac_ignore* field.

To exclude or include a survey response

1 From an open survey results report, select the record from which you want to exclude a response and click the Response Exclusion button. The Response Exclusion window opens.



Note The Response Exclusion button is enabled only on reports with response data that list results.

2 To exclude the response from survey results, select the Exclude Response radio button.

3 Click OK.

4 To see your change reflected on your report, click the Refresh button on the ribbon.

Important Remember, when you exclude a survey response you exclude all answers submitted by the contact.

5 To include a previously excluded response back into the survey results, click the Search button on the ribbon.

   a Clear the No check box, select the Yes check box, and click Search. By changing your search criteria for response exclusions, you've changed the data that displays on the report. Now, all records that have responses excluded will display.
   b Click the Response Exclusion button on the ribbon. The Response Exclusion window opens with the Include Response check box selected.
   c Click OK.
   d To see the responses added back into your report, click the Search button on the ribbon and change your Response Exclusion criteria from Yes to No.
   e Click Search. All records that are set to "Include Response," including those that had previously been excluded, now display.

Important This feature does not work when cross tabbing is used in the report or if the report displays data from multiple responses in a single row.

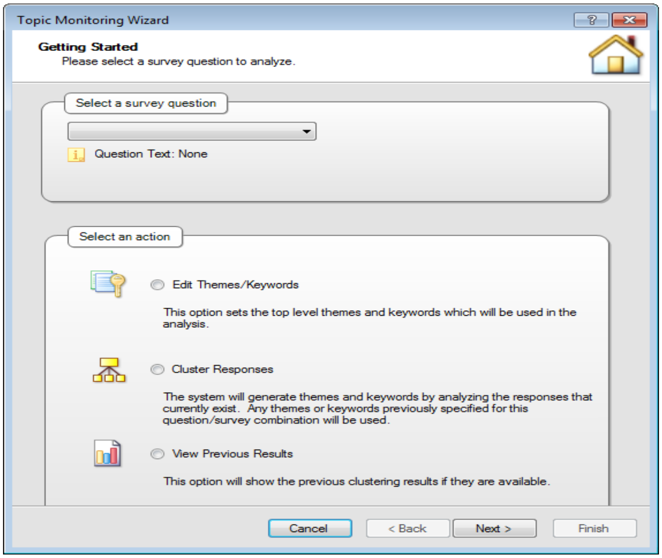
Topic monitoring

Text responses often provide the most valuable information received from customers. However, text responses can be more difficult to analyze than multiple choice questions that can be counted and included in graphs. A useful approach for analyzing text responses is to group responses containing similar content and look for emerging themes. Since the process of clustering (grouping responses and identifying themes) can be time consuming and tedious, Feedback can automatically perform this task, providing an easy method to spot trends in text responses to your survey questions.

Topic monitoring lets you view the distribution of responses across themes and drill down into themes or sub-themes to read individual responses. Themes are accessed through the survey Results tab and the topic monitoring report in Analytics.

To cluster text responses

1 In the Topic Monitoring section on the Results tab, click the Go button. The Topic Monitoring Wizard opens.



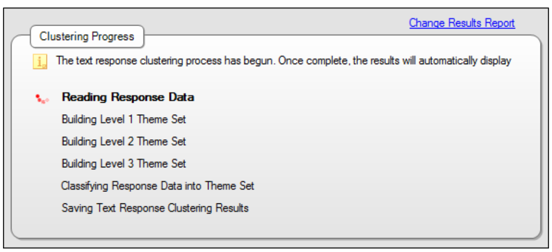
2 Select a question from the Select a Survey Question drop-down menu. The question text appears below the menu.

Note In order to be clustered, the question you select must have received at least ten responses.

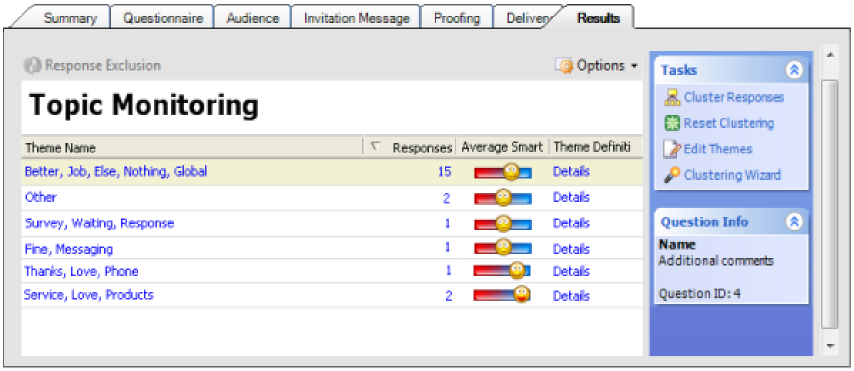
3 Select the Cluster Responses radio button. See [Editing themes](#).

4 To view recent cluster results without re-clustering, select View Previous Results and refer to the Topic Monitoring Report Description table below.

5 Click the Finish button. The Topic Monitoring Wizard closes and the Clustering Progress section displays on the Results tab.



When clustering is complete, the resulting themes display on the Results tab.



The following table describes the topic monitoring report after clustering.

Table 525: Topic Monitoring Report Description

Field	Description
Report Fields	Topic monitoring results include the following information.
Theme Name	This column displays the keywords that identify the theme or the name specified for the theme. Click the theme name to drill down into sub-themes, if they exist.
Responses	This column displays the number of text responses included in the theme. Click this number to drill down into the report and view a list of the text answers.
Average SmartSense	This column displays the average **SmartSense** rating for the text responses included in the theme.
Theme Definition	Click Details to view the top keywords for the theme and the theme type.
Change Results Report	Click this text to return to the default Results tab.
Tasks	Use the buttons in this section to cluster responses, reset clustering, edit themes, and open the Topic Monitoring Wizard.
Cluster Responses	Click this button to recluster the responses using your customized themes.

Table 525: Topic Monitoring Report Description (Continued)

Field	Description
Reset Clustering	Click this button to recluster the responses without using your customized themes. **Note:** Your custom themes are retained. However, they cannot be used during this clustering session.
Edit Themes	Click this button to edit the themes used in clustering. See [Editing themes](#).
Clustering Wizard	Click this button to open the Topic Monitoring Wizard and cluster responses for a different question.
Question Info	This section displays the name and Question ID of the selected question.

Editing themes

If you want to create your own themes based on specific words, you can customize the keywords that determine the themes used during clustering by editing themes. You can edit themes through the Topic Monitoring Wizard or from the Results tab displaying response themes for a question. You can edit suggested themes or create new ones. During the clustering process, the themes you create are emphasized more than automatically generated themes.

To edit themes

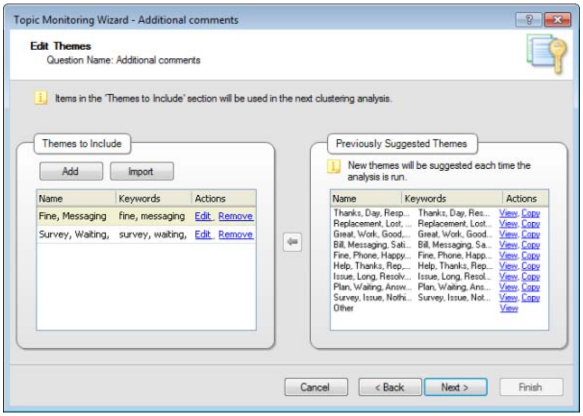
1. In the Topic Monitoring section on the Results tab, click the Go button. The Topic Monitoring Wizard opens.

   Or

   Click the Edit Themes button in the Survey Tasks section on the Results tab that displays response themes for a question.

   Note Response themes are only displayed after clustering has finished and there are at least ten question responses for the survey.

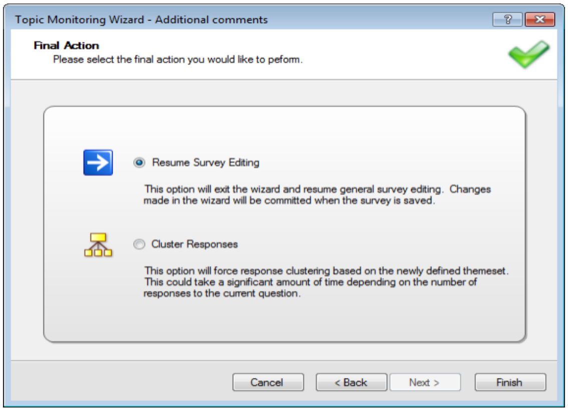
2. Select a question from the Select a Survey Question drop-down menu. The question text appears below the menu.
3. Select the Edit Themes/Keywords radio button on the Getting Started window of the Topic Monitoring Wizard and click the Next button. The Edit Themes window opens.



The Edit Themes window is divided into two sections: Themes to Include and Previously Suggested Themes. The Themes to Include section displays a list of themes that are used in clustering. You can also add and import themes through this section. See Working with themes.

The Previously Suggested Themes section displays a list of themes that were created during the clustering process. Suggested themes change each time responses are clustered. However, you can prevent a suggested theme from being automatically modified by moving it to the Themes to Include section. See Working with themes.

4 When you are done editing themes, click the Next button. The Final Action window opens.



5 To close the Topic Monitoring Wizard and return to the survey without clustering responses, select the Resume Survey Editing radio button.

Or

To cluster responses and return to the survey, select the Cluster Responses radio button.

Note If you select the Resume Survey Editing radio button, changes made to themes are saved, but responses are not clustered. The next time you cluster responses, your themes are applied.

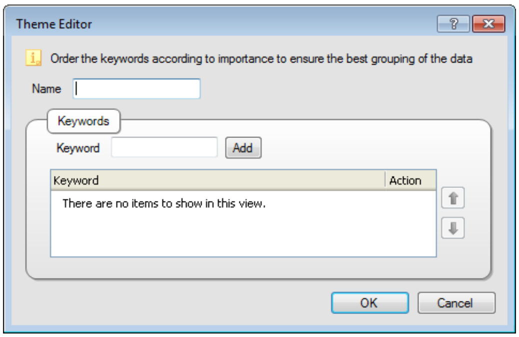
6 Click the Finish button.

Working with themes

When editing themes, you can perform actions on existing themes, add custom themes, and import themes from existing survey questions. For the procedure to edit themes, see Editing themes.

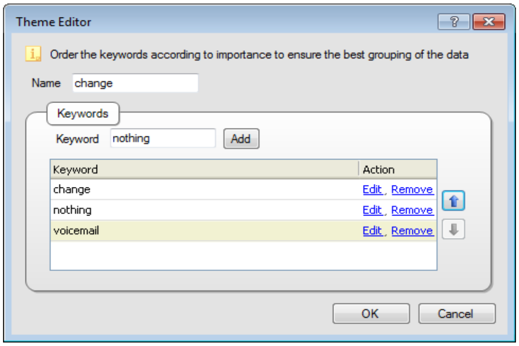
To add custom themes

1 Click the Add button in the Themes to Include section. The Theme Editor opens.



2 Type a name for the theme in the Name field.

3 In the Keyword field, type a keyword that you want associated with this theme and click the Add button. The keyword appears in the Keyword list.



Note Multiword keywords are not supported by the topic monitor. If multiple words are entered for a single keyword value, only the first word will be used. If the resulting outcome produces too many matches that are irrelevant to your search, try adding other keywords that relate to an appropriate subset of your topic. For example, adding the multiword phrase "customer experience" as a keyword will produce the same effect as adding the single keyword "customer" and the word "experience" will be ignored. For a more accurate result set, add keywords "customer" and "experience" separately.

4 To edit a keyword, click Edit next to the keyword.

5 To remove a keyword from the list, click Remove next to the keyword.

6 To move a keyword up or down in the list, use the up and down arrows to the right of the keyword list.

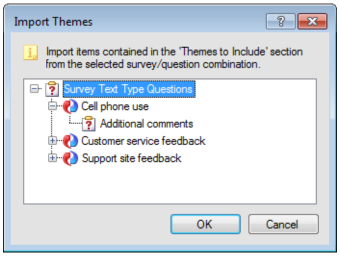
Note When responses are clustered, the keywords at the top of the list are considered more important than the keywords at the bottom of the list.

7 Click the OK button.

To import themes

1 Click the Import button in the Themes to Include section. The Import Themes window opens.

Note Only questions that have been clustered or have custom themes display in the tree.

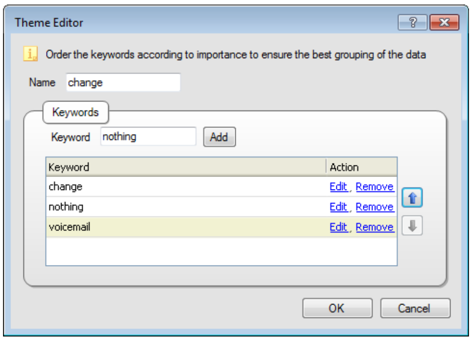


2 Select a question from the tree and click the OK button. The imported themes appear in the Themes to Include section.

Note All themes included with the question are imported. You can edit or delete them after the import. Suggested themes are not imported.

To edit a theme

1 Click Edit next to the theme in the Themes to Include section. The Theme Editor opens.



2 To edit a keyword, click Edit next to the keyword.

3 To remove a keyword from the list, click Remove next to the keyword.

4 To move a keyword up or down in the list, use the up and down arrows to the right of the keyword list.

Note When responses are clustered, the keywords at the top of the list are considered more important than the keywords at the bottom of the list.

5 Click the OK button to save your changes.

To view a suggested theme

Click View next to the theme in the Previously Suggested Themes section. The View Theme window opens.

To include a suggested theme

Click Copy next to the suggested theme in the Previously Suggested Themes section. The suggested theme appears in the Themes to Include section.

Or

Select a theme and click the left arrow between the Themes to Include and Previously Suggested Themes sections.

Adding stopwords

After clustering your text responses, you might find that commonly used words appear as topics. If you want to remove words from the clustering process to prevent them from being used as topics, you can add the words to the stopword list *exclude_responses.txt*. You can access the *exclude_responses.txt* file from the File Manager. See Wordlist files.

Note When adding stopwords to the list, you must specify all forms of the word that you want to exclude. For example, if you do not want “phone” or “phones” used as topics, you must add them both to the list.

Best practices for topic monitoring

The best practices for topic monitoring varies depending on your goals. However, general practices can be applied in all situations to help you find the information you are looking for.

1 **Cluster responses**—**Cluster** responses before you add stopwords or customize themes. See Topic monitoring.

2 **Review themes**—Review the predefined themes and sub-themes to determine if they are satisfactory. Look for common words that you think might be breaking your themes into smaller, less definitive clusters. Also look for certain words that you think might be useful in creating distinctive, useful themes.

3 **Add stopwords**—If you determine that there are common words that do not contribute to the creation of distinctive clusters, add them to the stopword list. See Adding stopwords.

Note The stopwords you add are applied to all the responses you cluster.

4 **Add custom themes**—If you determine that there are certain words that can help create distinctive, useful themes, add a custom theme containing these keywords. See To add custom themes.

Tip Custom themes are most helpful in creating distinctive clusters when they use synonyms. For example, a theme containing the word “software” should also contain the words “application” and “program.” If you find that a word is often misspelled, you can include the common misspelling as a keyword.

5 **Cluster responses again**—Cluster the responses again and, if necessary, repeat the previous steps of reviewing themes, adding stopwords, and adding custom themes until you are satisfied with the resulting themes.

Tip If you use these steps and get results that are less satisfactory than the predefined themes, reset clustering by clicking the Reset Clustering button in the Tasks section of the Results tab. Any custom themes you created are retained, but they are not used in the clustering session.

Creating transactional surveys

Transactional surveys let you survey customers when an event occurs. When a transactional survey is triggered, the system sends your customer an email message that links to a survey on a web page. You can send the email as part of a campaign or as a part of a contact, opportunity, incident, or chat rule. For example, when an incident is closed, a rule can send a survey to the incident's **primary contact** to find out how satisfied the contact was with your customer service.

The following sections describe how transactional surveys are used across Oracle Service Cloud.

- For information about using transactional survey attributes in campaigns, see Editing Transactional Survey attributes.
- For information about tracking transactional survey results by agent, see Tracking transactional survey results by agent.
- For information about using transactional surveys in rules, see Choosing actions.

To create a transactional survey

1 From the Surveys explorer, click the New button on the ribbon. A new survey opens on the content pane.

Tip You can also create surveys from an open survey by clicking the New button. Additionally, if your navigation set is configured to add surveys from the file menu, click File and select Surveys > Survey. See To configure the file menu.

2 Click Transactional Survey.

By default, the Summary tab is active. From here, you can review general information about the survey in the At a Glance section, as well as manage the survey's notes, tasks, and attachments. As you create the survey, you move through each tab to complete the survey's elements.

3 To assign the survey to another staff member (by default, the survey is assigned to the staff member who creates it), click the Assigned drop-down menu and select the staff member.

a To search for a staff member, type the staff member's name in the Find field.

Tip Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.

4 To let customers answer the survey anonymously, select the Allow Anonymous check box. Contact information is not required.

Note Selecting Allow Anonymous in your survey does not mean that all responses will be anonymous. If a survey invitation is sent to a contact or an Oracle Service Cloud cookie is detected on the contact's computer, or the survey itself contains an email address field, Feedback attempts to use that information to identify the contact.

5 Click the text in the At a Glance section described in the following table to perform common survey functions.

Table 526: At a Glance Section Description

Field	Description
Invitation Method	This field displays the invitation method currently selected for the survey. Click Change to change the method and refer to To change the invitation method of a survey.
Survey Status	This field displays whether the survey is active or inactive. Customers cannot submit responses to an inactive survey and receive a warning message when attempting to access the survey URL. See To deactivate a survey.
Expiration Date	This field displays the survey's expiration date and time. By default, no expiration date is set. See To set an absolute expiration date and To set a relative expiration date.
Expiration Max Responses	This field displays the number of responses a survey can accept. If set, this field also displays the number of responses received, as well as the number of surveys that are still allowed. The maximum number of survey responses you can define is one million. See To set expiration based on maximum number of responses.

Table 526: At a Glance Section Description (Continued)

Field	Description
Expiration Message	Click Edit to customize the survey's expiration message. See To customize the expiration message. **Note:** If you do not define your own survey expiration message, the system's default message is used.
Questionnaire	This field displays how many pages and questions are in the survey. Click Preview Survey to preview the survey.
Responses	This field displays how many surveys were started and completed by customers.
Market Testing	This field displays the market testing mode of the survey. Click Change to change market testing modes. See Market testing in transactional surveys.
Proofing	This field displays the number of proofs that have been sent, approved, and rejected. Click Send Proof Message to send a proof. See Sending a proof survey.
Delivery Status	This field displays the delivery status of the survey and the number of emails sent and delivered. See Survey delivery statuses.
Rule Visibility	Select which rules the survey can be used in. For example, select the Incidents check box if you want this survey available in an incident rule. You can select from contact, opportunity, incident, and chat rules.

6 Click the Questionnaire tab to add questions and HTML content to the survey. See Creating questionnaires in basic mode and Creating questionnaires in advanced mode.

7 Click the Audience tab to define an audience for the survey. See Defining the transactional survey audience.

8 Click the Invitation Message tab to create the message sent to the survey audience. See Customizing the invitation message in broadcast surveys.

9 Click the Proofing tab to send a proof of the message for internal review before sending it to the entire audience. See Sending a proof survey.

10 Click the Reminders tab to create automatic email messages that will prompt your customers either to start taking the survey or to finish it if they have already started. See Adding survey reminders.

11 Click the Delivery tab to select delivery options. See Accessing transactional delivery options.

12 To view the reports associated with the survey, click the Results tab. See Viewing survey results.

13 To preview the survey as it would be viewed on a standard web device, such as a desktop or a laptop, click the Standard button on the ribbon. The survey preview opens in a web browser.

Note If a survey contains an email address field and you submit a value for the field in the survey preview, the form creates or updates contact records so that advanced survey functions can be tested. For this reason, be sure to use only test contact addresses to avoid updating production contacts when testing survey previews.

Also, be careful not to use the preview survey URL in place of the URL of your completed survey (described in the following step). Information submitted on a preview survey is discarded and has no effect on the data collected by the live survey. For identification purposes, each preview survey displays a watermark to ensure it is not confused with a live survey.

14 To preview the survey as it would be viewed from a mobile device, click the Mobile button on the ribbon. See Mobile surveys.

Note Mobile preview is a limited, browser-based preview that gives you a general idea of how your survey might look on a smaller device when you are designing your survey from your desktop. With that in mind, always test your surveys on applicable mobile devices and browsers before you launch them.

15 To copy the URL of the survey to your clipboard, click the Survey URL button on the ribbon. The Survey URL message opens.

A URL is automatically assigned to the survey. This is the URL that your invitation message links to and your customers visit to complete the survey. From this window, you can view the URL and it is automatically copied to your workstation's clipboard.

a Click the OK button when you are finished viewing the URL to close the window.

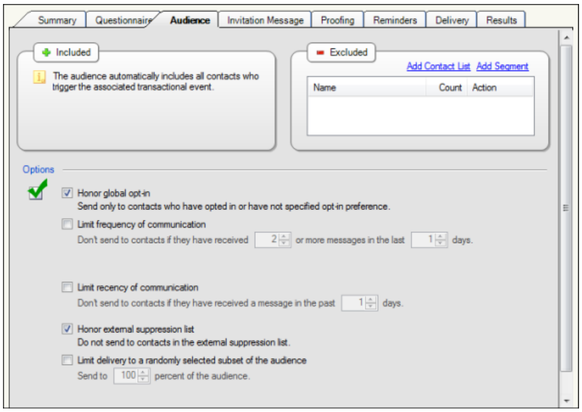
16 Click the Save and Close button to save the survey.

Defining the transactional survey audience

Even though your rules and campaigns determine which contacts receive the survey, you still need to define certain audience options if you want to exclude specific contacts or configure opt-out and external suppression list settings. You can also set survey frequency and recency limits to narrow your audience. See Audiences for complete details and procedures about using contact lists and segments in surveys and mailings.

To define the audience

1 In the open survey, click the Audience tab.



Note The audience for a transactional survey automatically includes all contacts who trigger the associated transactional event. For that reason, you can select only who is excluded from the survey, not who is included in it. You can exclude a total of fifty contact lists and segments, each containing a vast number of contacts.

2 To exclude a list from the audience, click Add Contact List in the Excluded section. The Select Contact List window opens.

a To add a contact list, click New Contact List and refer to Adding contact lists.

b Select the list you want to exclude from the survey's audience and click the OK button. The list is added to the Excluded grid. Contacts belonging to the list do not receive the survey.

3 To exclude a segment from the audience, click Add Segment in the Excluded section. The Select Segment window opens.

   a To add a segment, click New Segment and refer to Creating segments.

   b Select the segment you want to exclude from the survey's audience and click the OK button. The segment is added to the Excluded grid. Contacts belonging to the segment do not receive the survey.

4 To edit a list or segment that is excluded from the survey, click Open next to the list or segment name. See To add a contact list and To create a segment.

5 To remove a list or segment from the Excluded section, click Remove next to the list or segment name.

6 Enter the following field information in the Options section.

Table 527: Options Description

Field	Description
Honor global opt-in	Select this check box to send the survey to contacts who did not explicitly opt out of receiving surveys and mailings. Clear this check box to send the survey to all contacts in the audience, regardless of their opt-in preference.
Limit frequency of communication	Select this check box to set a frequency limit and then enter a maximum number of surveys and mailings and a number of days in which contacts can receive messages before they are excluded from surveys. When the survey is launched, it is not sent to any contacts who have received the maximum number of surveys and mailings within the designated time period. The minimum you can enter is two in the last one day. **Note:** The minimum you can enter is 2 in the last 1 day. The maximum number of days you can enter is 90. **Tip:** To ensure contacts receive only 1 email every "x" number of days, use the Limit recency of communication setting described next.

Table 527: Options Description (Continued)

Field	Description
Limit recency of communication	Select this check box to set a recency limit. Enter the minimum number of days that should elapse before contacts receive another email. When the survey is launched, it is not sent to any contacts who have received a survey or mailing email in the past specified number of days. **Note:** The maximum number of days you can enter is 90. The default value is 1 day. **Tip:** Use this check box to ensure contacts receive only one email every "x" number of days. For instance, if you want your contacts to receive only one email per week, you can select this check box and then set the field to seven.
Honor external suppression list	Select this check box to exclude contacts in the external suppression list from receiving the survey. Clear this check box to send the survey to all contacts in the audience, even if they are in the external suppression list. See External Suppression List for complete details and procedures about the external suppression list.
Limit delivery to a randomly selected subset of the audience	Select this check box to send the survey to a random subset of the audience. Type a percentage or use the up and down arrows to select a percentage of the audience to send the survey to.
Allow delivery of messages to multiple contacts sharing the same email address	**Caution:** Because duplicate messages sent to a single address are a common characteristic of spam, you should select this check box only when necessary. When the check box is selected and you attempt to schedule or send a mailing, survey, or proof, and duplicate email addresses exist in your audience, a message warns you that your reputation as a bulk email sender may be adversely affected and impact your ability to send future communications. See *Best Practices for Email Marketing*. Select this check box to send messages to multiple contacts sharing the same email address. If this check box is cleared, the message is sent only to the contact most recently updated. This option is available only when email address sharing is enabled. See Email address sharing.

Customizing the invitation message in transactional surveys

From the Invitation Message tab, you can activate **market testing** and specify the mailbox settings for the mailing, the subject of the email, and any URL parameters you want to attach to links in the message. In addition, you can create either plain text or HTML messages from scratch, from existing content, or by uploading HTML from another site.

Creating an invitation message follows the same procedure as creating an invitation message in a broadcast survey. See Customizing the invitation message in broadcast surveys.

Important By default, a transactional survey that has been launched or canceled can no longer be modified or sent. This ensures that you can accurately track the content you send your customers. You can, however, suspend a launched survey's invitation message, make edits, and then relaunch it. See To suspend a survey. For a canceled survey, you can copy it, and then modify and send the copy. See To cancel a survey invitation message.

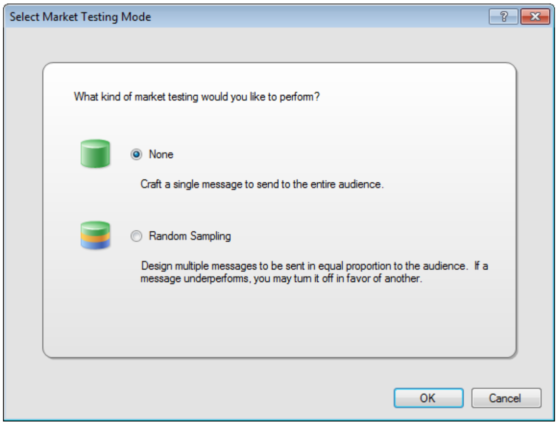
Alternately, you can enable the RNM_MOD_SENT_DOCS configuration setting (Outreach and Feedback > General > Miscellaneous) to allow edits to documents that have been used in sent messages. Just be aware when you enable this setting, you will no longer be able to view the original content sent to your customers, and your reporting will not be as accurate.

Market testing in transactional surveys

When creating a transactional survey, you can test different formats on equal portions of your audience. If more than one invitation message is created when market testing is used, then contacts sent the email through a campaign or rule are sent one of the invitation messages. All emails have an equal number of recipients. In other words, when the survey is **launched** through a campaign, it rotates between invitation messages.

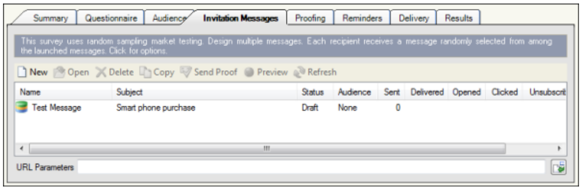
To activate market testing

1 On the Invitation Message tab of an open survey, click the information bar and select Change Market Testing Mode. The Select Market Testing Mode window opens.



2 Select the Random Sampling radio button.

3 Click the OK button. The market testing page displays in random sampling mode.



By default, you send one test message to 100 percent of the audience. You can add additional messages, edit the messages, send proofs, or view results. From here, you can also see information about each message, described in the following table.

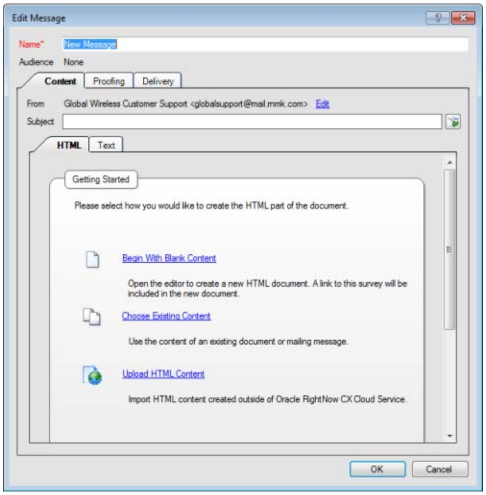
Table 528: Invitation Messages Description

Column	Description
Name	This column displays the name of the message.
Subject	This column displays the email's subject line for the message.
Status	This column displays the delivery status of the message. Refer to Survey delivery statuses.
Audience	This column displays the percentage of the audience the message is sent to.

Table 528: Invitation Messages Description (Continued)

Column	Description
Sent	This column displays the number of emails sent with the message.
Delivered	This column displays the number of emails sent with the message that did not bounce.
Opened	This column displays the number of unique email recipients who opened the message.
Clicked	This column displays the number of unique email recipients who clicked a tracked link.
Unsubscribed	This column displays the number of email recipients who chose to unsubscribe from future emails. **Note:** Unsubscribe sets global opt-in in both Outreach and Feedback. See Inserting unsubscribe links.
Replied	This column displays the number of times the survey message was replied to.

4 Click the New button to add a second test message. The Edit Message window opens.



5 Type the name of the message in the Name field.

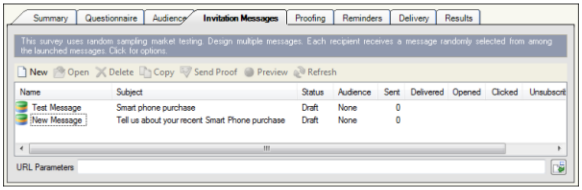
6 Type the subject of the message in the Subject field on the Content tab. See Customizing the invitation message in transactional surveys.

7 Define any other content or formatting options you may want to test using either the HTML editor or the text editor on the Content tab. See Using the HTML editor and Creating and editing text.

8 To send a proof, click the Proofing tab on the Edit Message window. See Sending a proof survey.

9 Click the Delivery tab on the Edit Message window to access delivery options for the test message. See Accessing transactional delivery options.

10 Click the OK button to save the message. The new message appears on the Invitation Messages tab.



11 To open a message for editing, select the message and click the Open button.

12 To delete a message, select the message and click the Delete button.

13 To copy a message to create a new message, select the message and click the Copy button.

Important A document is automatically created and stored in the Automatically Generated folder in the Documents explorer for every copy of a test message. Changes made to content in any of the copied test messages are not shared with the original test message or subsequent copies. See Automatically generated folders.

14 To send a proof, select the message and click the Send Proof button. See Sending a proof survey.

15 To preview the content of a message, select the message and click the Preview button.

16 To refresh the message statistics, click the Refresh button.

17 To add URL parameters, type any parameters you want to append to the links in your message (for example, p1=v1&p2=v2) in the URL Parameters field.

18 To add a merge field to the URL parameters, click the Merge Field button to the right of the URL Parameters field and select the field. See Inserting merge fields to URL parameters.

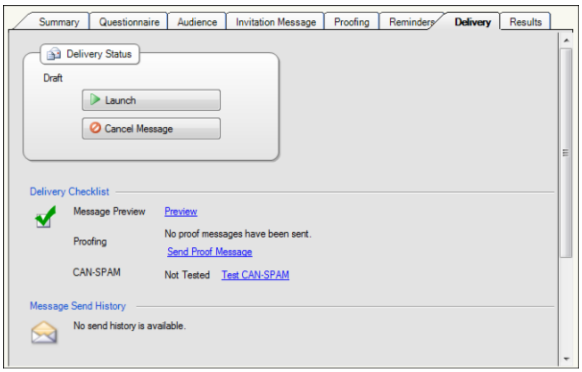
Accessing transactional delivery options

After you have created the **questionnaire**, defined the audience, created an invitation message, and proofed the survey, you can launch the survey so you can send the survey in rules and campaigns. From the Delivery tab, you can launch, suspend, or cancel the survey, as well as access common administration tasks and see the send history.

Note You must create a questionnaire before delivering the survey. See Creating questionnaires in basic mode.

To access transactional delivery options

From an open survey, click the Delivery tab.



The Delivery tab is divided into sections. The Delivery Status section displays the status of the survey (see Survey delivery statuses) and contains buttons for controlling the sending of the survey. You can perform the following tasks from this section.

- **Launch a survey**—See Launching surveys.
- **Suspend a survey**—See Suspending transactional surveys.
- **Cancel a survey**—See Canceling transactional surveys.

On the bottom of the tab, delivery information about the survey is available for you to quickly scan and assess. The following table describes the Delivery Checklist and Message Send History sections.

Table 529: Delivery Sections Description

Section	Description
Delivery Checklist	This section displays the audience count and proof history and provides a link to preview the survey.
Message Preview	This section contains a link to preview the message that is sent with the survey. Click Preview to preview the invitation message.
Proofing	This section displays a summary report of message proofs associated with the survey. Click Send Proof Message to send the message as a proof. See Sending a proof survey.
CAN-SPAM Compliance	This section contains a link to test the survey's compliance with the CAN-SPAM Act of 2003. If you have already tested CAN-SPAM compliance, the test results and a link to the details of the test display. See CAN-SPAM compliance in surveys.
Message Send History	This section displays a log of events relating to the delivery status of the survey. If the survey has not been sent, it is noted here.

Launching surveys

Transactional surveys must be launched before they can be used in rules or campaigns. Once you launch a survey, the status changes to Launched. From the Launched status, you can suspend the survey's invitation message or cancel it.

Important By default, a launched transactional survey can no longer be edited. This ensures that you can accurately track the content you send your customers. You can, however, suspend the survey's invitation message, make edits, and then relaunch it. See Suspending transactional surveys.

Alternately, you can enable the RNM_MOD_SENT_DOCS configuration setting (Outreach and Feedback > General > Miscellaneous) to allow edits to documents that have been used in sent messages. Just be aware when you enable this setting, you will no longer be able to view the original content sent to your customers, and your reporting will not be as accurate.

To launch a survey

1 From the Delivery tab of an open survey, click the Launch button. A window opens asking you to confirm that you want to launch the survey.

2 Click the Yes button to launch the survey. The delivery status on the Delivery tab changes to Launched and you can see how many surveys were sent and delivered.

Important Some high-volume sites are configured to send surveys from a **replication database** to reduce the impact of large processes on the **operational database**. Because the sync between the replication database and the operational database can occasionally fall behind, the **mailer daemon** (also called RNMD) uses a fail-safe function before sending to ensure that the replication database is caught up. If it is not, the survey is delayed until the replication database has been synchronized. The fail-safe function ensures that the survey reflects the current state of your production contact records (including those that are opted out or have email addresses marked as invalid) at the time the survey is sent. If you are uncertain whether your site uses the replication database to send surveys, contact support or your Oracle account manager.

Suspending transactional surveys

You may want to stop sending a survey after it has already been launched. You can temporarily stop a survey from sending by suspending it.

To suspend a survey

1 From the Delivery tab of an open survey, click the Suspend button. This button appears only when a survey has been launched. The Confirm Suspend message appears asking you to confirm that you want to suspend the survey.

2 Click the Yes button to confirm suspending the survey.

The status changes to Suspended and the Delivery Status section displays the number of audience members the survey was already sent and delivered to.

Canceling transactional surveys

You can cancel a survey invitation message at any time. When you cancel a survey invitation message, the survey is saved and you can still view survey results. However, the survey invitation message cannot be launched again.

Important By default, a canceled survey can no longer be modified or sent. This ensures that you can accurately track the content you send your customers. You can, however, copy a canceled survey and then modify and send the copied survey.

Alternately, you can enable the RNM_MOD_SENT_DOCS configuration setting (Outreach and Feedback > General > Miscellaneous) to allow edits to documents that have been used in sent messages. Just be aware when you enable this setting, you will no longer be able to view the original content sent to your customers, and your reporting will not be as accurate.

To cancel a survey invitation message

1 From the Delivery tab of an open survey, click the Cancel Invitation Message button. The Confirm Cancel Invitation Message window opens asking you to confirm that you want to cancel the invitation message.

2 Click the Yes button to cancel the survey. The delivery status changes to Canceled.

Creating website link surveys

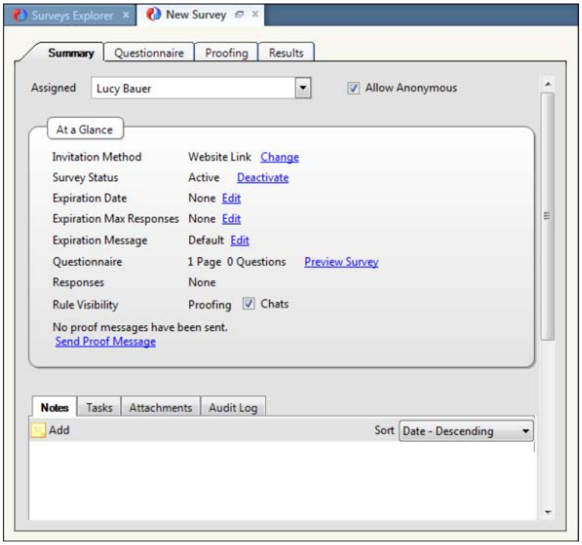
You can create website link surveys when you do not need to email a link to the survey or target a specific set of contacts. Website link surveys are published as a web page and can be linked to from any source. For example, you could create a survey that is linked to from the shopping cart on your website. Because website link surveys are posted as a web page, you do not need to define an audience or invitation message, or send or launch the survey. Once you save the survey, it is available on the web and can be linked to from your outside source.

To create a website link survey

1 From the Surveys explorer, click the New button on the ribbon. A new survey opens on the content pane.

Tip You can also create surveys from an open survey by clicking the New button. Additionally, if your navigation set is configured to add surveys from the file menu, click File and select Surveys > Survey. See To configure the file menu.

2 Click Website Link.



By default, the Summary tab is active when creating a website link survey. From here, you can review general information about the survey in the At a Glance section, as well as manage the survey's notes, tasks, and attachments (see Managing surveys). As you create the survey, you move through each tab to complete the survey's elements.

3 To assign the survey to another staff member (by default, the survey is assigned to the staff member who creates it), click the Assigned drop-down menu and select the staff member.

a To search for a staff member, type the staff member's name in the Find field.

Tip Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.

4 To remove the ability of customers to answer the survey anonymously, clear the Allow Anonymous check box.

Note Selecting Allow Anonymous in your survey does not mean that all responses are anonymous. If a survey invitation is sent to a contact or an Oracle Service Cloud cookie is detected on the contact's computer, or the survey itself contains an email address field, Feedback attempts to use that information to identify the contact.

5 Click the text in the At a Glance section described in the following table to perform common survey functions.

Table 530: At a Glance Section Description

Field	Description
Invitation Method	This field displays the invitation method currently selected for the survey. Click Change to change the method and refer to To change the invitation method of a survey.
Survey Status	This field displays whether the survey is active or inactive. Customers cannot submit responses to an inactive survey and receive a warning message when attempting to access the survey URL. See To deactivate a survey.
Expiration Date	This field displays the survey's expiration date and time. By default, no expiration date is set. See To set an absolute expiration date.
Expiration Max Responses	This field displays the number of responses a survey can accept. If set, this field also displays the number of responses received, as well as the number of surveys that are still allowed. The maximum number of survey responses you can define is one million. See To set expiration based on maximum number of responses.

Table 530: At a Glance Section Description (Continued)

Field	Description
Expiration Message	Click Edit to customize the survey's expiration message. See To customize the expiration message. **Note:** If you do not define your own survey expiration message, the system's default message is used.
Questionnaire	This field displays how many pages and questions are in the survey. Click Preview Survey to preview the survey.
Responses	This field displays how many surveys were started and completed by customers.
Proofing	This field displays the number of proofs that have been sent, approved, and rejected. Click Send Proof Message to send a proof. See Sending a proof survey.
Rule Visibility	Clear the Chats check box to make this survey unavailable as an action in a chat rule. **Note:** Rule Visibility only displays if Chat is enabled.

6 Click the Questionnaire tab to add questions and HTML content to the survey. See Creating questionnaires in basic mode.

7 Click the Proofing tab to send a proof of the survey for internal review before sending it to the entire audience. See Sending a proof survey.

Tip The email that is sent from the Proofing tab for website link surveys uses the Survey Proof message template. You can customize this message template from the Message Templates editor. For complete details and procedures about customizing templates, see Message Templates.

8 To view the reports associated with the survey, click the Results tab. See Viewing survey results.

9 To preview the survey as it would be viewed on a standard web device, such as a desktop or a laptop, click the Standard button on the ribbon. The survey preview opens in a web browser.

10 To preview the survey as it would be viewed from a mobile device, click the Mobile button on the ribbon. See Mobile surveys.

Note Mobile preview is a limited, browser-based preview that gives you a general idea of how your survey might look on a smaller device when you are designing your survey from your desktop. With that in mind, always test your surveys on applicable mobile devices and browsers before you launch them.

11 To copy the URL of the survey to your clipboard, click the Survey URL button on the ribbon. The Survey URL message opens.

The system automatically assigns a URL to the survey. This is the URL that you link to from outside of Oracle Service Cloud. From this window, you can view the URL and it is automatically copied to your workstation's clipboard.

a Click the OK button when you are finished viewing the URL to close the window.

12 Click the Save and Close button to save the survey.

Creating polling surveys

Polling surveys display as a question on a **customer portal** page or any page that is external to the customer portal, such as a "Poll of the Day." Polling surveys offer a unique way to engage your customers by asking them a single question, and then using their responses to gauge your business activities.

After customers submit their response, they see a poll results chart or a thank-you message, depending on the question type used in the polling survey. Question types include **text**, **choice**, and **matrix**. Any of these question types can be used, although the choice question type may be the most useful in a polling survey. It is also the only question type that presents customers with a results chart.

Customers are presented with only a single question. If you activate more than one question in a polling survey, then one active question is randomly selected to display to customers for a one-hour time period. Every customer who is offered the poll during that hour sees the same question. At the end of an hour, a new active question is selected at random.

Since polling surveys allow anonymous responses, if customers are not logged in, they can still respond to the survey. If customers are logged in, their responses to the survey question are associated with their contact record.

Because polling surveys are posted to a customer portal page or an external web page, you do not need to define an audience or invitation message, or send or launch the polling survey.

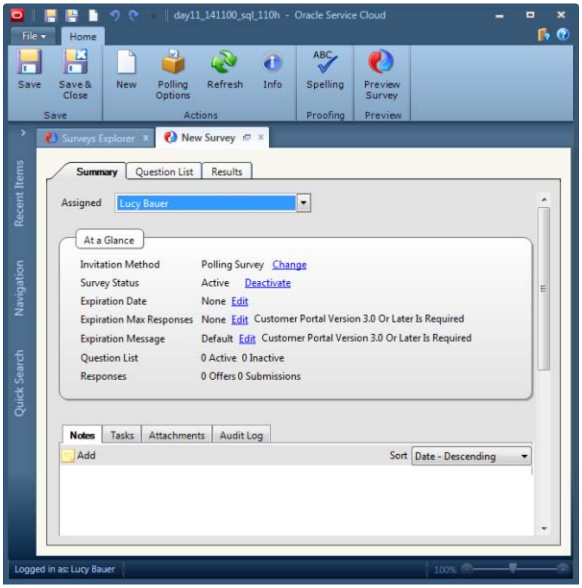
Note Polling surveys are associated with polling **widgets**—either a Polling widget or a PollingSyndication widget. Widget attributes and styling options are defined in the customer portal. See Offering customers a survey.

To create a polling survey

1 From the Surveys explorer, click the New button on the ribbon. A new survey opens on the content pane.

Tip You can also create surveys from an open survey by clicking the New button. Additionally, if your navigation set is configured to add surveys from the file menu, click File and select Surveys > Survey. See To configure the file menu.

2 Click Polling Survey.



By default, the Summary tab is active. From here, you can review general information about the polling survey in the At a Glance section, as well as manage the polling survey's notes, tasks, attachments, and audit log. As you create the polling survey, you move through each tab to complete the polling survey's elements.

3 To assign the polling survey to another staff member (by default, the survey is assigned to the staff member who creates it), click the Assigned drop-down menu and select the staff member.

   a To search for a staff member, type the staff member's name in the Find field.

Tip Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.

4 Click the text in the At a Glance section described in the following table to perform common polling survey functions.

Table 531: At a Glance Section Description

Field	Description
Invitation Method	This field displays the invitation method currently selected for the survey. Click Change to change the method. See To change the invitation method of a survey. **Note:** Once a polling survey is submitted by a customer, you cannot change the method.
Survey Status	This field displays whether the polling survey is active or inactive. See To deactivate a survey.
Expiration Date	This field displays the polling survey's expiration date and time. By default, no expiration date is set. See To set an absolute expiration date.

Table 531: At a Glance Section Description (Continued)

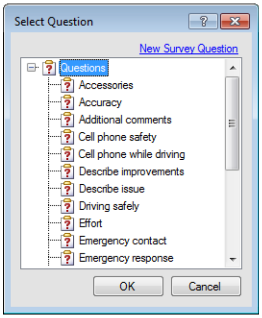
Field	Description
Expiration Max Responses	This field displays the number of responses a survey can accept. If set, this field also displays the number of responses received, as well as the number of surveys that are still allowed. The maximum number of survey responses you can define is one million. See To set expiration based on maximum number of responses. **Important:** This field works only on sites using Customer Portal Framework Version 3.0 or later.
Expiration Message	Click Edit to customize the survey's expiration message. See To customize the expiration message. If you do not define your own survey expiration message, the system's default message is used. **Important:** This field works only on sites using Customer Portal Framework Version 3.0 or later.
Question List	This field displays how many active and inactive questions are in the polling survey. The system supports a maximum of 100 questions. **Note:** There must be at least one active question in the polling survey.
Responses	This field displays how many polling surveys were offered to and submitted by customers.

5 Click the Question List tab to add questions to the polling survey.

You can either add existing questions or create new questions. Keep in mind, if more than one question is used in a polling survey, one question is randomly selected to display to customers for a one-hour time period. Every customer who is offered the poll during that hour sees the same question. At the end of an hour, a new question is selected at random.

Tip Since all questions are stored in the same place, questions are shared across the different survey types.

6 Click the Add Question button. The Select Question window opens.



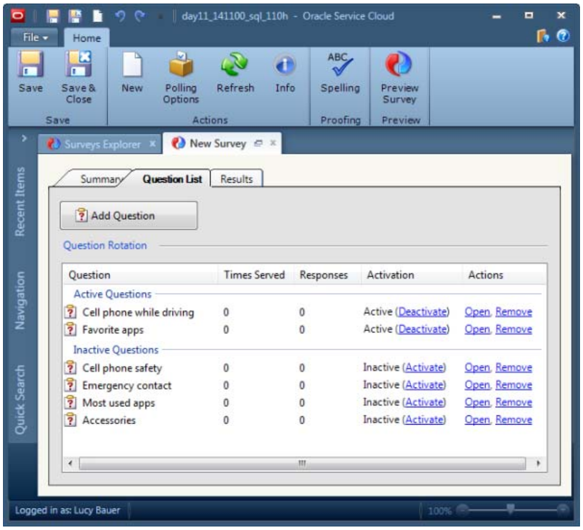
7 To add an existing question, double-click the question you want to add. The question appears in the Active Questions list.

8 To add a new question, click the Add Question button, and then click New Survey Question.

a To create a text question, complete steps 2–11 in To create a text question.
b To create a choice question, complete steps 2–12 in To create a choice question.
c To create a matrix question, complete steps 2–11 in To create a matrix question.

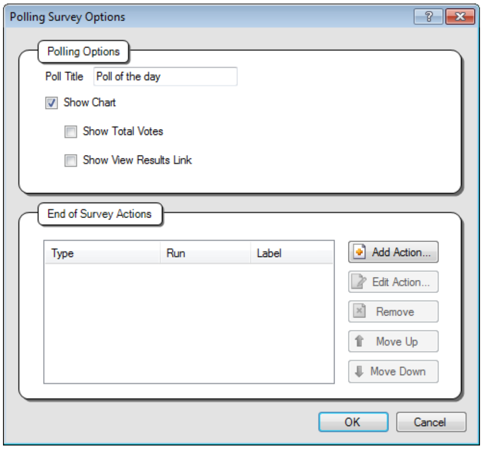
Important The Display Options button, which lets you define HTML properties for all question types, may be affected by widget styling attributes defined in the customer portal. See HTML properties in polling surveys.

You can also activate and deactivate questions, open questions for editing, and remove questions from the questions list. Questions with results cannot be removed, but they can be deactivated.



Important Questions can be edited after they have been created, even if they have been used in a polling survey. Keep in mind that if you edit a question, those changes appear immediately in any polling survey that uses the question. For this reason, if you want to preserve the integrity of the data returned by the original question, we recommend creating a new question rather than editing the existing question.

9 To define polling survey options, click the Polling Options button on the ribbon.



- **a** To define the polling survey title that displays on the web page, type it in the Poll Title field.
- **b** To let respondents see the polling survey's results chart on the web page, select the Show Chart check box.
- **c** To display the polling survey's total number of votes on the web page, select the Show Total Votes check box.
- **d** To display polling survey results to all web page visitors, even if they have not responded to the poll, select the Show View Results Link check box.
- **e** To define what happens after customers submit a polling survey, click the Add Action button in the End of Survey Actions section. You can also edit, remove, and reorder actions. End of survey actions are handled the same way as end of survey options in broadcast and transactional surveys. See Specifying end of survey options.

Important In order for an end of survey action to work from an external page, the customer portal needs to associate the customer with a contact record. Therefore, the customer must be logged in to the customer portal site, or you must implement open login or pass-through authentication (PTA) functionality. See Customer portal open login.

10 To spell check the polling survey, click the Spelling button on the ribbon.

11 To preview the polling survey, click the Preview Survey button on the ribbon.

The polling survey preview lets you see specific questions and switch between views. See Enabling and configuring modal polls.

Tip Since polling surveys are not accessible through a link, you can't send a proof of your polling survey to anyone. So previewing and spell checking your polling survey are important steps in your process.

12 Click the Results tab to view the reports associated with the polling survey.

a Select a question and click the Go button. The question's results display in a web browser.

Tip If your polling survey uses a text question, you can use **topic monitoring** to group the text responses containing similar content so that you can look for emerging themes. See Topic monitoring.

13 Click the Save and Close button to save the polling survey.

When you save the polling survey, a survey ID is assigned that must be associated to the polling widget in the customer portal. See Configuring polling widgets.

❖ Offering customers a survey

❖ Configuring polling widgets

HTML properties in polling surveys

While the steps for defining HTML properties for a polling survey are the same as all other survey types, there is one exception that you need to be aware of. Style precedence depends on the HTML tags defined in the customer portal. If the customer portal web designer uses the `!Important` tag in the **widget** styling attributes, those styles take precedence over the HTML properties you define in the polling survey by clicking the Display Options button on the ribbon of the New Question window. For customer portal widget styling attributes, see Chart attributes.

- To define HTML properties for a text question, see steps 5–7 in To create a text question.
- To define HTML properties for a choice question, see steps 6–8 in To create a choice question.
- To define HTML properties for a matrix question, see steps 5–7 in To create a matrix question.

❖ Chart attributes

Creating questionnaires in basic mode

The questionnaire is the main part of a **broadcast**, **transactional**, and **website link** survey. It consists of a set of questions you want your customers to answer. You must create a questionnaire for these types of surveys. From the Questionnaire tab, you have all the tools you need to create a dynamic HTML survey. You can add your own content, along with new and previously created questions.

In your survey, you can add multiple pages to your questionnaire. This can help break up the survey into manageable chunks. Customers see only questions on one page before proceeding to the next page.

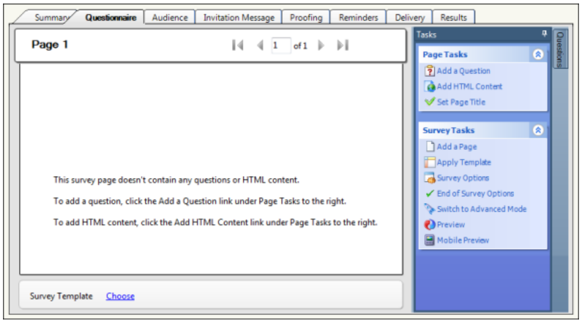
You can create the questionnaire in either basic or advanced mode. In basic mode, you can design multi-page questionnaires in a straightforward interface focused mainly on your survey presentation. In advanced mode, you can design a flow diagram to present questionnaires, set criteria for survey branches, and trigger automated actions such as sending notifications, setting fields, and creating opportunities and incidents.

The following procedure describes how you can create a questionnaire in basic mode. See Creating questionnaires in advanced mode for the procedure for creating a questionnaire in advanced mode.

Note Questionnaires do not apply to **polling surveys** because polling surveys use a list of questions instead of questionnaires. See Creating polling surveys.

To create a questionnaire in basic mode

1 In an open survey, click the Questionnaire tab.



The Questionnaire tab is divided into sections. The main section shows the page you are editing and displays the current content and questions in the questionnaire. When you create a questionnaire, this section is blank. If there is more than one page in the questionnaire, you can scroll through the pages using the arrows at the top of this section.

On the right side are buttons for the tasks you can perform on the questionnaire, such as adding a question. The Survey Tasks section contains buttons for the tasks you can perform on the entire survey. The Page Tasks section contains buttons for the tasks you can perform on the specific page of the questionnaire you are working on. You can also right-click in the main section to select from the most common tasks.

2 Click a button in the Page Tasks section described in the following table.

Table 532: Page Tasks Description

Button	Description
Add a Question	Click this button to add a question to the questionnaire. See Adding questions.
Add HTML Content	Click this button to add HTML content to the questionnaire. See Using the HTML editor.
Set Page Title	Click this button to change the title of the page from the default "Page <page number>." See Setting the page title.
Delete Page	**Caution:** Deleting a page cannot be undone. Click this button to delete the page you are on and all of its content. **Note:** This button is available only when the questionnaire contains more than one page.

3 Click a button in the Survey Tasks section described in the following table.

Table 533: Survey Tasks Description

Button	Description
Add a Page	Click this button to add a page to the questionnaire. Customers see only one page at a time when responding to the survey. When a page is added, the arrows at the top of the main section are activated and you can scroll through the pages of your questionnaire to add questions and content.

Table 533: Survey Tasks Description (Continued)

Button	Description
Organize Pages	Click this button to organize pages in the questionnaire. See Organizing pages. **Note:** This button is available only when the questionnaire contains more than one page.
Apply Template	Click this button to select a template to form the HTML in the questionnaire. See Selecting a template. **Note:** Templates are created through the **Content Library**. See Creating templates.
Survey Options	Click this button to set survey options, such as font attributes, progress indicators, button properties, cookie options, and optimization for mobile devices. See Specifying survey options.
End of Survey Options	Click this button to set options that determine what happens when the survey is submitted. See Specifying end of survey options.
Switch to Advanced Mode	Click this button to create your questionnaire in advanced mode. See Creating questionnaires in advanced mode. **Note:** You must save the survey before you can switch to advanced mode. If you do not save the survey before you click this button, a message prompts you to save.
Preview	Click this button to preview your survey in a web browser.
Mobile Preview	Click this button to see how your survey looks on a mobile device. **Note:** Mobile preview is a limited, browser-based preview that gives you a general idea of how your survey might look on a smaller device when you are designing your survey from your desktop. With that in mind, always test your surveys on applicable mobile devices and browsers before you launch them.

4 To select a template to use in the questionnaire, click Choose next to Survey Template at the bottom of the content pane. See Selecting a template.

Note If a template is already being used in the questionnaire, its name displays in this section. You can change templates or clear the content of the template from the questionnaire.

Basic mode ribbon

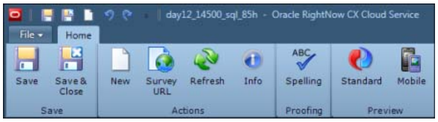


Table 534: Basic Survey Ribbon Description

Group/Button	Description
Save	
Save	Click this button to save the survey and keep it open for editing.
Save and Close	Click this button to save the survey and close it.
Actions	
New	Click this button to create a new survey.
Survey URL	Click this button to view the survey's URL. The URL is automatically copied to your clipboard so you can easily paste it into your browser.
Refresh	Click this button to reload the survey reports.
Info	Click this button to view identifying data about the survey, including the survey ID, date the survey was created and updated, staff member who created and updated the survey, interface ID, flow ID, and mailing ID.
Proofing	
Spelling	Click this button to spell check the survey invitation message.
Preview	
Standard	Click this button to preview your survey in a web browser as it would be viewed from a standard web device, such as a desktop or a laptop.

Table 534: Basic Survey Ribbon Description (Continued)

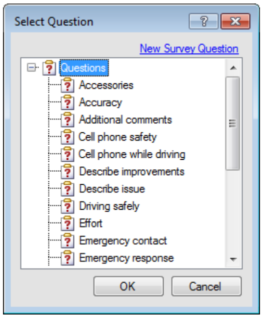
Group/Button	Description
Mobile	Click this button to see how your survey looks on a mobile device. **Note:** Mobile preview is a limited browser-based preview that gives you a general idea of how your survey might look on a smaller device. With that in mind, always test your surveys on applicable mobile devices and browsers before you launch them.

Adding questions

Adding questions is the most important part of creating your survey. You can add any questions already in Feedback or create questions as needed.

To add a question to a survey

1 Click the Add a Question button in the Page Tasks section. The Select Question window opens.



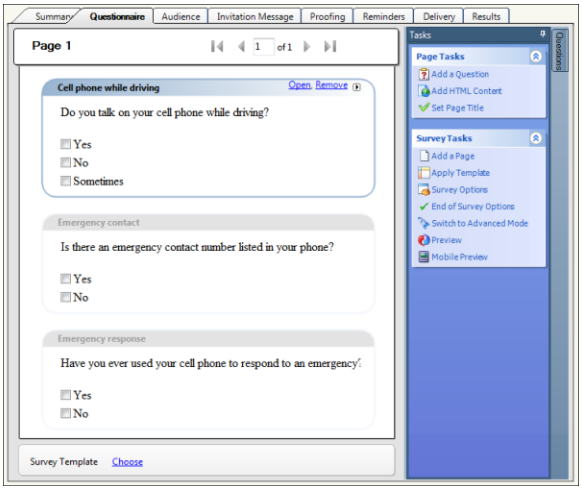
Tip You can also add questions by hovering over the Questions tab to the right of the Page Tasks section and then dragging a question from the list to the survey page.

To make the Questions section easier to access, you can dock it to the Questionnaire tab by clicking the Auto Hide button at the top of the Questions section.

2 To add an existing question, select it from the list and click OK or double-click the question.

Tip To add multiple questions at once, press the **Ctrl** key while selecting each question you want to add. When you drag multiple questions to the survey page, they are added in the order in which they were selected.

3 To create a new question, click New Survey Question. A window opens where you can create a question. Once you save the new question, it appears in the questions list. See Creating questions.

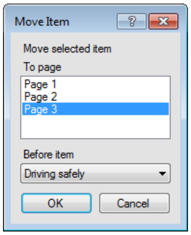


4 To reorder questions on the page, drag each question to its new position.

5 To open a question for editing, click Open.

6 To remove a question from the survey page, click Remove.

7 To move the question to another page of a multi-page questionnaire, click the arrow next to Remove and select Move. The Move Item window opens.



a Select a destination page from the list.
b Click the Before Item drop-down menu to select the question you want the moved question to come before.
c Click the OK button to move the question to the specified location.

Setting the page title

You can change the title of the page you are editing from the default “Page <page number>.” The page title displays in the title bar of the web browser when the survey is taken.

To set the page title

1 In your open questionnaire, click the Set Page Title button in the Page Tasks section. The Set Page Title window opens.

2 Type the name of the page in the Title field. This field must contain a value.

3 Click the OK button to save the page title and close the window.

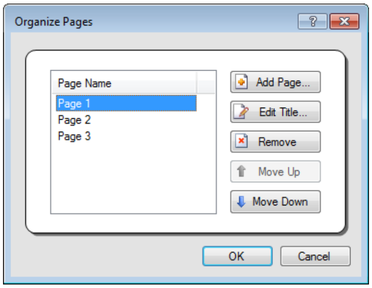
Organizing pages

If you have more than one page in your questionnaire, you can organize the pages by reordering, deleting, or adding pages. You can also edit the page titles to change what displays to customers in the title bar of their web browser.

Note The system automatically creates a document for each page created in a questionnaire and stores it in the Automatically Generated folder in the Documents explorer. When you update a page in the questionnaire, those changes are also made to the automatically generated copy. See Automatically generated folders.

To organize questionnaire pages

1 In your open questionnaire, click the Organize Pages button in the Survey Tasks section. The Organize Pages window opens and displays a list of the pages in your questionnaire.



2 To add a page, click the Add Page button. A page is added to the bottom of the list.

3 To edit a page title, select the page you want to edit and click the Edit Title button. See Setting the page title.

4 To delete a page from the questionnaire, select the page you want to delete and click the Remove button. The page and all of its contents are deleted.

Caution Deleting a page cannot be undone.

5 To move a page up one position, select the page and click the Move Up button.

6 To move a page down one position, select the page and click the Move Down button.

Tip You can also drag and drop pages to adjust their position.

7 Click the OK button to save your changes and close the window.

Selecting a template

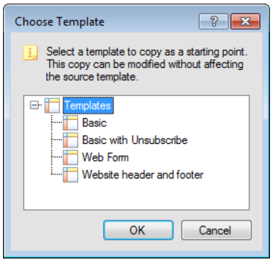
You can use a template to add HTML above and below the content and questions in your questionnaire. Templates are created through the **Content Library**. See Creating templates.

To select a template

1 In your open questionnaire, click the Apply Template button in the Survey Tasks section.

Or

Click Choose next to Survey Template at the bottom of the content pane. The Choose Template window opens.



2 Select the template you want to use and click the OK button. The template is applied to your questionnaire and the name of the template appears in the Survey Template section.

Note To clear a template from your survey, click the Clear Template button on the Choose Template window, or click Clear next to Survey Template on the bottom of the content pane.

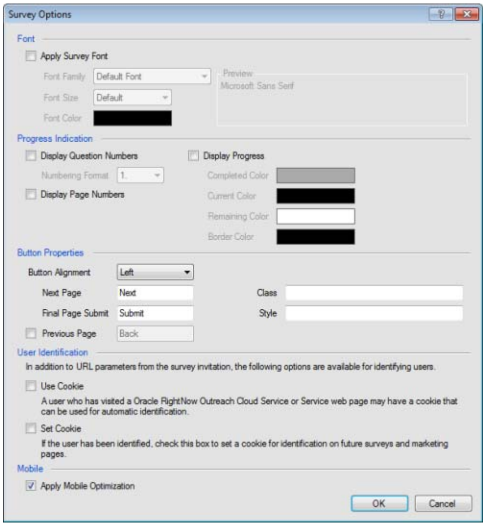
Specifying survey options

Specifying survey options lets you customize your questionnaire. You can set font attributes, choose how to notify customers of their progress through your survey, and specify how you identify customers. You can also add back buttons to multiple-page surveys and change the default text of the button labels. Any questions that respondents answer are saved, making it easy to review or change answers from a previous page or to come back at a later date to finish a survey.

Additionally, mobile optimization is applied, by default, from your survey options. Mobile optimization makes your surveys user-friendly when taken on mobile devices. See Mobile surveys.

To specify survey options

1 In your open questionnaire, click the Survey Options button in the Survey Tasks section. The Survey Options window opens.



2 Enter the following field information.

Table 535: Survey Options Window Description

Field	Description
Font	Enter field information in this section to define the font attributes for the survey.
Apply Survey Font	Select this check box to set the font attributes in the survey. **Note:** If you used a template to create the survey and then set the font attributes for the survey, the header and footer fonts defined in the template do not change to the new font attributes.
Font Family	Click this drop-down menu to select the font family.
Font Size	Click this drop-down menu to select the font size.
Font Color	Click this box to open the Color window and set the font color in the survey. You can select a color from the Basic colors or click Define Custom Colors to define a color.
Preview	Displays the font as it appears in the survey.

Table 535: Survey Options Window Description (Continued)

Field	Description
Progress Indication	Enter field information in this section to determine how customers can see their progress in the survey.
Display Question Numbers	Select this check box to display a number before each question. If cleared, questions appear unnumbered.
Numbering Format	Click this drop-down menu to select the number format you want to appear before each question. **Note:** This drop-down menu is available only when the Display Question Numbers check box is selected.
Display Page Numbers	Select this check box to display page numbers at the top of each page of the survey (for example, Page 1 of 3). **Note:** When this option is active, each question in a matrix is numbered in sequence with any surrounding questions. For example, if a four-row matrix is added below two text questions on the questionnaire, its rows are numbered 3, 4, 5, and 6. This option is not available in **advanced mode**.
Display Progress	Select this check box to display a progress bar that shows customers how much of the survey they have completed. **Note:** This option is not available in advanced mode.
Completed Color	Click this color box to select a color to designate the completed portion of the survey in the progress bar.
Current Color	Click this color box to select a color to designate the current portion of the survey in the progress bar.
Remaining Color	Click this color box to select a color to designate the remaining portion of the survey in the progress bar.
Border Color	Click this color box to select a color as the border of the progress bar.
Button Properties	Enter field information in this section to change the properties of buttons used in the survey.
Button Alignment	Click this drop-down menu to select left, center, or right alignment. Left is selected by default.
Next Page	To change the label of the next page button, which is set to Next by default, type the name of the label as you want it to display.

Table 535: Survey Options Window Description (Continued)

Field	Description
Final Page Submit	To change the label of the submit button, which is set to Submit by default, type the name of the label as you want it to display.
Previous Page	Select this check box to add a back button to your multiple-page survey. To change the label of the back button, which is set to Back by default, type the name of the label as you want it to display.
Class	Type any class name you want to assign to the default buttons. You must define the class in your document's HTML by either using the `<style>` tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the `<link>` tag.
Style	Type any style attributes you want to assign to the default buttons. Style attributes define how the buttons appear, such as color and font. For example, color: yellow; font-weight: bold; background: blue; border: 2px outset red.
User Identification	Specify cookie settings in this section.
Use Cookie	Select this check box to identify customers completing the survey by the Oracle Service Cloud cookie set on their computer. The customer is first identified through URL parameters in the email link to the survey, and, if none exist, the cookie is used.
Set Cookie	Select this check box to set a cookie for customers who are identified through the email link to the survey.
Mobile	Set mobile optimization for surveys taken on mobile devices.
Apply Mobile Optimization	**Caution:** By clearing this check box, surveys will not be optimized for readability or touchscreen compatibility on mobile devices. While the survey will still display on any device, the questions may not be easy to read and responding may be difficult when a mobile device is used. Clear this check box to disable optimization for mobile devices.

3 Click the OK button to save your settings and close the window.

Specifying end of survey options

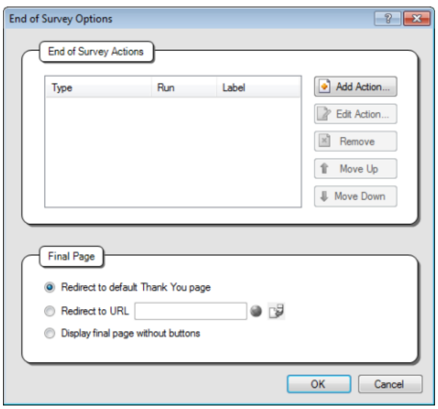
You can also determine what happens after customers submit a survey. For example, you can add the contact to a list, create an opportunity, or send the customer an email. A wizard helps step you through the process of the final actions performed after a survey is submitted. In addition, you can specify where customers are routed, such as the default Thank You page or your own website.

Note When a survey is responded to anonymously, survey actions that require contact identification are disregarded. Feedback cannot create an incident or opportunity for an anonymous responder, add them to a list, or send them a transactional mailing or survey.

To specify end of survey options

1 In your open questionnaire, click the End of Survey Options button in the Survey Tasks section. The End of Survey Options window opens.

Note Step 1 in a polling survey is slightly different. In your open question list, click the Polling Options button on the ribbon to open the Polling Survey Options window, where the End of Survey Actions section displays. Continue with step 2.



2 Click the Add Action button to add an action that is performed when the survey is submitted. The Survey Final Action wizard opens. See [Adding actions with the Survey Final Action wizard](#).

3 To edit an action, select the action and click the Edit Action button.

4 To delete an action, select the action and click the Remove button.

5 To move an action up one position, select the action and click the Move Up button. The actions execute in the order they are listed.

6 To move an action down one position, select the action and click the Move Down button.

Tip You can also drag and drop actions to adjust their position.

7 Select the page you want to display after the survey is submitted from the radio buttons described in the following table.

Table 536: Final Page Description

Radio Button	Description
Redirect to default Thank You page	Select this radio button to use the default final page. Customers are redirected to a Oracle Service Cloud page that thanks them for their feedback. **Note:** You can edit this page through the File Manager using the *cci/top.phph*, *head.phph*, and *bottom.phph* files. See Managing files. To learn more about customizing Outreach and Feedback pages, see Answer ID 2477 on our support site.
Redirect to URL	Select this radio button and type a URL to redirect customers to a specific website. See Editing Redirect to URL attributes.
Open URL	Click this button to open the URL.
Add	Click this button to add a contact, incident, opportunity, or tracked link **merge field** to the URL. See Inserting merge fields.
Display final page without buttons	Select this radio button to display the final page of the survey without a Submit button. **Note:** If you select this option, your survey should have more than one page with no questions on the last page, since answers cannot be submitted.

8 Click the OK button to save your settings and close the window.

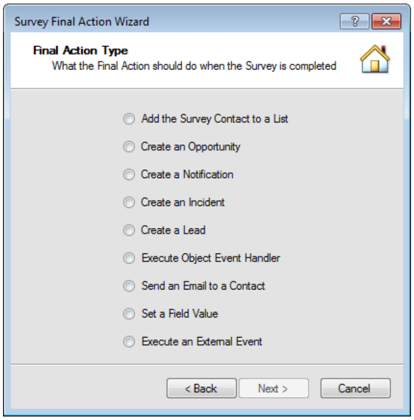
Adding actions with the Survey Final Action wizard

When setting end of survey options (see Specifying end of survey options), the Survey Final Action wizard steps you through the process of adding an action to the end of your survey. You can choose from several actions and also specify whether the action occurs at the end of all survey submissions or just when a survey **score** has been met.

To add an action

1 From the End of Survey Options window, click the Add Action button. The Survey Final Action wizard opens.

2 Click the Next button.



3 Select which action you want to perform from the radio buttons described in the following table.

Table 537: Final Action Types

Action Type	Description
Add the Survey Contact to a List	Select this radio button to add the customer to a contact list after submitting the survey.
Create an Opportunity	Select this radio button to create an opportunity in Oracle Right-Now Opportunity Tracking Cloud Service (Opportunity Tracking) using the customer information.

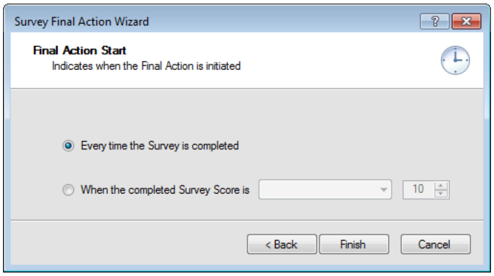
Table 537: Final Action Types (Continued)

Action Type	Description
Create a Notification	Select this radio button to send an email to staff members notifying them that the survey has been submitted.
Create an Incident	Select this radio button to create an incident in Service using the customer information.
Create a Lead	Select this radio button to create a lead in Opportunity Tracking using the customer information.
Execute Object Event Handler	Select this radio button to create a contact-related object event handler using customer information.
Send an Email to a Contact	Select this radio button to send a transactional mailing to the customer.
Set a Field Value	Select this radio button to set a field in the contact record for the customer.
Execute an External Event	Select this radio button to execute an **external event** after the survey is submitted.

4 Click the Next button. The next page that displays depends on the action you selected in the previous step. On this page of the wizard, you can set details for the action.

- **Add the Survey Contact to a List**—See Editing Add to List attributes.
- **Create an Opportunity**—See Editing Opportunity attributes.
- **Create a Notification**—See Editing Notification attributes.
- **Create an Incident**—See Editing Incident attributes.
- **Create a Lead**—See Editing Lead attributes.
- **Execute Object Event Handler**—See Editing Execute Object Event Handler attributes.
- **Send an Email to a Contact**—See Editing Transactional Mailing attributes.
- **Set a Field Value**—See Editing Set Field attributes.
- **Execute an External Event**—See Editing External Event attributes.

5 Click the Next button.



6 Select when the action should be performed from the radio buttons described in the following table .

Table 538: Final Action Start Description

Radio Button	Description
Every time the survey is completed	Select this radio button to perform the action every time the survey is submitted.
When the completed survey score is	Select this radio button and enter a survey score to send the survey only when the survey is equal to, less than, greater than, or between certain scores. For information about question scores, see To create a choice question.

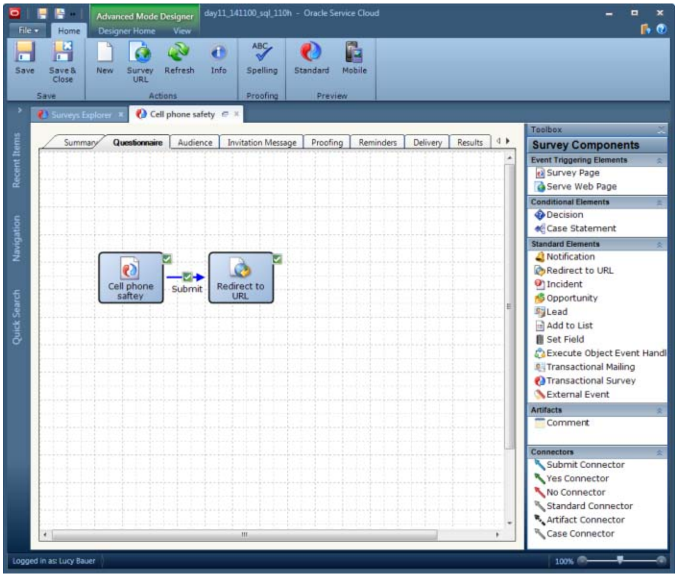
7 Click the Finish button to add the action.

8 Click OK to close the End of Survey Options window.

Note The actions available in the Survey Final Action Wizard are also available as standards elements when editing in **advanced mode**.

Creating questionnaires in advanced mode

If you want to create more detailed questionnaires, you can do so in advanced mode. Feedback provides an intuitive graphical interface for creating and editing advanced surveys. For example, to add survey branching, you can use the Decision element or the Case Statement element (see Editing Decision attributes and Editing Case Statement attributes). When creating and editing an advanced survey, you perform most tasks using the ribbon, canvas, and survey components. These resources provide all of the tools and elements you need to design an advanced survey.



To switch to advanced mode

Click Switch to Advanced Mode in the Survey Tasks section.

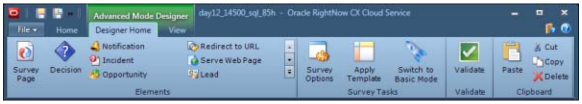
Note When you switch to advanced mode, the default questionnaire displays a survey page element, a Submit connector, and a Redirect to URL element that is defined (by default) to display a thank you page when the contact clicks the Submit button. This flow represents the simplest form of an advanced survey that you can send. Editing Redirect to URL attributes.

Advanced mode ribbon

The advanced mode ribbon features two additional tabs, Designer Home and View, from which you can access options to create or edit an advanced survey. Each tab on the ribbon has one or more groups containing buttons you can use to modify the survey or elements on the canvas.

Designer Home tab

The Designer Home tab gives you access to basic editing functions, survey components, and attributes that impact the entire survey.



The groups and buttons on the Designer Home tab are described in the following table.

Table 539: Designer Home Tab Description

Group/Button	Description
Elements	The buttons in this group let you add survey components to your flow diagram. For a description of available components, see Designing flow diagrams in surveys. **Note:** Components can also be accessed from the toolbox.
Survey Tasks	The buttons in this group provide options to change the overall appearance of the survey.
Survey Options	Click this button to access settings for default font formatting, question numbering, and user identification.
Apply Template	Click this button to select or clear a survey template. See Selecting a template.
Switch to Basic Mode	**Caution:** Switching to Basic mode cannot be undone and any changes made in advanced mode are lost. Click this button to switch the survey to Basic mode.
Validate	Click this button to check the survey workflow for errors. See Validating surveys.
Clipboard	The buttons in this group provide access to basic editing commands when working with components on the canvas.
Paste	Click this button to paste the contents of the clipboard.
Cut	Click this button to cut selected components from the canvas to the clipboard.
Copy	Click this button to copy selected components from the canvas to the clipboard.

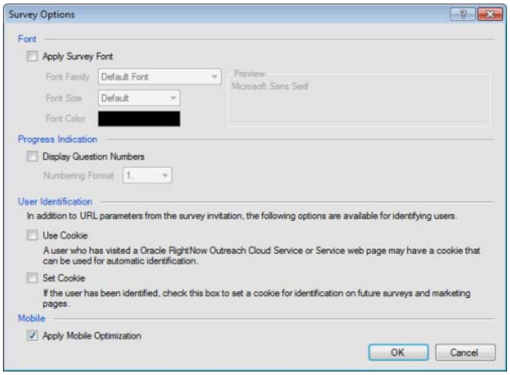
Table 539: Designer Home Tab Description (Continued)

Group/Button	Description
Delete	Click this button to delete selected components from the canvas.

From the Designer Home tab, you can specify certain survey options to customize your questionnaire. You can set the font attributes and choose how to notify customers of their progress through your survey. You can also specify how the system identifies contacts.

To specify survey options in advanced mode

1 Click the Survey Options button on the Designer Home tab. The Survey Options window opens.



2 Enter the following field information.

Table 540: Survey Options in Advanced Mode Description

Field	Description
Font	Enter field information in this section to define the font attributes for the survey.
Apply Survey Font	Select this check box to set the font attributes in the survey. **Note:** If you used a template to create the survey and then set the font attributes for the survey, the header and footer fonts defined in the template do not change to the new font attributes.
Font Family	Click this drop-down menu to select the font family.
Font Size	Click this drop-down menu to select the font size.
Font Color	Click this box to open the Color window and set the font color in the survey. You can select a color from the Basic colors or click Define Custom Colors to define a color.
Preview	Displays the font as it appears in the survey.
Progress Indication	Enter field information in this section to determine how customers can see their progress in the survey.
Display Question Numbers	Select this check box to display a number before each question. If cleared, questions appear unnumbered.
Numbering Format	Click this drop-down menu to select the number format you want to appear before each question. **Note:** This drop-down menu is available only when the Display Question Numbers check box is selected.
User Identification	Specify cookie settings in this section.
Use Cookie	Select this check box to identify customers completing the survey by the Oracle Service Cloud cookie set on their computer. The customer is first identified through URL parameters in the email link to the survey, and, if none exist, the cookie is used.
Set Cookie	Select this check box to set a cookie for customers who are identified through the email link to the survey.
Mobile	Set mobile optimization for surveys taken on mobile devices.

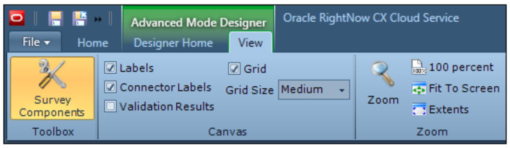
Table 540: Survey Options in Advanced Mode Description (Continued)

Field	Description
Apply Mobile Optimization	**Caution:** By clearing this check box, surveys will not be optimized for readability or touchscreen compatibility on mobile devices. While the survey will still display on any device, the questions may not be easy to read and responding may be difficult when a mobile device is used. Clear this check box to disable optimization for mobile devices. See Mobile surveys.

3 Click the OK button to save your settings and close the window.

View tab

The View tab provides access to the toolbox and options for changing your view of the design canvas.



The groups and buttons on the View tab are described in the following table.

Table 541: View Tab Description

Group/Button	Description
Survey Components Toolbox	Click this button to display the toolbox.
Canvas	The check boxes in this group let you select canvas options.
Labels	Select this check box to display labels for elements in the diagram. Labels display by default.
Connector Labels	Select this check box to display labels for connectors in the diagram. Connector labels display by default.
Validation Results	Select this check box to display validation icons in the diagram.

Table 541: View Tab Description (Continued)

Group/Button	Description
Grid	Select this check box to display the canvas grid. The canvas grid displays by default.
Grid Size	Click this drop-down menu to select the size of the canvas grid. The canvas grid is set to Medium by default.
Zoom	The buttons in this group let you select a zoom level for the canvas.
Zoom	Click this button to access the Zoom Options window. See To select zoom options.
100 percent	Click this button to view the canvas at its normal size.
Fit To Screen	Click this button to adjust the zoom level to show all elements.
Extents	Click this button to show the entire canvas.

As described in the table above, you can change the view of the design canvas from the View tab, including displaying design grid elements and adjusting the zoom level. These options make it easier to review and edit your flow diagram.

To select canvas options

1 To display labels for connectors on the canvas, select the Connector Labels check box.

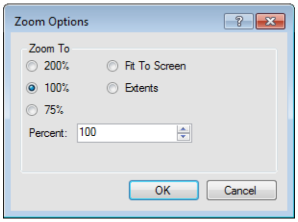
2 To display validation results on the canvas, select the Validation Results check box. See Validating surveys.

3 To display the canvas grid, select the Grid check box.

4 To change the size of the canvas grid, click the Grid Size drop-down menu and select from Small, Medium, or Large.

To select zoom options

1 Click the Zoom button on the View tab. The Zoom Options window opens.



2 To specify a desired zoom level, select a radio button in the Zoom To section.

 a To adjust the zoom level to show all components, select the Fit to Screen radio button.

 b To show the entire canvas, select the Extents radio button.

3 Type a zoom percentage in the Percent field. Click the up or down arrow to increase or decrease the value.

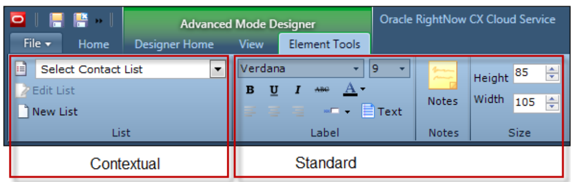
Tip You can also change the magnification of the canvas using the zoom slider located on the bottom right corner of the Service Console.

4 Click the OK button to close the window.

Contextual tabs

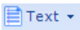
When you select an element or connector on the canvas, the ribbon displays a third contextual tab. When an element is selected, the Element Tools tab appears. This tab is divided into two sections. On the left are contextual groups and buttons, meaning they change depending on the element selected. On the right are standard groups and buttons, meaning they display no matter what element is selected.

The following figure displays the Element Tools tab and shows the contextual group of buttons for the Add to List element on the left and the standard group of buttons on the right.

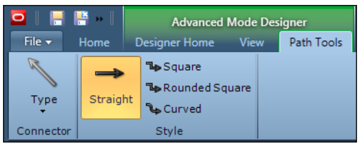


The standard groups and buttons on the Element Tools tab are described in the following table.

Table 542: Element Tools Tab Description

Group/Button	Description
Label	The buttons in this group let you change the font style, size, and color. You can select font attributes, such as bold and italic, and change the text's alignment.
 (Label Position)	Click this button to select the position of the label relative to the element.
	Click this button to type the text of the element label. **Note:** You can also edit the label text inline by clicking the element label.
Notes	Click this button to type notes about the element.
Size	The buttons in this group let you change the height and width of the element.

Another contextual tab that displays on the ribbon is the Path Tools tab. This tab displays when you select a connector. The buttons on this tab let you format the connector and change the connector type.



The standard groups and buttons on the Path Tools tab are described in the following table. Refer also to Creating connectors in surveys.

Table 543: Path Tools Tab Description

Group/Button	Description
Connector Type	Click this button to change the type of the selected connector. **Note:** A connector's type can be changed only when it is not connected to a standard or event-triggering element.

Table 543: Path Tools Tab Description (Continued)

Group/Button	Description
Style	The buttons in this group let you change the line style of the selected connector.
Straight	Click this button to set the connector line style to straight.
Square	Click this button to set the connector line style to square.
Rounded Square	Click this button to set the connector line style to rounded square.
Curved	Click this button to set the connector line style to curved.

Designing flow diagrams in surveys

The first step in creating a survey in **advanced mode** is to design a flow diagram. The flow diagram is a graphical representation of the survey's "flow," the actions and decisions your survey will perform, and the order in which it will perform them. Your flow diagram can be as simple as a single path connecting a few actions, or it can be complex, routing your audience through dozens of actions, paths, and decision points. With its simplified graphical interface, Feedback makes creating even a complex workflow as easy as clicking and dragging components into a logical order.

Whether your business needs are simple or complex, you should start by reviewing the elements available in the toolbox and consider how each might help accomplish your survey's key objectives. Once you have a clear idea which elements will be useful, you can create the flow diagram by dragging them from the toolbox to the canvas, inserting each element in a logical position, and connecting them to define the sequence of actions. Once an element has been inserted, you can double-click it to open a window where you can edit its attributes.

Tip When explaining attributes that can be edited on a window or the ribbon, we describe the procedure using the window. However, keep in mind that the ribbon provides easy access to most of the same attributes available on windows, without the need to double-click. Survey components can also be dragged to your flow diagram from the Elements groups on the Designer Home tab.

When a survey is launched and a contact performs the first **action**, the decisions and actions in the survey are evaluated and executed in the sequence you have specified. For example, when a contact submits a web form, your campaign evaluates the information provided and executes the next action, such as creating a sales lead and sending a follow-up message to the contact.

Note When a survey is responded to anonymously, survey actions that require contact identification are disregarded. Feedback cannot create an incident or opportunity for an anonymous responder, add them to a list, or send them a transactional mailing or survey.

If you switch to advanced mode before adding anything to the questionnaire, the canvas initially displays the components of a basic survey: a blank web form with a submit button that redirects to Feedback's standard Thank You page. These elements serve as the starting point for your design. You can add, edit, or remove elements to customize the questionnaire to fit your needs.

To customize a questionnaire in advanced mode

1 Drag and drop an element from the toolbox onto the canvas. See the following table for a description of the available components.

Table 544: Elements Description

Element	Description
Event Triggering Elements	Event-triggering elements serve as starting points for questionnaires.
Survey Page	Drag and drop this element to add a survey page to the questionnaire. After adding this element, double-click it to add content to the page. See Editing Survey Page attributes.
Serve Web Page	Drag and drop this element to serve a web page. After adding this element, double-click it to define its attributes. See Editing Serve Web Page attributes.

Table 544: Elements Description (Continued)

Element	Description
Conditional Elements	Conditional elements produce multiple path outcomes based on decisions.
Decision	Drag and drop this element to add a decision point. A decision lets you specify conditions the contact must meet to advance in the workflow. You can create two outgoing paths from a decision: Yes (contact meets the criteria) and No (contact does not meet the criteria). See Creating connectors in surveys. After adding the decision, double-click it to define its attributes. See Editing Decision attributes.
Case Statement	Drag and drop this element to add a case statement to the survey. A case statement is a type of conditional element that lets you add multiple choice decisions. This give you an easy way to add diverse branching capabilities to your surveys based on conditions defined in the workflow. Case statements are unique because they have an outgoing path for every condition. As soon as the first choice (condition) is matched, the path for that choice is followed, and no other conditions within the case statement are evaluated. See Creating connectors in surveys. After adding the case statement, double-click it to define its attributes. See Editing Case Statement attributes.
Standard Elements	Standard items perform actions when specified criteria are met.
Notification	Drag and drop this element to send a notification to one or more staff members. After adding this element, double-click it to define its attributes. See Editing Notification attributes.
Redirect to URL	Drag and drop this element to redirect the contact to a URL. After adding this element, double-click it to define its attributes. See Editing Redirect to URL attributes.
Incident	Drag and drop this element to create an incident from the contact record. After adding this element, double-click it to define its attributes. See Editing Incident attributes.
Opportunity	Drag and drop this element to create an opportunity from the contact record. After adding this element, double-click it to define its attributes. See Editing Opportunity attributes.

Table 544: Elements Description (Continued)

Element	Description
Lead	Drag and drop this element to create a lead from the contact record. After adding this element, double-click it to define its attributes. See Editing Lead attributes.
Add to List	Drag and drop this element to add the contact to a list. After adding this element, double-click it to define its attributes. See Editing Add to List attributes.
Set Field	Drag and drop this element to set a value for one of the fields in the contact record. After adding this element, double-click it to define its attributes. See Editing Set Field attributes.
Execute Object Event Handler	Drag and drop this element to add a contact-related object event handler that will trigger an external event action. See Editing Execute Object Event Handler attributes.
Transactional Mailing	Drag and drop this element to send a transactional mailing to the contact. After adding this element, double-click it to define its attributes. See Editing Transactional Mailing attributes.
Transactional Survey	Drag and drop this element to send a transactional survey to the contact. After adding this element, double-click it to define its attributes. See Editing Transactional Survey attributes.
External Event	Drag and drop this element to run an external event. External events are scripts that run outside of Oracle Service Cloud After adding this element, double-click it to define its attributes. See Editing External Event attributes.
Artifacts	Artifact elements let you make comments about your survey. They do not affect the outcome of your flow diagram.
Comment	Drag and drop this artifact to add comments about your flow diagram or a specific survey component. A comment artifact does not require a connector, but if your comment is about a specific element, use the Artifact connector type. See Creating connectors in surveys.

2 To edit the attributes of an element on the canvas, double-click the element. See Editing element attributes.

3 To connect one element to another, click an anchor on the first element and drag the connector to an anchor on the second element. See Creating connectors in surveys.

4 To cut, copy, or paste one or more components, click the appropriate button on the Clipboard group of the Designer Home tab.

5 To export an image of the canvas to your workstation, click File and select Export Image.

6 To change the formatting of an element, select the element and see the following table. See Element Tools Tab Description.

Tip To select multiple elements at once, press **Ctrl** and select each component.

Creating connectors in surveys

Connectors are components used to link elements and indicate flow direction. Elements can be connected to other elements depending on their type. The type of connector is indicated by its color, as described in the following table.

Table 545: Types of Connectors

Path	Color	Description
Submit	Blue	This type of connector submits an element's web form fields to the database and then links to another element. A web form can be a document with a web form or survey questions. **Note:** In order for the submit connector to work, there must be a submit action on the web form that's used in the campaign. See Inserting survey results links.
Yes	Green	This type of connector links a decision element to another element. The path is taken if the contact meets the criteria specified in the decision.
No	Red	This type of connector links a decision element to another element. The path is taken if the contact does not meet the criteria specified in the decision.
Standard	Gray	This type of connector links one element to another element. The second action is performed immediately after the first.

Table 545: Types of Connectors (Continued)

Path	Color	Description
Artifact	Black (Dashed)	This type of connector links a comment to an element.
Case	Gray	This type of connector links a case statement element to another element. The path is taken if the contact meets the criteria specified in the case statement.

Each element can have a specific number of incoming and outgoing connectors. See the following table for a list of the number of connectors allowed in each element.

Table 546: Connectors Allowed for Element Types

Element	Connectors Allowed
Add to List	• Unlimited incoming connectors • 1 outgoing standard connector
Case Statement	• Unlimited incoming connectors • 1 outgoing connector for each choice.
Decision	• Unlimited incoming connectors • 1 outgoing Yes connector • 1 outgoing No connector
Execute Object Event Handler	• Unlimited incoming connectors • 1 outgoing standard connector
External Event	• Unlimited incoming connectors • 1 outgoing standard connector
Incident	• Unlimited incoming connectors • 1 outgoing standard connector
Lead	• Unlimited incoming connectors • 1 outgoing standard connector
Notification	• Unlimited incoming connectors • 1 outgoing standard connector
Opportunity	• Unlimited incoming connectors • 1 outgoing standard connector

Table 546: Connectors Allowed for Element Types (Continued)

Element	Connectors Allowed
Redirect to URL	• Unlimited incoming connectors • 1 outgoing standard connector
Serve Web Page	• Unlimited incoming connectors • 1 outgoing standard connector • 1 outgoing submit connector
Survey Page	• Unlimited incoming connectors • 1 outgoing standard connector • 1 outgoing submit connector
Set Field	• Unlimited incoming connectors • 1 outgoing standard connector
Transactional Mailing	• Unlimited incoming connectors • 1 outgoing standard connector • 1 outgoing submit connector
Transactional Survey	• Unlimited incoming connectors • 1 outgoing standard connector • 1 outgoing submit connector

To connect an element

To connect one element to another, click an anchor on the first element and drag the connector to an anchor on the second element. The anchor is highlighted when the connector is able to link to it. The connector arrow points from the first element to the second. When you connect your element types this way, the system automatically applies the correct connector type.

Note If you use the wrong connector type, the element anchor will not be highlighted. See Connectors Allowed for Element Types.

Other ways to connect elements include:

- Hover over the first element and click a blue arrow to link to an adjoining element.
- Drag one element over another, hover over its blue arrow until it turns dark blue, and then drop to connect the elements. Connecting your elements this way auto-links them with the correct connector type.

- Click an element from the toolbox, and then hover over an element on the canvas and click its blue arrow to drop and auto-link the new element.
- Drag and drop a connector from the toolbox to the canvas, and then drag the ends of the connector to anchors on the elements you want to link.

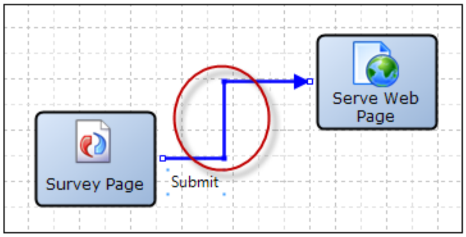
Tip To auto-link your elements, drag your connector over both elements until they are highlighted, and then drop to connect them. Remember, if you select the wrong connector type, your elements will not be highlighted.

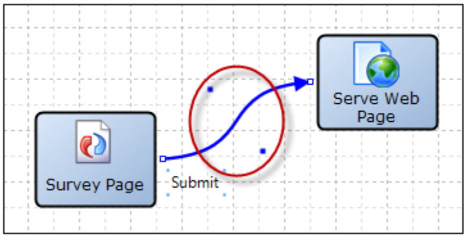
To connect to a different element

Click a midpoint on the connector to select it and drag one of its ends to an anchor on a different element to create a different connection.

To edit a square or curved connector

Click a midpoint on a square or curved connector to select it and drag the calibration points to adjust the shape of the connection. The following figures show the calibration points on square and curved connectors.





To delete a connector

Click a midpoint on the connector to select it and press **Delete**.

Editing element attributes

Once you have added an element to the canvas, you must edit its attributes to make it functional. For example, if you add a survey page to the canvas, you need to edit it and add the questions that will appear on that page.

Important You must define attributes for each component added or a validation error occurs when attempting to save the survey. See Validating surveys.

Editing Survey Page attributes

Once you add a Survey Page element to your flow diagram, you can edit its attributes to add questions and HTML content, set the page title, and define the buttons you want to use on your page.

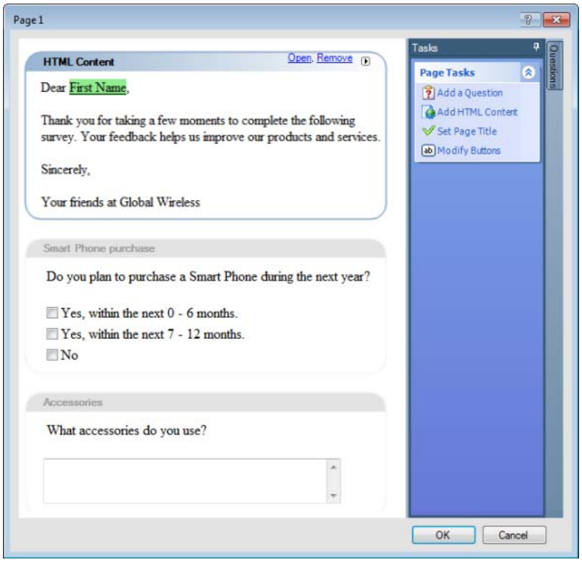
For multiple-page surveys, you can add next and previous buttons to your pages. Because the next button performs a submit function when it is clicked, once respondents finish a page and perform a submit, answers from that page are saved so they can easily go back and forth between pages. This makes it easy to review or change answers from a previous page or to come back at a later date to finish a survey. You can also customize the appearance of the button text and style attributes to make it more applicable for each survey page.

Standard element placement when using next and back buttons

When you use next and back buttons with standard elements, we recommend adding those elements to the end rather than to the middle of your flow. For example, suppose you add an Incident element to the second page of a survey, and then you add next and back buttons on subsequent pages. This scenario could cause two incidents to be created if respondents go back to the first page, because once they are ready to move forward, clicking the next button will resubmit the incident. Therefore, to avoid the possibility of triggering duplicate actions, we recommend adding standard elements (such as an Incident element) to the end of your surveys.

To edit a survey page

1 Double-click the Survey Page element. The New Survey Page window opens.



2 Click a button in the Page Tasks section described in the following table.

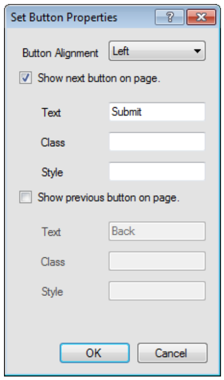
Table 547: Page Tasks Description

Button	Description
Add a Question	Click this button to add a question to the questionnaire. See Adding questions.
Add HTML Content	Click this button to add HTML content to the questionnaire. See Using the HTML editor.
Set Page Title	Click this button to change the title of the page from the default “Page <page number>.” See Setting the page title.
Modify Buttons	Click this button to modify the text of the buttons or remove buttons from a page. See the procedure that follows to modify buttons.

To modify buttons

Caution Because the next button performs a submit function for each page, do not remove the next button from survey pages that have questions on them. Otherwise, responders cannot submit their answers.

1 Click the Modify Buttons button in the Page Tasks section. The Set Button Properties window opens.



2 Enter the following field information.

Table 548: Set Button Properties Window Description

Field	Description
Button Alignment	Click this drop-down menu to select left, center, or right alignment. Left is selected by default.
Show next button on page	**Caution:** Because the next button performs a submit function for each page, do not remove the next button from survey pages that have questions on them. Otherwise, responders cannot submit their answers. This check box, which is selected by default, displays a next button and performs a submit function when you add subsequent pages to your survey. If you clear this check box, the remaining fields are disabled.
Text	To change the label of the next button, which is set to Submit by default, type the name of the label as you want it to display.

Table 548: Set Button Properties Window Description (Continued)

Field	Description
Class	Type any class name you want to assign to the button. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag.
Style	Type any style attributes you want to assign to the button. Style attributes define how the button appears, such as color, font, and alignment (for example, font-family: arial, sans-serif; font-weight: bold; background: #99ff00; margin-left: 20px).
Show previous button on page	Select this check box to display a previous button on your page.
Text	To change the label of the previous button, which is set to Back by default, type the name of the label as you want it to display.
Class	Type any class name you want to assign to the button. You must define the class in your document's HTML by either using the <style> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <link> tag.
Style	Type any style attributes you want to assign to the button. Style attributes define how the button appears, such as color, font, and alignment (for example, font-family: arial, sans-serif; font-weight: bold; background: #99ff00; margin-left: 20px).

3 Click the OK button to save your changes and close the window.

Editing Serve Web Page attributes

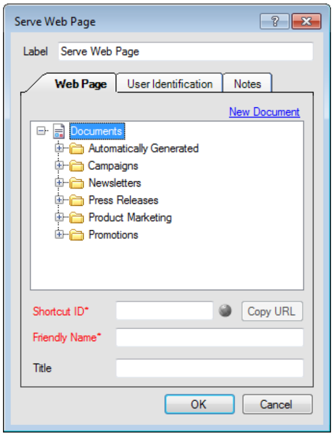
Once you add a Serve Web Page element to your flow diagram, you can edit its attributes to select a document to serve as a web page through Oracle Service Cloud. You can specify the shortcut ID used to generate the URL and choose whether to prefill the web form in the document with contact fields stored in the contact's cookies or passed as parameters in the URL. In addition, you can customize the title of the page you are editing. The page title displays in the title bar of the web browser when the survey is taken. See Creating documents.

Tip

- Use a submit connector to connect this action to the next action when the web page contains a web form or survey questions.
- You can add a back button to a web page that contains a web form. See To add a back button to a Serve Web Page attribute.

To edit Serve Web Page attributes

1 Double-click the Serve Web Page element to open the Serve Web Page window.



2 Type the name of the element in the Label field.

3 Enter the following field information on the Web Page tab.

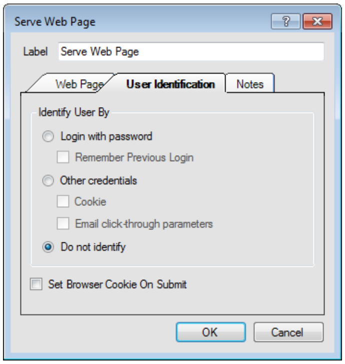
Table 549: Serve Web Page Window Description

Field	Description
***Document**	Select the document you want to use as a web page from this list. To search for a document, right-click the list and select Search. Then type the document name in the Find field.
New Document	Click this text to create a document. See To create a document.

Table 549: Serve Web Page Window Description (Continued)

Field	Description
***Shortcut ID**	Type the shortcut ID that is used to format the URL in this field. The URL for the document is: http://<your_domain>/ci/documents/detail/2/<shortcut_ID> **Note:** This shortcut ID must be unique for all Serve Web Page elements in all surveys and campaigns.
(View Web Page)	Click this button to open the web page in a browser. **Note:** The button is not active until the questionnaire is set to the Launched status and saved.
Copy URL	Click this button to copy the URL generated for the web page to the clipboard. **Note:** The URL is not valid until the questionnaire is set to the Launched status and saved.
***Friendly Name**	Type the name of your web page. This name is used when linking to the web form from another document.
Title	Type the name of the page as you want it to display in the title bar of the web browser when the survey is taken. **Note:** If you leave this field blank, either the document or template title will display in the web browser title bar. If a template has been applied to the document the survey uses, then the template title is used.

4 Click the User Identification tab.



Note You can specify default values for the settings on the User Identification tab by editing optional configuration settings. See Customizing Feedback configuration settings.

5 Enter the following field information.

Table 550: User Identification Tab Description

Field	Description
Identify User By	Select from the following options to prefill a web form (if one is included in your document).
Login with Password	Select this radio button to require the contact to log in to the Service **customer portal** before viewing the web form.
Remember Previous Login	Select this check box to identify the contact through the contact's Service login cookie. If a login cookie does not exist, the contact is redirected to the login page on the customer portal. If this check box is cleared, the contact is always required to log in through the customer portal before viewing the web form.
Other Credentials	Select this radio button to identify the contact by a cookie or through URL parameters.
Cookie	Select this radio button if you want to use the contact's browser cookie to prefill the web form. The contact's record is updated with the form submission.

Table 550: User Identification Tab Description (Continued)

Field	Description
Email Click-Through Parameters	Select this radio button if you want to use parameters passed in the URL to prefill the web form. **Note:** If using this option to prefill a web form from a link in a mailing, be sure to use a web page link instead of a **tracked link**. Because tracked links are used to redirect to external sites, they do not support click-through parameters.
Do Not Identify	Select this radio button if you never want the web form to be pre-filled. **Note:** A contact record is updated through the web form if the email address field is included and can be matched to an existing record.
Set Browser Cookie on Submit	Select this check box if you want to set the contact's browser cookie upon submitting the form. If they access any form later, the form is prefilled, if the Cookie radio button is selected for that form.

Tip You can set default values for the user identification fields by editing the configuration settings located at Outreach and Feedback > General > Campaigns. Note that default values specified by these settings impact both new campaigns and new advanced surveys.

6 To add any notes associated with the element, click the Notes tab and type the notes.

7 Click the OK button.

To add a back button to a Serve Web Page attribute

1 From an advanced survey, double-click the Serve Web Page element to open the Serve Web page window.

2 Click the New Document link.

3 From the HTML tab of your document, click Begin With Blank Content. The HTML editor opens.

4 Click the Web Form button under the Forms section to add a web form to your document. See Inserting survey results links.

Note Form fields cannot be added outside of a web form.

5 Click the Submit button to add the Submit button to your web form.

Note Web forms must contain a Submit button.

6 To add a back button to your content, click the Back Button button under the Forms section.

7 To edit the label of the back button, double-click the button and type the label as you want it to display.

Editing Decision attributes

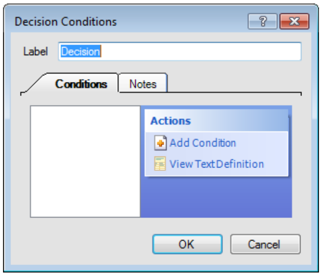
Decision elements let you branch your workflow based on two outgoing paths you define. Once you add a Decision element to your flow diagram, you can edit its attributes to require contacts to meet certain criteria before moving down the Yes path. Contacts who do not meet the criteria are moved down the No path (if one exists). When you edit the decision, you can define conditions based on contact fields or question responses and a logical expression based on the conditions.

When you create decisions in advanced questionnaires, you can create branches in your survey based on customer response. For example, you could serve a document with survey questions as a web page, then create a decision based on a response to send them to one of two documents containing additional questions.

Also, when a matrix question is added to an advanced questionnaire, each question from the matrix can be filtered by decision elements. In this way, you can direct the survey's flow based on a specific contact response to an individual question in the matrix.

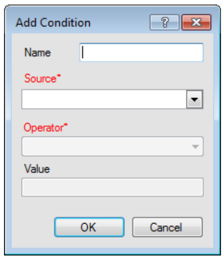
To edit Decision attributes

1 Double-click the Decision element to open the Decision Conditions window.



2 Type the name of the decision in the Label field.

3 Click the Add Condition button to create a condition for the Yes path. The Add Condition window opens.



a Type the name of the condition in the Name field.

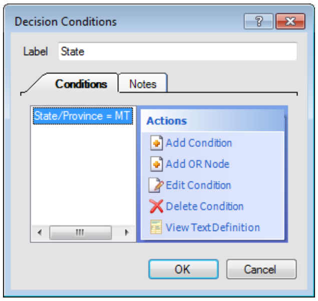
b Click the Source drop-down menu and select a contact field, survey question, or survey score.

Note When adding a text field to a decision, the Source drop-down menu displays an additional item as “<text field name> SmartSense.” Selecting the **SmartSense** item lets you evaluate the customer’s emotional state or attitude based on the words or language the customer used when responding to the question. You can then specify values from Very Happy to Very Angry as criteria for your decision logic.

c Click the Operator drop-down menu and select the logical symbol that completes the condition.

d Type the value of the field or click the drop-down menu and select the value in the Value field.

This expression determines which contacts meet the condition (for example, State/Province=MT or <menu question>=<specified answer>).



By default, multiple conditions are joined by AND. When the AND operator is used, contacts are moved down the Yes path when all the conditions are met. You can further limit your data set by using the Boolean operators OR and NOT. When the OR operator is used, contacts are moved down the Yes path when any of the conditions are met.

4 To add an OR to your expression, click the Add OR Node button. Conditions attached to the OR node are joined by OR.

5 To edit a condition, select the condition and click the Edit Condition button.

6 To delete a condition, select the condition and click the Delete Condition button.

Note The Add OR Node, Edit Condition, and Delete Condition buttons display only after you have added a condition.

7 Click the View Text Definition button to see your conditions as a logical expression.

8 To add any notes associated with the decision, click the Notes tab and type the notes.

9 Click the OK button.

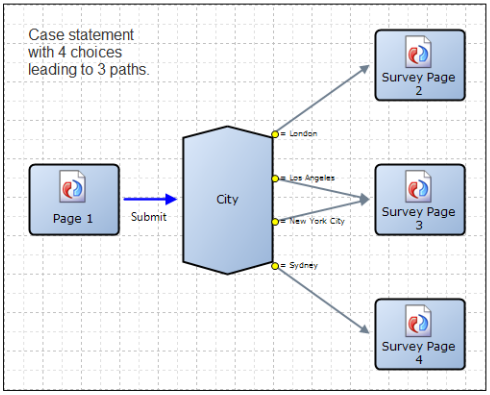
Editing Case Statement attributes

Case statements help you branch your workflow based on multiple conditions that you define. They are unique because you define an outgoing path for each condition. As soon as the first choice (condition) is matched, the path for that choice is followed, and no other conditions within the case statement are evaluated.

Once you add a case statement element to your flow diagram, you can edit its attributes to branch your flow to different paths based on whether contacts meet certain conditions. When you edit the case statement, you can define multiple conditions using a contact field in the database, a question, or a score.

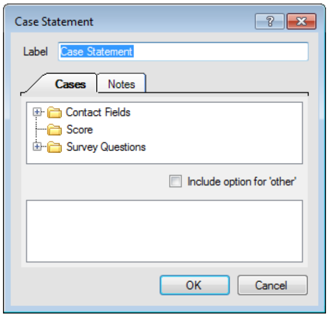
Score pertains to the cumulative score from all preceding survey question responses. Score always displays on the Cases tab.

Case statements differ from decisions because they let you add multiple paths to your flow.



To edit Case Statement attributes

1 Double-click the Case Statement element to open the Case Statement window.

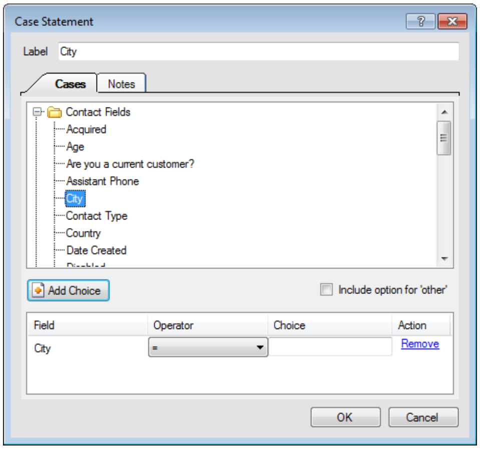


2 Select a contact field, survey question, or score from the Cases tab.

Note Keep in mind that depending on the item you select, choices are either already defined by default or you must define them.

3 If you want to add an “other” path to your case statement, select the Include Option for Other check box.

4 To add a choice that is not defined by default, click the Add Choice button. The bottom section of the Case Statement window displays options to define logical expressions for your choices.



Note The Add Choice button does not display if choices have already been defined by default. For example, Contact Type or Global Opt-in under Default Contact Fields have choices defined. Therefore, the Add Choice button does not display when these fields are selected.

5 Click the Operator drop-down menu to select the logical symbol that completes your expression.

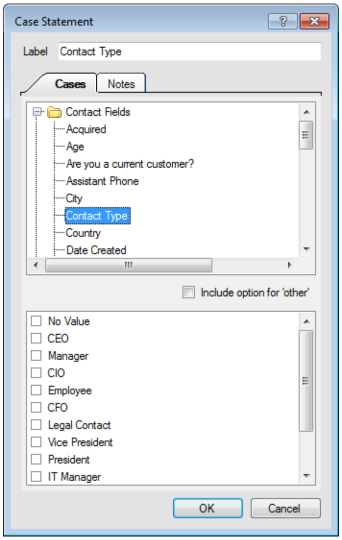
6 Type the field’s value in the Choice field.

7 To add another choice that is not defined by default, repeat steps 4 through 6.

8 To delete a choice, select the choice and click Remove.

9 To add a choice that is defined by default, select the check boxes next to the choices you want to include in your case statement.

Note Cases with menu, yes/no, and opt-in items present you with default choices defined by the database.



10 To add any notes associated with the element, click the Notes tab and type the notes.

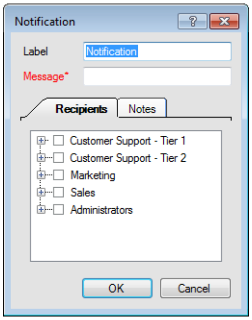
11 Click the OK button to add the case statement to the flow.

Editing Notification attributes

Once you add a Notification element to your flow diagram, you can edit its attributes to define which staff members to notify. You can select multiple staff accounts and customize the notification message. Details about the questionnaire and contact record, and any incident or opportunity that originated the survey, are automatically included in the notification email.

To edit Notification attributes

1 Double-click the Notification element to open the Notification window.



2 Type the name of the element in the Label field.

3 Type the message you want to appear in the subject line of the notification in the Message field.

4 Select the check boxes of the staff members you want to notify.

5 To add any notes associated with the element, click the Notes tab and type the notes.

6 Click the OK button.

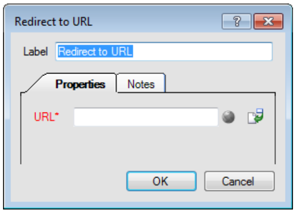
Editing Redirect to URL attributes

Redirect to URL elements let you define a web page that your customers are redirected to once they complete the previous action in the workflow. After you add a Redirect to URL element to your flow diagram, you can edit its attributes to specify the URL to which you want to send the contact.

Note The Redirect to URL element that displays when you switch to advanced mode is defined (by default) to display a thank you page when the contact clicks the Submit button on the survey page (which is also defined by default).

To edit Redirect to URL attributes

1 Double-click the element to open the Redirect to URL window.



2 Type the name of the element in the Label field.

3 Type the URL of the website you want to redirect the contact to in the URL text box. The protocol must be specified. The following protocols are supported:

- file:///
- ftp://
- gopher://
- http://
- https://
- mailto:
- nntp:
- news:

4 To open the URL in a browser, click the Open URL button (to the right of the URL field).

5 To add a contact, incident, opportunity, or tracked link field to the URL as a parameter, click the Merge Field button (to the right of the Open URL button). See Inserting merge fields.

6 To add any notes associated with the element, click the Notes tab and type the notes.

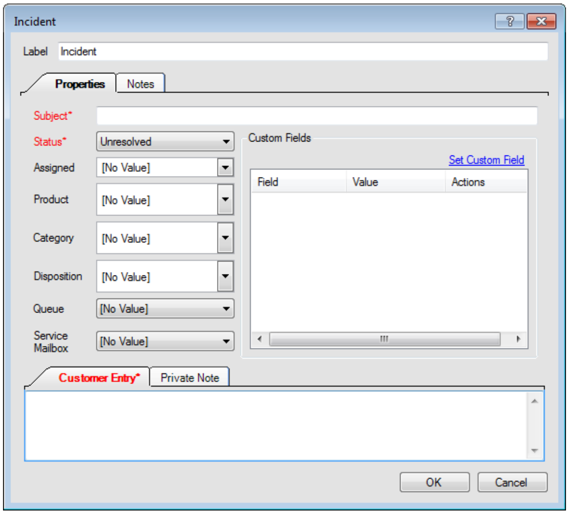
7 Click the OK button.

Editing Incident attributes

Once you add an Incident element to your flow diagram, you can edit its attributes to define the subject, status, and other elements of the created incident. See Incidents overview.

To edit Incident attributes

1 Double-click the Incident element to open the Incident window.



2 Type the name of the element in the Label field.

3 Enter the following field information.

Table 551: Incident Window Description

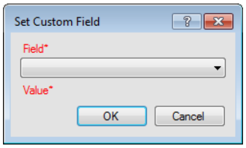
Field	Description
*Subject	Type the subject of the incident in this text box.
*Status	Click this drop-down menu to select a status to assign to the incident. The default status is Unresolved.
Assigned	Click this drop-down menu to select a group or staff member to assign to the incident.
Product	Click this drop-down menu to select a product to assign to the incident.
Category	Click this drop-down menu to select a category to assign to the incident.
Disposition	Click this drop-down menu to select a disposition to assign to the incident.
Queue	Click this drop-down menu to select a queue to assign the incident to.

Table 551: Incident Window Description (Continued)

Field	Description
Service Mailbox	Click this drop-down menu to select a mailbox to associate with the incident.
*Customer Entry	Type a default value for the customer thread in this text box.
Private Note	Click this tab to type a default value for the notes thread.

4 Click Set Custom Field to set custom fields for the incident. The Set Custom Field window opens.

Note You must define custom fields in the Custom Fields editor before you can set a custom field for an incident. See Adding and editing custom fields.



a Click the Field drop-down menu to select the custom field you want to set.
b Enter the value of the custom field in the Value field.
c Click the OK button. The custom field and its value appear in the Custom Fields grid.

5 To edit the value of a custom field, click Edit next to the custom field.

6 To remove the set value of a custom field, click Delete next to the custom field.

7 To add any notes associated with the element, click the Notes tab and type the notes.

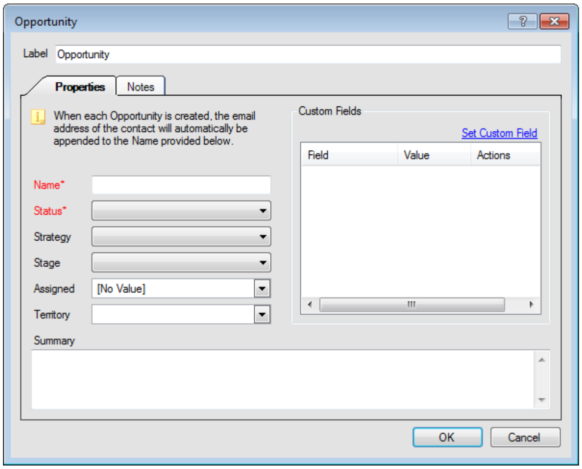
8 Click the OK button.

Editing Opportunity attributes

Once you add an Opportunity element to your flow diagram, you can edit its attributes to define fields of the opportunity created by this element. You can specify the opportunity’s name, status, strategy, stage, assigned sales representative, and territory. See Opportunities overview.

To edit Opportunity attributes

1 Double-click the Opportunity element to open the Opportunity window.



2 Type the name of the element in the Label field.

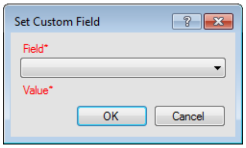
3 Enter the following field information.

Table 552: Opportunity Window Description

Field	Description
*Name	Type the name of the opportunity in this field. **Note:** The contact's email address is appended to the opportunity name.
*Status	Click this drop-down menu to assign a status to the opportunity.
Strategy	Click this drop-down menu to assign the opportunity to a strategy.
Stage	Click this drop-down menu to assign the opportunity to a stage. The options in this menu depend on the strategy selected.
Assigned	Click this drop-down menu to assign the opportunity to a sales representative.
Territory	Click this drop-down menu to assign the opportunity to a territory.
Summary	Type a summary of the opportunity in this field.

4 Click Set Custom Field to set custom fields for the opportunity. The Set Custom Field window opens.

Note You must define custom fields in the Custom Fields editor before you can set a custom field for an opportunity. See Adding and editing custom fields.



a Click the Field drop-down menu to select the custom field you want to set.
b Enter the value of the custom field in the Value field.
c Click the OK button. The custom field and its value appear in the Custom Fields grid.

5 To edit the value of a custom field, click Edit next to the custom field.

6 To remove the set value of a custom field, click Delete next to the custom field.

7 To add any notes associated with the element, click the Notes tab and type the notes.

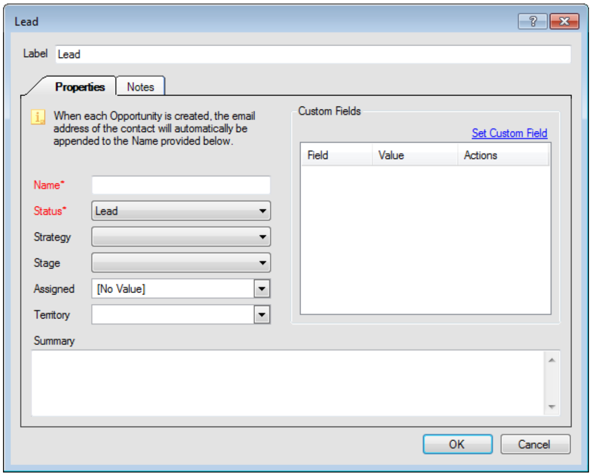
8 Click the OK button.

Editing Lead attributes

Once you add a Lead element to your flow diagram, you can edit its attributes to define fields of the lead created by this element. You can specify the lead's status, strategy, stage, assigned sales representative, and territory. See Accepting and rejecting leads.

To edit Lead attributes

1 Double-click the Lead element to open the Create Lead window.



2 Type the name of the element in the Label field.

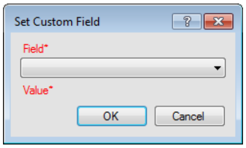
3 Enter the following field information.

Table 553: Create Lead Window Description

Field	Description
*Name	Type the name of the lead in this field. **Note:** The contact's email address is appended to the lead name.
*Status	Click this drop-down menu to assign a status to the lead. Only statuses with a Lead status type display.
Strategy	Click this drop-down menu to assign the lead to a strategy.
Stage	Click this drop-down menu to assign the lead to a stage. The options in this menu depend on the strategy selected.
Assigned	Click this drop-down menu to assign the lead to a sales representative.
Territory	Click this drop-down menu to assign the lead to a territory.
Summary	Type a summary of the lead in this field.

4 Click Set Custom Field to set custom fields for the lead. The Set Custom Field window opens.

Note You must define custom fields in the Custom Fields editor before you can set a custom field for a lead. See Adding and editing custom fields.



a Click the Field drop-down menu to select the custom field you want to set.
b Enter the value of the custom field in the Value field.
c Click the OK button. The custom field and its value appear in the Custom Fields grid.

5 To edit the value of a custom field, click Edit next to the custom field.

6 To remove the set value of a custom field, click Delete next to the custom field.

7 To add any notes associated with the element, click the Notes tab and type the notes.

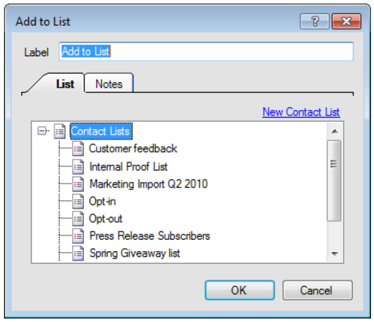
8 Click the OK button.

Editing Add to List attributes

Once you add an Add to List element to your flow diagram, you can edit its attributes to define which list the contact is added to. You can select from predefined lists in your system or create a list. See Adding contact lists.

To edit Add to List attributes

1 Double-click the Add to List element to open the Add to List window.



2 Type the name of the element in the Label field.

3 Select a contact list from the List menu.

  a To search for a contact list, right-click the list and select Search. Then type the list name in the Find field.

4 To create a contact list, click New Contact List and refer to [To add a contact list](#).

5 To add any notes associated with the element, click the Notes tab and type the notes.

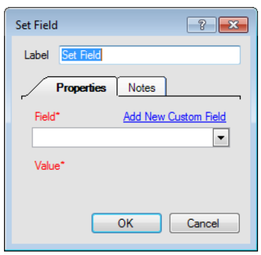
6 Click the OK button.

Editing Set Field attributes

Once you add a Set Field element to your flow diagram, you can edit its attributes to specify the value of contact fields. You can specify a number of contact record fields, including opt-in status, state, survey score, or any contact custom fields defined in your system.

To edit Set Field attributes

1 Double-click the Set Field element to open the Set Field window.



2 Type the name of the element in the Label field.

3 Click the Field drop-down menu and select the contact field you want to set the value of.

4 To add a new contact custom field, click Add New Custom Field and refer to Adding and editing custom fields.

5 Enter a value for the contact field you selected.

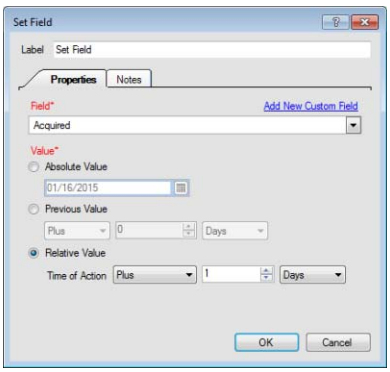
Note In addition to setting explicit (absolute) values, you can set null values for text and text area fields as well as relative values for some field types. Relative values are defined by adding or subtracting (or appending or prepending) a value to the field's previous value. See Setting relative field values.

6 To add any notes associated with the element, click the Notes tab and type the notes.

7 Click the OK button.

Setting relative field values

In addition to setting absolute field values for date, date/time, integer, text, and text area fields, you can set relative values. When setting a value for one of these field types, clicking the Value drop-down menu presents additional options for adding or subtracting (or appending or prepending) a value to the field's previous value. For example, you can increment the value of an integer field by 1 or append text to a contact text field. For date and date/time fields, you can also set a value relative to the time of action, such as adding one day to the current date and time, as shown in the following figure.



Options for setting relative field values vary by field type and are described in the following table.

Table 554: Relative Field Value Options

Field Type	Value Options
Date	Add or subtract a number of days or weeks to or from the previous value or the current date.
Date/Time	Add or subtract a number of minutes, hours, days, or weeks to or from the previous value or the current date and time.
Integer	Add or subtract an integer value to or from the current value. **Note:** The resulting value cannot be greater than the maximum value defined for the field or less than the minimum. Therefore, the maximum value you can add or subtract is the field's maximum value minus the field's minimum value. For example, if the field maximum is 8 and the field minimum is -8, the maximum value you can add or subtract from the current value is 16.
Text Field	Prepend or append a text value to the current text value.
Text Area	Prepend or append a text value to the current text value.

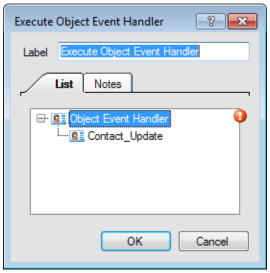
Editing Execute Object Event Handler attributes

You can add contact-related object event handlers to your survey that can be associated with create and update operations on contact objects. Object event handlers are added and managed on the process designer in a virtual container called the **process model**. Once you add your object event handlers on the process designer and deploy the process model, you can add an Execute Object Event Handler element to your flow diagram and then associate it with one of your object event handlers to trigger an action. See Adding object event handlers.

Note Only synchronous object event handlers are applicable to surveys.

To edit Execute Object Event Handler attributes

1 Double-click the Execute Object Event Handler element. The Execute Object Event Handler window opens.



Note Contact objects must be added on the process designer and then the process model must be deployed for objects to display on the List tab.

2 Type the name of the element in the Label field.

3 Select an object event handler from the List tab.

4 To add notes about the object event handler, click the Notes tab and type your notes.

5 Click the OK button to add the object event handler to the flow.

Editing Transactional Mailing attributes

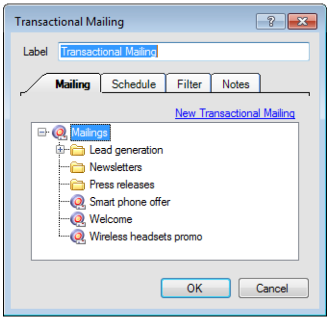
Once you add a Transactional Mailing element to your flow diagram, you can edit its attributes to define which mailing to send to a contact. In addition, you can choose to send the mailing immediately, at an exact time, or at a certain interval. If the mailing is scheduled to be sent at a certain interval, the mailing is stored until sent by the **mailer daemon**. By default, the mailer daemon sends scheduled transactional mailings every fifteen minutes. If you want the utility to send mailings more frequently, you must edit the site-wide configuration setting RNMD_EVENT_PROC_INTERVAL (Outreach and Feedback > General > RNM Daemon).

Note The Transactional Mailing element simply schedules a mailing to be sent. It does not pause the processing of the flow until the mailing is sent. Therefore, any elements following this element in the flow continue to be processed immediately, even if the mailing is scheduled to be sent in the future.

This element can be filtered using segments. If you choose to filter a transactional mailing, you can select whether contacts who are in or not in the segment are sent an email. See Creating transactional mailings.

To edit Transactional Mailing attributes

1 Double-click the Transactional Mailing element to open the Transactional Mailing window.



2 Type the name of the element in the Label field.

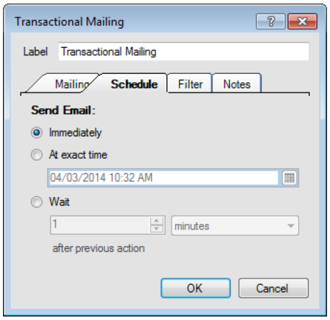
3 Select the mailing you want to send.

 a To search for a mailing, right-click the list and select Search. Then type the mailing name in the Find field.

Note In order to be sent, the transactional mailing you select must be in a launched state. If you select a transactional mailing that has not been launched, it is not sent and the system advances to the next element in your flow diagram.

4 To create a transactional mailing, click New Transactional Mailing and refer to [To create a transactional mailing](#).

5 Click the Schedule tab.

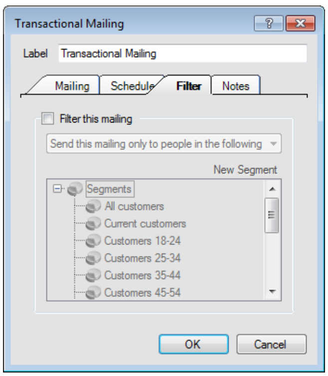


6 Enter the following field information.

Table 555: Schedule Tab Description

Field	Description
Immediately	Select this radio button to send the email immediately after this action occurs.
At exact time	Select this radio button and click the calendar (to the right of the At Exact Time field) to select a specific date and time to send the email. **Note:** If this option is selected, a clock icon appears on the Transactional Mailing element to indicate that a time has been scheduled for this mailing.
Wait	Select this radio button to send the mailing a specified amount of time after this action is triggered in the flow. Use the up and down arrows to select the number of units, and click the drop-down menu to select the interval (minutes, hours, days, or weeks). **Note:** If this option is selected, a clock icon appears on the Transactional Mailing element to indicate that a time has been scheduled for this mailing.

7 Click the Filter tab and select the Filter This Mailing check box to select whether contacts should be included or not included in the segment to be filtered from the mailing. The default is Send This Mailing Only to People in the Following Segment.



If you leave the default, only contacts who meet the criteria in the segment receive the mailing.

8 To send the mailing to all contacts except those who meet the criteria in the segment, click the drop-down menu and select Send This Mailing Only to People in the Following Segment.

9 Select a segment for the mailing.

10 To add a segment, click New Segment and refer to [To create a segment](#).

11 To add any notes associated with the element, click the Notes tab and type the notes.

12 Click the OK button.

Editing Transactional Survey attributes

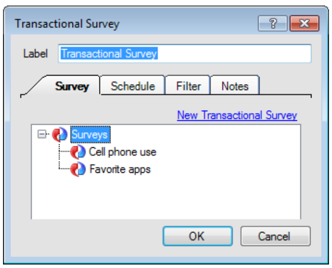
Once you add a Transactional Survey element to your flow diagram, you can edit its attributes to define which survey to send to a contact. In addition, you can choose to send the survey immediately, at an exact time, or at a certain interval. If the survey is scheduled to be sent at a certain interval, the survey is stored until sent by the **mailer daemon**. By default, the mailer daemon is scheduled to send scheduled transactional surveys every fifteen minutes.

Note The Transactional Survey element simply schedules a survey to be sent. It does not pause the processing of the flow until the survey is sent. Therefore, any elements following this element in the flow continue to process immediately, even if the survey is scheduled to be sent in the future.

This element can be filtered using segments. If you choose to filter a transactional survey, you can select whether contacts who are in or not in the segment are sent an email. See [Creating transactional surveys](#).

To edit Transactional Survey attributes

1 Double-click the Transactional Survey element to open the Transactional Survey window.



2 Type the name of the element in the Label field.

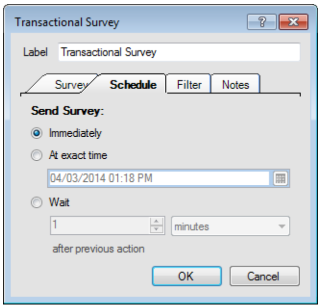
3 Select the survey you want to send.

a To search for a survey, right-click the list and select Search. Then type the survey name in the Find field.

Note In order to be sent, the transactional survey you select must be in a launched state. If you select a transactional survey that has not been launched, it is not sent and the system advances to the next element in your flow diagram.

4 To create a transactional survey, click New Transactional Survey and refer to [To create a transactional survey](#).

5 Click the Schedule tab.



6 Enter the following field information.

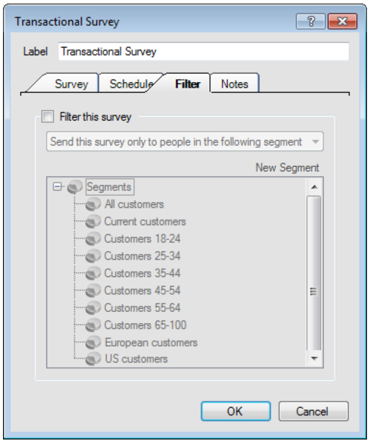
Table 556: Schedule Tab Description

Field	Description
Immediately	Select this radio button to send the survey's invitation message immediately after this action occurs.
At exact time	Select this radio button and click the calendar (to the right of the At Exact Time field) to select a specific date and time to send the invitation message. **Note:** If this option is selected, a clock icon appears on the Transactional Survey element to indicate that a time has been scheduled for this invitation message.

Table 556: Schedule Tab Description (Continued)

Field	Description
Wait	Select this radio button to send the survey's invitation message a specified amount of time after this action is triggered in the flow. Use the up and down arrows to select the number of units, and click the drop-down menu to select the interval (minutes, hours, days, or weeks). **Note:** If this option is selected, a clock icon appears on the Transactional Survey element to indicate that a time has been scheduled for this invitation message.

7 Click the Filter tab and select the Filter This Survey check box to select whether contacts should be included or not included in the segment to be filtered from the survey. The default is Send This Survey Only to People in the Following Segment.



If you leave the default, only contacts who meet the criteria in the segment receive the survey.

8 To send the survey to all contacts except those who meet the criteria in the segment, click the drop-down menu and select Send This Mailing to Everyone Not in the Following Segment.

9 Select a segment for the survey.

10 To add a segment, click New Segment.

11 To add any notes associated with the element, click the Notes tab and type the notes.

12 Click the OK button.

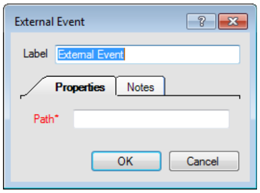
Editing External Event attributes

Once you add an External Event element to your flow diagram, you can edit its attributes to specify the path to your external event. In order to pass contact data to the external event, you must create a template file specifying the data format. For information about external events or assistance in creating external event template files, contact your Oracle account manager.

Important External events have been deprecated and may be permanently removed in a future release. Instead, you can use contact-related object event handlers to trigger actions. See Editing Execute Object Event Handler attributes.

To edit External Event attributes

1 Double-click the External Event element to open the External Event window.



2 Type the name of the element in the Label field.

3 Type the full path name of a script or program used to externally process the event in the Path field.

4 To add any notes associated with the element, click the Notes tab and type the notes.

5 Click the OK button.

Adding Comment artifacts

The toolbox also provides a Comment artifact that lets you enter comments in your diagram without impeding the survey flow. Comments are added to the canvas in the same way elements are and can be linked to elements using the Artifact connector type.

To add a comment

1 Drag and drop a Comment artifact from the toolbox onto the canvas.

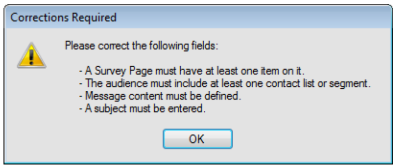
2 Click the artifact to type your comments.

3 To connect the artifact to an element, click an anchor on the artifact and drag to an anchor on the element. The anchor is highlighted when the connector is able to link to it.

Validating surveys

As you create a flow diagram for your survey, Feedback validates all flow components to ensure all required attributes have been specified. Although validation occurs in real time as you add and update the components, you can also force validation manually at any time by clicking the Validate button on the Designer Home tab.

You can choose to display validation flags by selecting the Validation Results check box on the View tab (see View tab). This way, valid components are flagged with a green check mark, while those found to be invalid are flagged with a red exclamation point and a small button you can click to view the validation error. If you attempt to send a survey without first addressing its validation errors, the flags automatically display (even if you have not selected the Validation Results option) along with a message summarizing the errors, as shown in the following figure.



CAN-SPAM compliance in surveys

Legal definitions and penalties for spam vary among countries. Therefore, it is important to stay abreast of current and pending legislation in the United States and other countries. There are many sites that you can check to stay current with the laws and to make sure your site is compliant.

The CAN-SPAM Act of 2003 (CAN-SPAM) requires that organizations adhere to certain rules when sending commercial emails. Included in the requirements are the following conditions:

- Email does not contain false or misleading header information.
- Email does not use a deceptive subject line.
- Email contains a way for recipients to opt out of all emails, not just specific types.

- Email does not send to contacts that have previously opted out.
- Email must be identified as an advertisement in the subject line.
- Email includes the sender’s physical mailing address, which must display in ASCII text.
- Email that contains adult content is identified as such in the subject line.
- Email does not send to harvested or generated email addresses.
- Email does not send to domains in the Federal Communications Commission (FCC) wireless domain list.

Oracle Service Cloud helps you identify CAN-SPAM compliance issues. When creating a survey with an invitation message, the system automatically checks that the message contains a physical address and an unsubscribe link, and honors global opt-in preferences. The remaining requirements must be manually verified by the staff member saving the survey.

For information about the CAN-SPAM Act, refer to the Federal Trade Commission (FTC) website.

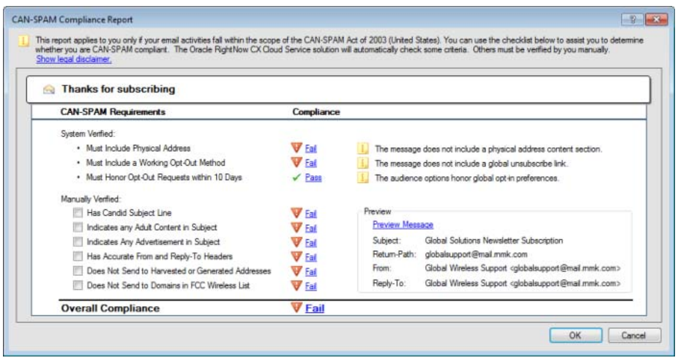
Important The checklist is used to gauge your compliance with CAN-SPAM. You should use this checklist in conjunction with and not as a replacement for legal counsel.

The following procedures describe the methods for checking for CAN-SPAM compliance from the Invitation Message tab and the Delivery tab of a survey.

To check compliance from the Invitation Message tab

1 Open a survey and click the Invitation Message tab.

2 Click the Test CAN-SPAM button in the Content section of the HTML editor. The CAN-SPAM Compliance Report opens.



The report shows whether each system-verified requirement passed or failed. The manually verified requirements can be selected or cleared based on your manual verifications. The following table describes the fields on the window.

Table 557: CAN-SPAM Compliance Report Description

Field	Description
System Verified	This section shows whether the following system-verified requirements passed or failed.
Must Include Physical Address	The system automatically verifies that a physical address is included in the message. For this requirement to pass, you must have inserted a physical address using the Insert Address button on the HTML editor. See Inserting physical addresses. If a text address has not been inserted using the Insert Address button, the requirement fails.
Must Include a Working Opt-Out Method	The system automatically verifies that a global unsubscribe link is included in the message. The unsubscribe link can be added by using the Unsubscribe Link button in the toolbox of the HTML editor. When this button is clicked, a window opens for selecting the opt-in field. If Global Opt-In is selected, the requirement passes when CAN-SPAM compliance is checked.
Must Honor Opt-Out Requests within 10 Days	The system automatically verifies whether the global opt-in setting is honored by the survey. By default, the Honor Global Opt-In check box is selected on the Audience tab, which prevents messages from sending to contacts who have globally opted out of receiving communications. If this check box is not selected, the requirement fails when compliance is checked. Since contacts are instantly unsubscribed when they globally opt out of surveys, any global opt-out requests are automatically met within 10 days.
Manually Verified	This section lets you select whether the following requirements passed or failed.
Has Candid Subject Line	You must manually verify that the message uses a candid subject line. CAN-SPAM compliance requires that the subject line of an email accurately reflects its contents. To pass this requirement, you should ensure that the subject line is not deceptive to the email recipient. You can view the subject line in the Preview section.

Table 557: CAN-SPAM Compliance Report Description (Continued)

Field	Description
Indicates any Adult Content in Subject	You must manually verify that the subject identifies adult content in the message. The CAN-SPAM Act requires that a message containing adult content must contain the text "SEXUALLY EXPLICIT" in the subject line of the email. You can view the subject line in the Preview section.
Indicates Any Advertisement in Subject	You must manually verify that the subject identifies the message as an advertisement, when applicable. The CAN-SPAM Act requires that the message contains clear and conspicuous notice that the message is an advertisement or solicitation. To pass this requirement, you should ensure that the subject line accurately reflects the message's content. You can view the subject line in the Preview section.
Has Accurate From and Reply-To Headers	You must manually verify that the From and Reply-To headers contain accurate information. CAN-SPAM compliance requires that the From and Reply-To headers and routing information, including the originating name and email address, must accurately identify your organization. You can view the From and Reply-To headers and the return path in the Preview section.
Does Not Send to Harvested or Generated Addresses	You must manually verify that you are not sending the message to harvested or generated addresses. Harvested email addresses are gathered from websites or web services that have published a notice prohibiting the transfer of email addresses for the purpose of sending email. Generated email addresses are formed by using a "dictionary attack," by combining names, letters, or numbers into multiple permutations.
Does Not Send to Domains in FCC Wireless List	You must manually verify that you are not sending the message to email addresses that contain domains in the FCC wireless list. The CAN-SPAM Act prevents the sending of messages to wireless devices, such as mobile phones. The FCC publishes a downloadable list of domain names used by cellular companies.
Overall Compliance	This section indicates whether the email is entirely CAN-SPAM compliant. If any of the compliance criteria in this table fails, overall compliance fails.

Table 557: CAN-SPAM Compliance Report Description (Continued)

Field	Description
Preview	This section lets you preview the following parts of a message.
Preview Message	Click this text to preview the message.
Subject	Displays the subject of the message.
Return-Path	Displays the mailbox address the message is being sent from.
From	Displays the From address of the message.
Reply-To	Displays the Reply-To address of the message.

3 Select the check box next to the manually verified items that you have verified.

4 Click the OK button.

To check compliance from the Delivery tab

1 Open a survey and click the Delivery tab.

2 Click Test CAN-SPAM next to CAN-SPAM Compliance in the Delivery Checklist section. The CAN-SPAM Compliance Report opens (see the table in the previous procedure).

3 To view a read-only copy of the results from the last time CAN-SPAM compliance was tested, click Details next to CAN-SPAM Compliance.

Improving your email marketing

In addition to anti-spam legislation, many other external factors can negatively impact the efficiency and success of your surveys. As a Feedback user, it is important that you follow industry-accepted best practices to protect your reputation, optimize your audience, and produce well-formed content. While these best practices do not guarantee that your emails will always be accepted, they can improve the chances that your messages are delivered to the intended recipients with minimal interference from content monitors and filters. Since these practices are focused on improving the quality of your contact data as well as your messages, your survey conversion rates will most likely improve as well. For a list of best practices, see *Best Practices for Email Marketing*.

Survey session recovery

When a contact loads a survey in a web browser, a cookie is placed on the contact's computer and updated to track which survey pages have been submitted. If a contact attempts to access a survey that the contact has abandoned, the system detects this from information in the survey cookie and then loads the first page in the survey's page sequence that has not yet been submitted. This ensures that the contact does not have to answer all questions again from the first page of the survey. This cookie is separate from the session cookie placed when a contact logs in to the **customer portal** and does not affect login status.

Note By default, the survey cookie does not expire and is cleared only when the survey is completed. Therefore, contacts are not able to start over or access previously submitted pages unless the cookie is first cleared from their browser. You can disable the survey cookie or define an expiration interval by editing the RNM_RESUME_SURVEY_COOKIE_EXP setting (Outreach and Feedback > General > Miscellaneous). However, upon clearing the cookie and reloading the survey, all questions revert to a blank state. At no time can contacts see answers that they previously submitted.

Customizing Feedback configuration settings

Feedback provides many options that can be activated by editing configuration settings. These settings are used to set cookie expiration times, define default values for Serve Web Page element properties, and specify whether documents can be edited after having been sent in a survey. You can also define the subject line of Forward to Friend emails and specify a default URL to load in cases where a blank page would have been displayed.

To access Feedback settings

1 Double-click Configuration Settings under Site Configuration. The Search window opens, where you can filter your search results.

2 Clear the Select All check box under the Folders field and then select the Outreach and Feedback check box.

3 To search for a specific configuration setting in the Outreach and Feedback folder, type the setting name in the Key field.

Tip You can search part of a configuration setting name by appending a wildcard (either an asterisk or a percentage sign) to the end of your search term.

4 Click the Search button. The Configuration Settings editor displays the settings in the Outreach and Feedback folder that match your search criteria.

Tip To display configuration settings in alphabetical order, click in the Key column header.

5 Expand the folders under Outreach and Feedback > General.

6 Customize the settings under the specific Campaigns and Miscellaneous folders.

For information about a setting, see the description that appears on the Configuration Settings editor. For complete details about the Configuration Settings editor, including searching, editing, and creating new configuration settings, see Site Configuration.

Social Experience

The following sections are intended for administrators and staff members. They contain information and procedures for configuring and using Oracle RightNow Social Experience.

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Social Overview

Oracle RightNow Social Experience (Social Experience) is your organization's gateway to providing exceptional service on the social cloud. It is comprised of a set of complementary features, each representing a different, powerful way of interacting with customers using social media. While each component serves a distinct purpose, they can be used together to create a wide-ranging social web presence. By engaging with your customers using leading social channels or providing a targeted social channel of your own, you can foster dynamic customer relationships, deliver powerful support offerings, and build brand loyalty.

To make the most effective use of social media, be sure to review each feature and consider its benefits to your service initiatives. Together, the major components summarized here provide a comprehensive solution for organizations looking to expand and solidify their social media presence.

Social Experience consists of the following major features.

	**Communities**—Social Experience communities are complete social web solutions consisting of customizable **hives**, **members**, **groups**, and custom pages. Communities can galvanize your customer base and help you promote a unique culture around your brand. By opening your own dynamic social channel tailored to your products and services, you can harness the power of social media for the direct benefit of your customers. Helping your customers meet and interact can help reduce your service costs, build brand loyalty, and capture valuable insight into customer needs and preferences. Refer to Communities.

Channels—An extensive variety of methods by which your staff can communicate with your customers. Channels refer to all of the available sources of social messaging, incoming incidents, and outgoing responses that are monitored and processed by Oracle Service Cloud. In addition to traditional sources such as Service and Outreach mailboxes, chat, and the Ask a Question page, channels support leading social media such as Facebook, Twitter, YouTube, Community, and RSS feeds. Refer to Channels.

Social Monitor—With Oracle RightNow Social Monitor Cloud Service, you can monitor and participate in conversations on the social web. You can also interact with your customers by searching leading social media services, create **incidents** in **Oracle Service Cloud**, and include social media in your **Oracle RightNow Outreach Cloud Service** and **Oracle RightNow Feedback Cloud Service** messages. You can improve customer experiences by identifying trends in customer issues and opinions, and proactively communicate with customers through social channels using incidents. Refer to Social Monitoring.

Self Service for Facebook—Oracle RightNow Self Service for Facebook Cloud Service is a social web solution you can use to embed a set of Oracle Service Cloud service and community features directly on your organization's Facebook page. As a result, your organization can deliver a consistent experience to customers and fans on Facebook while maintaining a unified view of customer interactions across channels. Refer to Self Service for Facebook.

For in-depth best practices and strategies for defining a comprehensive social strategy for your organization, refer to Answer ID 4647 on our support site.

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Communities

The social web has changed the nature of customer experiences. Not long ago, word-of-mouth messaging was constrained to a limited set of channels such as email, phone, and interpersonal conversations. Today, those conversations have grown dramatically in scope. With little effort, your customers are able to broadcast and discuss their experiences through a disparate array of blogs, message boards, and social media. While monitoring and responding to issues through social media channels is critical, attempting to promote your brand in this environment is often hit-or-miss and can fragment your core message.

For a more stable social media platform, a better approach is to provide your customers with a branded **community**. By creating a dedicated social channel tailored to your own products and services, you can harness the power of social media to galvanize your customer base and promote an unconstrained conversation and unique culture around your brand. Providing a dedicated space for customers to meet and interact can help reduce service requests, all the while capturing valuable insight about needs, tastes, and preferences.

With a wide range of uses, flexible tools, and solid analytics, Oracle RightNow Support Community Cloud Service and Oracle RightNow Innovation Community Cloud Service (communities) can help your organization provide your customers with an unparalleled social experience.

For in-depth best practice information about getting the most out of your community, refer to Answer ID 4647 on our support site.

Community types

Communities may exist as standalone resources for fostering conversations and relationships, or supplement other resources such as an Oracle Service Cloud application or company website. A standard, out-of-the-box community can be customized to fulfill a broad range of activities, including:

- Social interaction
- Peer support
- Product innovation
- Blogging or journal entries
- Forums
- Managing account information
- Question and answer dialogues
- Media sharing
- Wiki-style collaborative authoring
- Corporate intranet resource

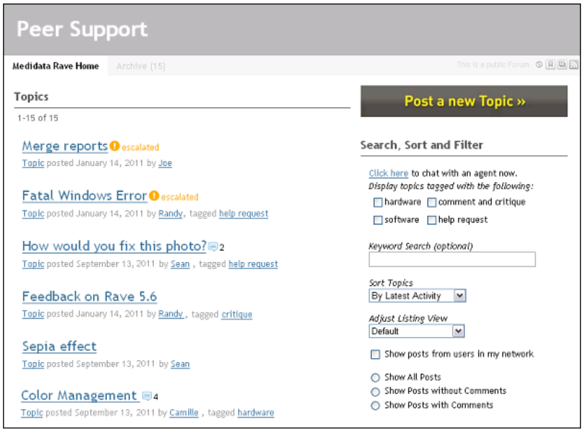
In addition to its basic configuration, the community solution is available in two specialized configurations to offer your users support from their peers in your customer base, or to help drive product innovation. Refer to Support Communities and Innovation Communities.

Whether you use a prebuilt solution or start from scratch with your own design, your community can be tailored to meet the needs of your organization.

For in-depth best practices and guidance in building and managing support and innovation communities, refer to Answer ID 4647 on our support site.

Support Communities

Oracle RightNow Support Community Cloud Service is a specialized, preconfigured **community** that can provide your customers with the opportunity to help you deliver exceptional support. By allowing them to ask questions and find answers in an online community, you can help customers feel valued without adding a single call or email to your contact center's workload, and perhaps even lighten it. In the process, your customers' contributions will transform them into loyal community experts and generate reusable content for your knowledge base.



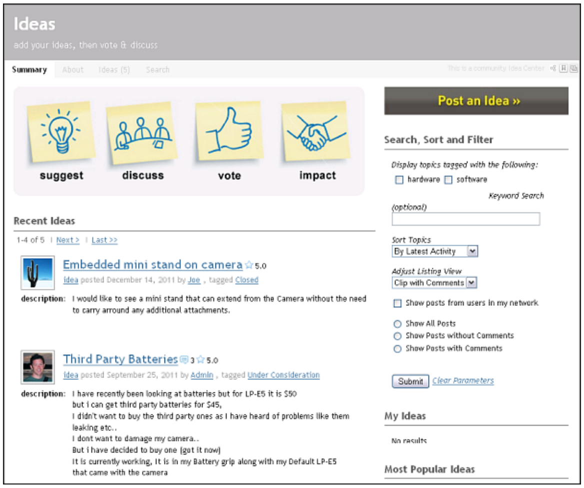
A support community provides:

- Discussion forums to encourage customers to talk about your products and services, share tips, and answer each other's questions.
- Q&A pairs to let customer pose questions to the online customer community and then mark the best answer—with escalation to your contact center if needed.
- A resource library for maintaining a searchable repository of useful information, including both company and user-generated content.
- Member reputation-tracking management to reward customer participation and expertise.
- Extensive integration with Oracle Service Cloud for incident escalation, syndicated widgets, single sign-on, knowledge access, mailings, and surveys.

For more information, contact your Oracle account manager.

Innovation Communities

Oracle RightNow Innovation Community Cloud Service helps you connect with customers who have strong opinions and great ideas for growing and improving your product and service offerings. This specialized, preconfigured **community** is designed to give your customers a voice in your product innovation processes so they can help you identify new business opportunities, guide your product road map, prioritize and refine ideas, and develop your next breakthrough product.



An innovation community provides:

- An innovation message board that invites customers to submit ideas and vote for their favorites.
- A method for capturing feedback to improve the quality of your product, packaging, ads, and more.
- A discussion board that customers can use to share their experiences to stimulate creativity and foster personal relationships.
- Member reputation-tracking management to reward customer participation and expertise.
- Extensive integration with Oracle Service Cloud for knowledge access, mailings, and surveys.

For more information, contact your Oracle account manager.

Community overview

Communities are broad entities constructed using a few highly configurable elements, each associated with a specific type of community data.

	**Hives** are resource entities, such as blogs, forums, photo shares, and message boards. Each hive can support various forms of **posts** and **comments**, which house the core content that the hive presents. Communities can contain any number of hives of varying purposes and privacy levels. Hives are also sometimes referred to as resources. Refer to Hives.
	**Members** are users of the community and can have varying permissions for actions within the community and within different hives, based on their role. Refer to Members.
	**Groups** are used to formalize member relationships based on a common interest, cause, or organization. Groups can also be associated with hives. Communities can contain any number of groups of varying purposes and privacy levels. Refer to Groups.
	**Custom pages** can be developed to “fill in” areas of the community that require further resources or exposition. Several types of **panels** are available to add community functionality to custom pages. Refer to Customizing pages.

These elements can be configured in many ways to produce a unique community environment for your customers. For example, a consumer products community could contain a hive for every major product line and perhaps an additional hive for general discussion. Each hive could accept different types of posts (such as blog entries, forum posts, or multimedia files) unique to the product it supports. The ability to read, post, and comment on the content of each hive could be restricted to specific members or groups based on their role in the community. A custom page could be added to one of the hives to extend the information it presents, such as links to other company resources. Another standalone page might serve to tie several hives together under one easily referenced landing page.

In addition to the base set of major elements, a variety of administration options exist to specify how these pieces interact with each other, such as the amount of member information stored, levels of privacy, member reputation and content moderation, and the ownership and management of hives and groups.

Taken together, these tools and functions provide vast flexibility for creating dynamic, active communities to support the unique needs of your organization.

Configuring community access

As you begin creating the content and membership that will form your **community**, it is important to understand how to govern access to the variety of user functions, exposing only the appropriate level of access to each **member** or **group**. Access to community administration functions is granted by a combination of **community privacy** settings, **hive permissions**, and **user types**. These are described in detail in the following sections.

- Community privacy levels
- Hive privacy levels
- User types

Note Because the appearance of content and configuration settings varies by the level of access provided, all procedures in this documentation assume that you are logged in as a member of the Admin–All user type (the highest level of access and visibility), unless otherwise indicated. Refer to User types for a description of the access this user type provides.

All users (members and administrators) log in to a community in the same way. However, the procedures for logging in will vary slightly based on whether your community is integrated with Oracle Service Cloud or if it exists as a standalone community.

A standalone community provides its own sign-in page as part of the community page set. When a community is integrated with Oracle Service Cloud, users log in through the customer portal. Their credentials are then passed through a single sign-on integration, logging them in to the community. For this reason, staff must have a customer account and access to the customer portal in order to log in to an integrated community. Refer to Adding contacts.

Important Communities use cookies to identify members and support community functions. Browser privacy settings that restrict or prevent the acceptance of cookies are not supported by the application.

When you first log in to a community, you will be taken to the community home page at http://<your_community_site>/pages/home. In new communities, the home page is not configured with content. Refer to Community page structure and navigation.

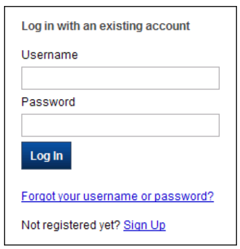
To set a different default page for new users, refer to Enabling common user features.

To log in to a community integrated with Oracle Service Cloud

1 Open your web browser and type the following URL.

```
http://<your_community_site>/signin
```

The page redirects to the customer portal login screen.



Important Staff must have a contact record and access to the customer portal in order to log in to an integrated community. Refer to Adding contacts.

2 Type your user name in the Username field.

3 Type your password in the Password field.

Note If you have forgotten your user name or password, click Forgot Your Username or Password for account assistance. If you do not yet have an account, click Sign Up to register.

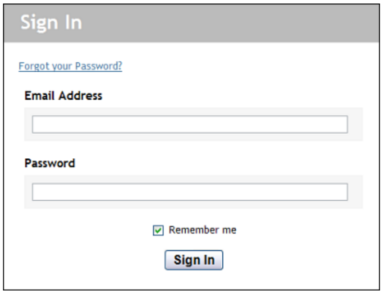
4 Click the Log In button. Your browser will redirect to the community default page.

Important Although they are associated, community user accounts are separate and distinct from contact records in Oracle Service Cloud. For this reason, creating a contact record in Oracle Service Cloud does not automatically create a user account in the community. As a result, new users may be prompted to complete additional profile fields for their community account before they are redirected to the community default page.

To log in to a standalone community

1 Open your web browser and type the following URL.

```
http://<your_community_site>/signin
```



2 Type your account email address or login ID in the Email Address field. Refer to [Creating member accounts](#).

3 Type your password in the Password field.

Note If you have forgotten your password, click Forgot Your Password and submit your email address. The community will send you a message containing a link to a password reset form.

4 To have the community remember your login credentials the next time you access the site, select the Remember Me check box.

5 Click the Sign In button.

Community privacy levels

At its highest tier of security, communities support three privacy levels that control overall access and visibility for the entire **community**.

- **Community**—The community is accessible only to registered logged-in users.
- **Public Preview**—The community is accessible only to registered users, but you can set content and **hive permissions** to Public in preparation for a public launch.
- **Public**—The community is accessible to everyone on the web with no login required.

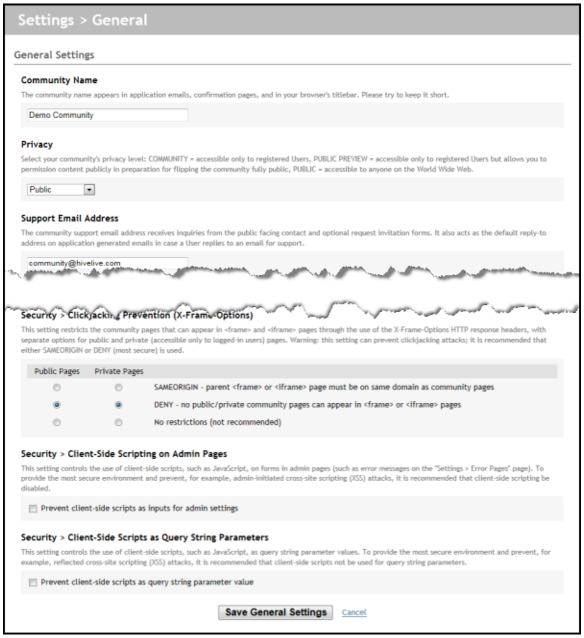
A community's privacy setting is available in the general administration settings, where you can also specify the community name, default time zone, friendly time preference, and a service email address.

It is important to consider potential security risks and learn how you can limit these risks on your community pages. See Communities and Social Monitor.

To access a community's general settings

1 Click the Admin **user link** to display community administration settings.

2 Click General Settings.



3 Type a name for your community in the Community Name field.

4 Click the Privacy drop-down menu to select a community privacy setting.

5 Type a support email address in the Support Email Address field. This address will be used as a reply-to address for all email messages sent by the community.

6 Click the Default Time Zone drop-down menu to select a default time zone for the community.

Note The default time zone is applied only to **members** who have JavaScript disabled in their browser. Members with JavaScript-enabled browsers will see times represented in their own time zone.

7 To always display time stamps in a formal date/time format instead of a friendly value (such as "yesterday"), clear the Enable Friendly Time check box.

8 To specify the default for the Email Me When Others Post a New Comment subscription notification, select or clear the Auto-check the Subscription Checkbox for New Comments check box. Refer to Post and comment subscriptions and notifications.

9 To restrict specific file types from being uploaded by users as attachments to posts and comments, select the Do Not Allow Files With the Following Extensions as Attachments check box, and add or delete file types to complete the list.

10 To allow admins to export post and comment data, select the Show the Icons for Exporting Content as a CSV File check box.

11 To display threads with unread content by logged-in users in bold, select the Highlight Unread Threads (Based on the Initial Post) to Logged-in User check box.

12 To disable Search Engine Optimization (SEO) No Follow, clear the Enable No Follow check box.

13 To send users of supported mobile devices to a mobile-optimized page when replying to a thread from a subscription notification email, select the Enable Mobile-optimized Pages check box.

14 To set the clickjacking prevention security level for public and private pages, select the SameOrigin, Deny, or No Restrictions radio buttons. The security level is set, by default, to Deny, which is the most secure level.

15 To prevent the use of client-side scripts on forms in admin pages, select the Prevent Client-side Scripts as Inputs for Admin Settings check box. This check box is cleared, by default. To provide the most secure environment, it is recommended this check box be selected. .

Note When the Prevent Client-side Scripts as Inputs for Admin Settings check box is changed from selected to cleared, a message is displayed to warn of the security risk.

16 To prevent executable client-side scripts from being passed as query string parameter values, select the Prevent Client-side Scripts as Query Sting Parameter Value check box. This check box is cleared, by default. To provide the most secure environment, it is recommended this check box be selected.

17 Click the Save General Settings button.

Hive privacy levels

In addition to setting a privacy level for the entire **community**, each **hive** is set to one of four privacy levels, determined by the **community privacy level** and the granting of **hive permissions**. Refer to Hive permissions.

Hives associated to a **group** are also restricted by the group privacy level. Refer to Editing group attributes.

Table 558: Hive Privacy Levels

Privacy Level	Description
Private	Hive visibility is restricted to the hive **owner** when all of the following conditions have been met: • The community privacy level has been set to Community or Public Preview. • Hive permissions have been granted only to the hive owner. • The hive is associated with a group of any group privacy level. **Note:** New hives are private by default until additional hive permissions are granted. Hives created from templates inherit the privacy level of the copied template.
Restricted	Hive visibility is restricted to groups or members that you explicitly define when all of the following conditions have been met: • The community privacy level has been set to Community or Public Preview. • Hive permissions have been granted to specific groups or members, but not to all registered users or **guest** users. • If the hive is associated with a group, the group's privacy level is set to Restricted, Community, or Public.
Community	Hive visibility is restricted to any member who is registered and logged in to the community when all of the following conditions have been met: • The community privacy level has been set to Community or Public Preview. • Hive permissions have been granted to all registered users, but not to guest users. • If the hive is associated with a group, the group's privacy level is set to Community or Public.

Table 558: Hive Privacy Levels (Continued)

Privacy Level	Description
Public	Hive visibility is enabled for everyone on the web, with no registration or login required, when all of the following conditions have been met: • The community privacy level has been set to Public. • Hive permissions are granted to guest users (visitors to the community who are not members or are not logged in). • If the hive is associated with a group, the group's privacy level is set to Public.

User types

While general access to communities and **hives** is governed by privacy settings and permissions, higher-level member functions are governed by user types that define their roles in the community.

As part of their profile, all **members** are assigned a user type that determines the actions they can perform. For example, in a common default scenario, you can choose from two administrator types, two **builder** types, and a basic member type. Each user type establishes a level of access that determines what features and settings are accessible to members. Note that the default user types in a given community may be different from what is shown here.

- **Admin–All**—This user type provides the highest level of access and visibility, bypassing all permission restrictions. Members of this user type can perform any administrative task and view all community content, regardless of privacy settings. This user type should be reserved only for members who require full administrative access. Members of this type are sometimes referred to as super admins, as they have access to certain settings that community admins do not.
- **Admin–Community**—This user type is the next highest level of community access. Members of this user type can access the Admin user link to access community administration settings, such as those that manage community structure and memberships. Refer to Accessing community administration settings.
- **Builder–Custom**—This user type is the higher level of the two builder types. Members of this user type can create custom hives and **groups** from scratch, and customize other design elements such as pages or navigation.
- **Builder–Template**—This user type can create hives and groups from **templates** only. Members of this user type cannot customize hives and groups once they have been created.

- **Member**—This user type has the most basic level of access and visibility. This user type has no access to administration or building functions and is generally used to access the community's content.

The following figure provides more detail about the permissions granted to each user type.

User Types and Permissions

Permission	Member	Builder-Template	Builder-Custom	Admin-Community	Admin-All (Super Admin)
Edit own account email	•	•	•	•	•
Edit own account login ID	•	•	•	•	•
Create hives from templates		•	•	•	•
Publish hives		•	•	•	•
Create custom hives			•	•	•
Customize hives			•	•	•
Edit content flags				•	•
Create groups				•	•
Customize groups				•	•
Edit account names				•	•
Create users				•	•
Edit users' account information and content				•	•
Invite users				•	•
Edit all aspects of the community (Admin link)				•	•
Bypass all permissions and privacy settings					•

Important While the user types shown here reflect a common distribution of user permissions, community user types are often highly customized and tailored to the specific business needs of the site. If you want to customize user types with permission sets different than those available on your site, contact your Oracle account manager.

In addition to setting a user type, you can define a user status for each member. A member's status reflects the current disposition of the account—whether it is active or inactive, or has been suspended. Members must be active to log in to a community. User type and status can be edited by accessing the administration settings in their profile. Refer to Managing member accounts.

Accessing community administration settings

Members with Admin-All and Admin-Community **user types** can access community administration settings by clicking the Admin **user link** that appears at the top right of every page. The community administration settings are used to configure all aspects of the community, including its members, **hives**, and content.

Important These settings are available only to members whose profiles have been set to a user type of Admin–Community or Admin–All. Refer to User types.

To access community administration settings

1 Click the Admin user link.

2 Click an option to access community administration settings. Settings available for each option are described in the following table.

Table 559: Community Administration Settings

Option	Description
General Settings	Set the community name, privacy level, default time zone, and the support email address. Refer to Community privacy levels.
Users	Configure settings for private messaging, profile pop-ups, and the default landing page for new users. You can also create additional fields for user profiles. Refer to Enabling common user features and Defining member profile fields.
Hives	Create hives and **hive types**, access **hive templates**, and transfer hive **ownership**. Refer to Hives.
Groups	Create new **groups**, access group **templates**, and transfer group ownership. Refer to Groups.
Posts	Create new **post types** and view **posts** associated with a hive or post type. Refer to Posts.
Comments	Create comment types and view **comments** associated with a hive or post type. Refer to Comments.
Custom Pages	Create and manage **custom pages** for your community. Refer to Customizing pages.

Table 559: Community Administration Settings (Continued)

Option	Description
Master Template	Customize elements used by every page in the community, such as navigation bars, fine print and footer content, and the URL of the logo. Refer to Community page structure and navigation.
Join Codes	Create special codes for allowing and tracking how users join your community. Refer to Join codes.
Invitations	Enable users to invite others to join the community and define default text to be used in invitation emails. Refer to Community invitations.
Moderation	Configure community moderation features, such as post and comment flagging, disruptive user filtering, and a CAPTCHA threshold. Refer to Content moderation.
Reputation	Define reputation levels and set scoring points for reputation actions. Refer to Member reputation levels.
Search	Manage search settings, such as the default search interface, parent group label visibility in hive filters, and filter visibility and sorting. Refer to Searching for content.
Analytics and Reporting	View community statistics, such as posts viewed, content created, and user activity. Refer to Community analytics.
Languages	View and modify labels and select default and supported languages.
Error Pages	Customize the content of error pages returned by the community.
Emails	Customize messages sent by the community, such as account activation messages and new content notifications. Refer to Post and comment subscriptions and notifications. **Note:** This section is available only to members with the Admin–All user type.

Community page structure and navigation

Communities feature several standard pages that are often made available from the community navigation links or set as default landing pages.

Table 560: Community Standard Pages

Page	Description
Community Home	The default community landing page that displays summary information about the community. `http://<your_site>/pages/home` **Note:** The content of this page can be customized by clicking Edit Page in the upper right corner of its content area. Refer to Adding panels to pages.
People	Displays information about **members** of the community. `http://<your_site>/people`
Groups	Displays information about **groups** in the community. `http://<your_site>/groups`
Group Summary	The default landing page for a group page set that displays summary information about the group. Refer to Group pages. `http://<your_site>/groups/<group_hash>/summary` **Note:** The content of this page can be customized by clicking the group's Settings tab and clicking Customize Summary Page. Refer to Adding panels to pages.
Hives	Displays information about **hives** in the community. `http://<your_site>/hives`
Hive Summary	The default landing page for the hive page set that displays summary information about the hive. Refer to Hive pages. `http://<your_site>/hives/<hive_hash>/summary` **Note:** The content of this page can be customized by clicking the hive's Settings tab and clicking Edit Panels page in the Summary Page section. Refer to Adding panels to pages.
Posts	Displays information about **posts** in the community. http://<your_site>/posts
Comments	Displays information about **comment** in the community. `http://<your_site>/comments`

Table 560: Community Standard Pages (Continued)

Page	Description
My [Objects]	Lists all community objects of a specific type (such as posts, comments, hives, and groups) that are associated with your account. `http://<your_site>/my/<object_type>`

Community pages are assembled using a common set of navigation elements defined by a master template. The master template contains settings that define basic page structure and navigation. You can add and remove navigation links by editing the hive's master template settings.

When defining a link, you can enter a full URL to a page outside of the community, or a relative path to a page within the community. For example, entering a relative path of /example will create a link that points to a **custom page** located at http://<your_site>.com/example. Refer to Customizing pages.

You can also add fine print and custom footer content that will appear on each page. This can be useful for adding legal text, copyright information, and other navigational elements that should always be accessible to your members.

The following figure shows a simplified representation of a basic community page layout.

The design elements shown here are described in the following table.

Table 561: Community Navigation Elements

Element	Description
Top Links	A navigation element at the upper left corner containing custom links. Refer to To add top and bottom links.
User Links	A navigation element at the upper right corner containing links to the logged-in user's profile, inbox, favorites, subscriptions, and a sign-out option. Admin-level members will also see a link to community administration settings. Refer to Member experience.
Logo	An image that appears at the top of every community page. This image can also be configured as a clickable link. Refer to To edit miscellaneous master template settings.
Community Navigation	The community's main navigation element containing links to community home, members, groups, and hives. This element can also be configured with custom links. Refer to To customize the community links.
Community Search	A basic keyword search field that members can use to search community content. This element also provides a link to the advanced search option. Refer to Searching for content. **Note:** Search terms must contain a minimum of three characters.
History	Breadcrumb-style links that members can click to return to pages recently visited.
Content Area	The content section used to display community data elements such as pages, hives, groups, and members. These elements are customizable and often contain a navigation tab set of their own. Refer to Adding panels to pages.
Bottom Links	A navigation element at the lower left corner containing custom links. Refer to To add top and bottom links.
Fine Print	A text element at the lower right corner used to display fine print. Refer to To edit miscellaneous master template settings.
Custom Footer	A content element used to display a custom footer at the bottom of all community pages. Refer to To edit miscellaneous master template settings.

To customize the community links

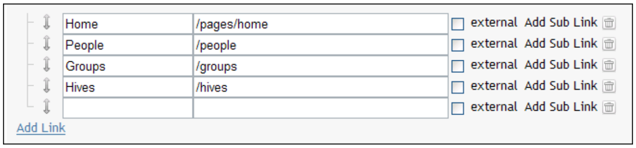
1 Click the Admin **user link** to display community administration settings.

2 Click Master Template.

3 To add a community link, click Add Link in the Community Links section. A new row is added to the link configuration grid.

Or

To create a sublink for an existing link, click Add Sub Link.



a Type the link text.
b Type a full URL or relative path for the link.
c To create a link that opens in a new window, select the External check box.

4 To change the position of a community link, click the arrow next to the link and drag it up or down in the grid. Links will appear in the order they are listed.

5 To remove a community link, click the Delete button.

6 Click the Save Navigation Settings button.

To add top and bottom links

1 Click the Admin **user link** to display community administration settings.

2 Click Master Template.

3 To add a top link, click Add Link in the Top Links section.

Or

To add a bottom link, click Add Link in the Bottom Links section.

4 Type the link text in the Text field.

5 Type a full URL or relative path for the link in the URL field.

6 To remove a link, remove its text and URL values.

7 Click the Save Navigation Settings button.

To edit miscellaneous master template settings

1 Click the Admin **user link** to display community administration settings.

2 Click Master Template.

3 Scroll down to the Misc Settings section.

4 To turn the community logo image into a link, type a full URL or relative path in the Logo Link field.

5 To add fine print content to the lower right corner of the page, type the content in the Fine Print Item HTML field.

6 To add custom footer content to the bottom of the page, type the content in the Custom Footer HTML field.

7 Click the Save Misc Settings button.

Searching for content

Members can search for content using a keyword search field generally located at the top right corner of every page. The search algorithm is enhanced with Boolean logic, so members can use the following operators when performing searches.

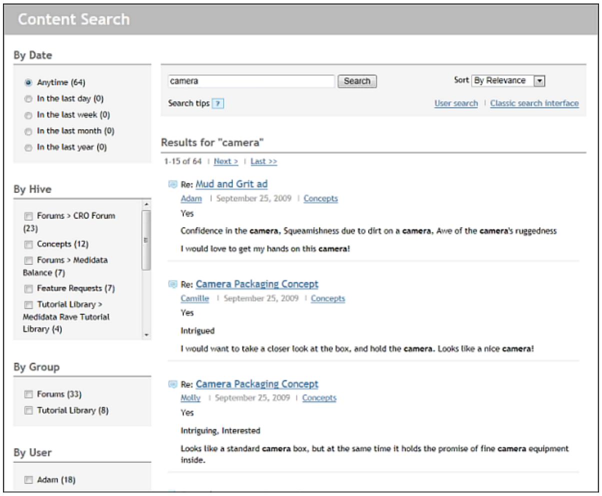
Table 562: Search Operators

Operator	Description
+	A leading plus sign indicates a word is required. For example, searching for `+John Doe` returns all results containing John and, optionally, those containing Doe. Searching for `+John +Doe` returns results that contain only both John and Doe.
–	A leading minus sign indicates a word must not be present. For example, searching for `+John -Doe` returns results that contain John but do not contain Doe.
( )	Parentheses can be used to group words into subexpressions. For example, searching for `+(John Jane)+Doe` returns results that contain Doe and either John or Jane.

Table 562: Search Operators (Continued)

Operator	Description
*	Append an asterisk to use a wildcard in your search term to match exact strings. For example, searching for `Jane*` returns results that start with Jane, such as Janet.
%	Append a percent sign to use a wildcard in your search term to match like terms. For example, searching for `hut%` returns results that are similar to hut, such as shutter.
" "	Enclose two or more words in double quotes to match a literal phrase. For example, searching for `"John Doe"` returns results containing only the exact phrase, John Doe.

Performing a search will take community members to the Content Search page at http://<your_community_site>/search.



This page includes the community search element, the search results, and a group of filters along the left. You can access a set of search configuration settings to display filters differently on global search, group search, and hive search pages.

Filtered search results display immediately as you select filters. Community members can sort search results by relevance, date posted, or rating. Posts and comments that contain file attachments display a file type indicator that you can click to view the file.

Members can also search for other community members from User Search. This is a useful option to search for a post or group of a known author.

Important The default keyword search requires JavaScript to be enabled in the member's web browser. When selecting one or more filters on the left, the search results refresh dynamically using AJAX without requiring the page to reload. If a member attempts to access the keyword search without JavaScript enabled, they will be prompted to enable JavaScript or to follow a link to use the classic search interface. Experienced community users may be accustomed to searching for content using our classic search form. Refer to Classic search interface.

To perform a search

1 Type a term in the Search field. Refer to the table above for a list of valid search operators.

2 Click the Search button. A list of search results displays. To sort by relevance, date posted, or rating, click the Sort drop-down menu in the upper right of the Content Search page and select the sort you want.

3 To narrow your search by activity date when searching posts, comments, or hives, select a By Date filter on the left. Available options include anytime, last day, last week, last month, or last year.

4 To narrow your search by hive, select one or more hives in the By Hive filter.

5 To narrow your search by group, select one or more groups in the By Group filter.

6 To narrow your search by user name when searching posts and comments, select one or more names in the By User filter.

7 To clear multiple selected filter values at once, click the Clear link beneath the filter header.

To search for a specific community user

1 Click the User Search link.

2 Type the display name of the user you are searching for.

3 Click the Search button. A list of matching users displays in the search results.

To access search configuration settings

1 Click the Admin **user link** to display community administration settings.

2 Click the Search link.

3 To change the default search interface, click the radio button next to the interface you want. Here you may choose from the new search interface (introduced in the November 2013 release) or the original classic search interface. Refer to Classic search interface.

4 To hide the parent group from hive filter labels, clear the Display Parent Group check box. By default, parent groups are included when hive filters are displayed, in the format of Group Name > Hive Name.

5 To disable the visibility of the Hive, Group, or User filter on global, group, or hive search pages, clear the filter's check box in the column for the search page type.

Note Date filters cannot be hidden from any search page.

6 Click the Save Search Settings button.

Classic search interface

Though the new search interface is the default, the classic search interface may be used to perform content searches across the community or within a single hive or group. The classic form lacks the dynamic search functionality that is available with the new search form. Classic search results display in separate categories, including posts, comments, hives, people, and groups.

Note We recommend that community members use the new search interface. Refer to Searching for content.

To switch between the classic and new search forms

1 On the Content Search Page, click the Classic Search Interface link. The classic search form displays.

2 To return to the new search interface, click the New Search Interface link in the Search form.

Or

Click the Advanced link in the upper right corner of the community interface.

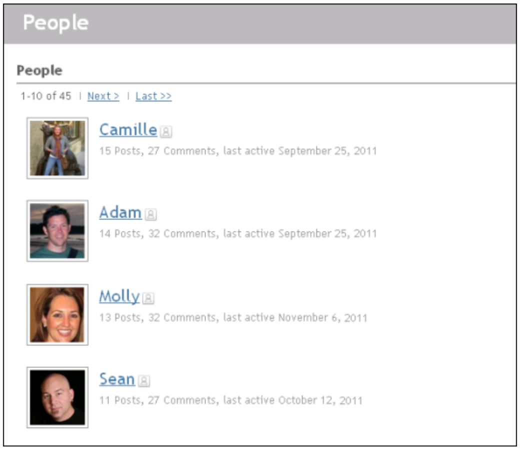
To perform a search using the classic search interface

1. To narrow your search to a specific type of data, click the area you want to search from the links above the search form. Available options are All, Posts, Comments, KB Articles, Hives, People, and Groups. By default, all forms of content are searched.
2. Type a search term in the Keywords field. Search terms must contain a minimum of three characters. Refer to the Search Operators table for a list of search operators.
3. To narrow your search by activity date when searching posts, comments, or hives, select a date range from the Last Activity drop-down menu.
4. To narrow your search by author name when searching posts and comments, type the author name in the Author field.
5. To narrow your search to a profile field when searching people, click the Profile Field drop-down menu and select a field to search.
   a. To search additional profile fields, click Add Field.
6. Click the Search All button.

Members

The foundation of a **community** is its membership, the people who congregate to produce the content and conversations that give the community its value. A list of the people that comprise your community's membership is available at the following location.

```
http://<your_site>/people
```



While you can make your community content publicly available to guests (users who do not have community accounts), it is usually better to require member accounts for your users so you can track their profile and activity. For example, when users have member accounts, you can store pertinent information about them in profile fields, moderate their content, and manage their community reputation. Refer to Managing member accounts.

Members can be assigned different levels of access, allowing them to perform different roles in the community. Some may have only a basic level of access for **posting** or **commenting** on a **hive**. Others may help manage and moderate the community's content and membership. A few may have complete authority to design new hives and manage other high-level administration tasks. Accounts can also be used to grant members access to restricted hives, either individually or based on **group** memberships. Refer to Hive permissions.

Depending on the community settings and permissions you define, member accounts can be created manually by administrators, selectively by invitation, or openly by your **guests** themselves. You can also create join codes to help you track promotions that result in community membership. Refer to Creating member accounts.

- ❖ Group ownership and delegation
- ❖ Hive ownership and delegation

Member experience

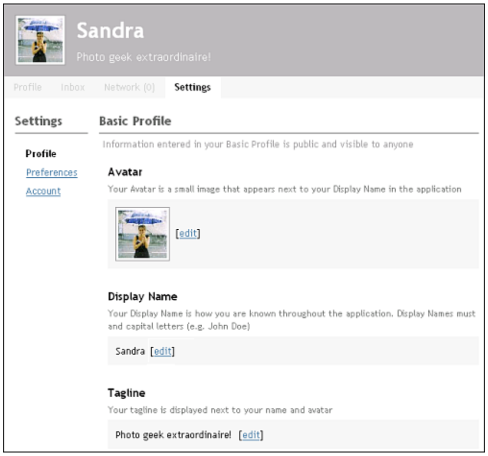
Your community provides a unique social experience tailored to the needs of your business and customer base. While the community interface can be highly customized, the basic features available to users are consistent between communities. Understanding how your community appears and functions from your users' viewpoint is essential to maintaining a compelling social environment.

Basic member features—such as the user profile, inbox, favorites, and subscriptions—can be accessed by clicking the user links that appear at the top right of all community pages.

Tip In addition to the features described here, if your community is integrated with Oracle Service Cloud, you can add widgets to your customer portal pages to extend the member experience to your support site. These widgets allow your users to search, display, and submit posts right from the support site. Refer to [Community integration widgets].

Profiles

Member profiles are used to track basic user information, such as a display name, email address, login credentials, and any profile fields defined by the community administrators. Members can also select an avatar image and set their network privacy level. Refer to [Managing member accounts].

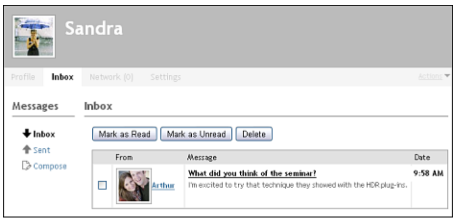


Members can access their profile page at any time by clicking the Logged In As user link. To edit their information, members can click the Edit Profile link on the profile page, or click the Settings tab on any My [Object] page, such as the My Posts page available at the following location.

```
http://<your_site>/my/posts
```

Messaging

Occasionally, members may want to exchange private messages instead of exchanging comments in a public forum. By clicking the Inbox user link, members can send messages directly to other members, subject to the recipient's Network Privacy settings (refer to Member Preferences). Messages are visible only to the sending and receiving members and are not associated with a specific hive or post. Refer to Member Preferences.



From this area, you can click options in the Messages column to check your personal inbox, view messages you have sent, and compose new messages to people in your network.

Note You can send messages to members who are not in your network by clicking the Send <Member Name> a Message link on their member profile pages.

Favorites

In a fast-growing community, it can be challenging for members to search and browse for resources they have found useful in the past. To make this easier, your members can keep track of their favorite hives, pages, and posts by clicking the Add To Favorites link above the header, or by clicking the favorites button wherever it appears.

Members can view a list of their favorites at any time by clicking the Favorites user link.

Subscriptions and RSS feeds

While favorites are a great way to track frequently accessed content, members may find it useful to simply be notified when an infrequently used resource has been updated. When viewing a hive, page, or post, members can choose to be notified of new comments by clicking the Subscribe link above the header, or by clicking the subscribe button wherever it appears. When a subscribed item is updated, a notification email is sent to all subscribed members informing them of the update. Refer to Post and comment subscriptions and notifications.

Members can view a list of their subscriptions at any time by clicking the Subscriptions user link. They can also add a hive's RSS feed URL to a third-party RSS reader application for external review of community feeds. The feed is accessed by clicking the RSS button.

Note Private or restricted hives cannot be accessed through the RSS feed. For public hives, anyone who has the feed URL will be able to access the feed.

Networks

To develop strong relationships within the community, customers must be able to easily track and access a list of favorite past acquaintances. Your community provides a networking feature that allows members to maintain those important contacts, share ideas, and track their posts and comments. To add someone to their personal network, members can simply click the Add <Member Name> to Network link on that person's profile.

To view their network, members can click the Network link on their own profile page.

Note By default, member profiles are visible to everyone, but members can adjust their Network Privacy settings to make their profile visible only to themselves or people within their network. Refer to Member Preferences.

Creating member accounts

A community **member** account is created by entering basic account information such as the member's display name, password, email address, and **user type**. In addition, a member's user status can be set to reflect whether the account is active or inactive or has been suspended. Active members can log in to the community and click their name in the Signed In As **user link** to further update their profile, set personal preferences, and access account information.

Communities also provide you with the following additional options for managing the account creation process.

- **Invitations**—Invitation emails can be sent to prospective members to invite them to join your community. Refer to Community invitations.
- **Invitation requests**—When the Request Invitation page is enabled, guests can complete a form requesting an invitation to join the community, subject to approval by a community administrator. To enable this page, contact your Oracle account manager.
- **Join codes**—You can create join codes that nonmembers can enter when creating an account. Join codes can be used to target prospective members and track the results, or to automatically associate new members with **user types** and **groups**. Refer to Join codes.
- **Open joins**— In public communities, site visitors can click the Join user link to create their own member account without an invitation or administrator approval. Refer to Community privacy levels.

Tip You can enable CAPTCHA verification on the Join form to prevent abuse of this form by automated spam systems. Refer to Enabling common user features.

The following procedure describes the process of a community administrator manually creating a new member account.

To create a new member account

1. Click the Admin **user link** to display community administration settings.
2. Click Users.
3. In the Related Tasks section, click Create a New User.
4. Enter the following field information.

Table 563: Create Account Description

Field	Description
User Type	Click the User Type drop-down menu and select a user type. Refer to User types.
Display Name	Type the member's name as you want it to appear throughout the community.

Table 563: Create Account Description (Continued)

Field	Description
Password	Type a password for the member to use when logging in to the community. To generate a random password, click the Generate button.
Email	Type the email address that the member will use to log in to the community and receive community notifications.
Status	Click the Status drop-down menu and select a user status. Available user statuses include the following: • **Active**—The account is active and currently in use by approved members. • **Inactive**—The account is no longer in use or is currently on hold. • **Suspended**—The account has been suspended for abusive activity or posting inappropriate content. Refer to Content moderation. • **Disruptive**—The account has been deactivated for disruptive behavior and its content has been hidden from the community. This status is used to track accounts that submit excessive amounts of content, such as web robots, and is available only when the disruptive user filter is enabled. Refer to Content moderation. • **Template**—The account is a template used for creating other new accounts. **Note:** Members must be active to log in to the community.

5 Click the Create User Account button.

Enabling common user features

When creating accounts for your community visitors, you are granting them access to a variety of content and features based on their **user type** and **group** associations. To further enhance their experience, you can also enable a few helpful features for all **members**.

To enable common user features

1 Click the Admin **user link** to display community administration settings.

2 Click Users.

3 Enter the following field information.

Table 564: Common User Features Description

Field	Description
Enable CAPTCHA on Join Form	Select this check box to require CAPTCHA authentication when users create member accounts using the Join user link. Refer to Creating member accounts.
Enable Private Messaging	Select this check box to enable private messaging. Enabling this option adds an Inbox user link that members can click to exchange messages with other members of the community, using a basic inbox, sent folder, and compose message function. Refer to Messaging.
Enable User Profile Popup	Select this check box to enable profile pop-ups. Profile pop-ups are small windows that appear when hovering over a user's avatar in a community, displaying a portion of the user's profile information. **Note:** You can specify the fields that appear in profile pop-ups when configuring profile fields. Refer to Defining member profile fields.
New User Account First Page	Type the relative URL of the page you want new members to see when they first log in to the community.

4 Click the Save Settings button.

Managing member accounts

All **members** can easily access the settings that control their account so they can manage their own profile and preferences. Members can also view their alternate login (user **hash** ID) and the email address associated with their account, or even delete their account.

Administrators can also access these settings for any member, as well as update the account status and **user type**. For instance, you may sometimes need to modify an account manually if the member's role in the community has changed, such as promoting a member to Admin-Community to manage and moderate the community, or suspending a user for posting inappropriate content. You can also update the number of invitations the member is allowed to provide to others.

To edit member settings

1 Click a member's name anywhere in the community to view the user's profile.

Note You can also type a member's name in the Search field and click the Go button. Then click the user in the People section of the search results to view the user's profile.

2 Click Edit Profile.

3 To edit the user's profile settings, enter the following field information.

Table 565: Member Profile Settings

Field	Description
Basic Profile	The following settings define the appearance of the member's profile throughout the community.
Avatar	Click Edit to select an avatar from a gallery of default images, or to upload or link to your own image. **Note:** If profile pop-ups are enabled, hovering over a user's avatar in the community will display a small window containing a portion of the user's profile information. Refer to Enabling common user features.
Display Name	Click Edit to change the member's name as it appears throughout the community.
Tagline	Click Edit to enter a tagline for the member's profile.
Extended Profile	Enter field information for any profile fields that have been added to the community. The privacy level of each profile field displays to its right. Click Edit to change a field's privacy level. Refer to Defining member profile fields.

a Click the Save Profile button.

4 To edit the user's administration settings, click Admin Only and enter the following field information. Member administration settings are available to administrators only.

Table 566: Member Admin Settings

Field	**Description**
User Type	Click the User Type drop-down menu and select a user type. Refer to User types.
Status	Click the Status drop-down menu and select a user status. Available user statuses include the following: • **Active**—The account is active and currently in use by approved members. • **Inactive**—The account is no longer in use or is currently on hold. • **Suspended**—The account has been suspended for abusive activity or posting inappropriate content. Refer to Content moderation. • **Disruptive**—The account has been deactivated for disruptive behavior and its content has been hidden from the community. This status is used to track accounts that submit excessive amounts of content, such as web robots, and is available only when the disruptive user filter is enabled. Refer to Content moderation. • **Template**—The account is a template used for creating other new accounts. **Note:** Members must be active to log in to the community.
Number of Invitations	Type the number of invitations you want to provide to the member. Refer to Community invitations.

a Click the Save Admin Settings button.

5 To edit the member's preferences, click Preferences and enter the following field information.

Table 567: Member Preferences

Field	Description
Email Notifications	Select this check box to email the member by email when the member receives a message from another member. Refer to Messaging.
Tips	Select the On radio button to enable contextual tips for the member. Select the Off radio button to disable tips. **Note:** Tips are displayed when hovering over some community controls.
Network Privacy	Select a radio button to set network privacy for the member. Refer to Networks. The following options are available. • **Only Admin**—The member profile will be visible only to administrators. • **People in Network**—The member profile will be visible only to administrators and users in the member's network. • **All Registered Users**—The member profile will be visible to all logged-in members. **Note:** Some profile information can also be restricted based on the configuration of the profile fields. Refer to Defining member profile fields.

a Click the Save Preferences button.

6 To view the login ID and email address associated with the member's account, click Account.

Defining member profile fields

To get the most value from and provide the best service to your community, it can be helpful to collect and track pertinent information about your **members**. By default, member accounts contain only basic information, such as each member's name and role in the community (**user type**). To deepen your knowledge of your members, it is helpful to add custom profile fields. Members can edit these fields in the Extended Profile section of their profile.

Profile fields can take a variety of forms such as text boxes, menus and multi-select fields, postal addresses, file attachments, or embedded media. Depending on your need, profile fields can be made required, included in profile pop-ups, or restricted from view by certain privacy levels.

Note All communities must contain at least one user profile field. However, if you do not want to display a user profile field to other members, you can set its Privacy setting to Private.

To create and manage user profile fields

1. Click the Admin **user link** to display community administration settings.
2. Click Users.
3. In the User Profile Fields section, click Add Field and enter the following field information.

Table 568: User Profile Fields Description

Field	Description
Order	Click the arrow to drag a field to a new position in the display sequence of profile fields.
Field Name	Type the name of the field as you want it to appear in the member profile.
Field Description	Type a text description that will be visible to members when they complete the field.
Field Type	Click this drop-down menu to select the type of field you want to add. For a description of available field types, refer to Profile field types.
Field Data	Type the field data parameters that define the field type. For a description of the parameters used for each field type, refer to Profile field types. **Note:** Field data may be required, optional, or not applicable, based on the field type.
Popup	Select this check box to make the field visible in profile pop-ups. Refer to Enabling common user features.

Table 568: User Profile Fields Description (Continued)

Field	Description
Privacy	Click this drop-down menu to select a privacy level for the field. • **Public**—The field's content will be visible to everyone, including **guest** users. • **Community**—The field's content will be visible to all logged-in members. • **Network**—The field's content will be visible only to members of the user's personal network. • **Private**—The field's content will be visible only to the profile owner and community administrators.
Required	Select this check box to make the field required. **Note:** Once you add a new required profile field, existing members will be prompted to complete the field when they next log in to the community.
Uses	This column displays the number of members that have values in this field. **Tip:** This is useful for identifying fields that should be modified or removed due to low usage.
 Delete	Click this button to delete the profile field. **Note:** Deleting a field cannot be undone and its data will be permanently discarded.

4 Click the Save Fields button.

Profile field types

The following fields and controls are available when creating and editing user profiles.

Table 569: Profile Field Types Description

Field	Description
Text	The following elements allow members to enter text when adding a **post**.

Table 569: Profile Field Types Description (Continued)

Field	Description
Textbox	Select this option to add a text field for a single line of text. To set parameters for field size and maximum number of characters allowed, type them in the Field Data field in the format `[small|medium|large], [1-255]`. For example, to add a small field allowing twenty-four maximum characters, type the value `small, 24`.
Textarea (WYSIWYG/ HTML)	Select this option to add a text box featuring a WYSIWYG/HTML editor (1-4,000 characters). To specify text box height (in text rows) and whether to resize it fluidly based on the text it contains, type the parameters in the Field Data field in the format `[2-50],[fixed|fluid]`. For example, to make the text box ten rows high and automatically resize it based on its contents, type the value `10,fluid`.
Textarea (Plain Text)	Select this option to add a text box for entering plain text (1-4,000 characters). To specify field size and maximum number of characters allowed, type the parameters in the Field Data field in the format `[size|medium|large],[1-255]`. For example, to add a small field allowing twenty-four maximum characters, type the value `small, 24`.
Textarea (Textile)	Select this option to add a text box that supports Textile formatting (1-4,000 characters). Refer to Textile (markup language). To specify field size and maximum number of characters allowed, type the parameters in the Field Data field in the format `[size|medium|large],[1-255]`. For example, to add a small field allowing twenty-four maximum characters, type the value `small, 24`.

Table 569: Profile Field Types Description (Continued)

Field	Description
Code	Select this option to add an element that members can use to display code or preformatted text when adding a post. Code formatting, including tabs and spaces, is retained and displayed when added to a post in this field. To specify field size and maximum number of characters allowed, type the parameters in the Field Data field in the format `[size|medium|large],[1-255]`. For example, to add a small field allowing twenty-four maximum characters, type the value `small,24`. **Note:** Code entered in this field will not be rendered and does not impact the security of the community.
Embedded Media	The following elements allow members to embed multimedia content when adding a post.
Image	Select this option to allow members to upload or embed linked image files.
Flash	Select this option to allow members to embed linked Flash *(.swf)* files. **Note:** Although Flash is a supported field type, it can introduce potential misuse by malicious users. Use this field type with caution. Refer to Cross-site flashing.
Video	Select this option to allow members to upload or embed linked video files.
Form Controls	The following elements allow members to select options from form controls when adding a post.
Select	Select this option to add a drop-down menu that members can select a single option from. Type options for the menu in the Field Data field in comma-separated format. For example, `High, Medium, Low`.
Multi-select	Select this option to add a multi-select field that members can select one or more options from. Type options for the field in the Field Data field in comma-separated format. For example, `France, Germany, Italy, Portugal, Spain`.

Table 569: Profile Field Types Description (Continued)

Field	Description
Radio Buttons	Select this option to add radio buttons that members can select a single option from. Type options for the radio buttons in the Field Data field in comma-separated format. For example, `Yes, No, Maybe`.
Checkboxes	Select this option to add check boxes that members can select one or more options from. Type options for the check boxes in the Field Data field in comma-separated format. For example, `Baseball, Basketball, Football, Golf, Tennis`.
Dates and Times	The following elements allow members to enter date values when adding a post.
Date	Select this option to add a date field to the post. Members can type the date in any of the following formats: • `MM/DD/YY` • `Mon DD, YYYY` • `DD Month YYYY` • `Next Day` The community will display the date in the format Month DD, YYYY.
Event Date	Adds a date field to the post or comment that can be used with calendar events and the RSVP feature.
Files	Select this option to allow members to attach files to the post.
Special	The following elements allow members to enter special values.
Link	Adds a drop-down menu containing links. By default, links open in a new browser window. To open them in a parent window instead, type `internal` in the Field Data field.
Postal Address	Adds a postal address field. **Note:** Content displayed in this field is used to automatically create a link to the address in Google Maps.
Email Address	Adds an email address field.
Instant Messenger	Adds contact ID fields for several leading instant messenger services.

Table 569: Profile Field Types Description (Continued)

Field	Description
Fixed Value	Select this option and type a text value in the Field Data field to add that text to the post form.
Ratings (Deprecated)	The following elements allow members to enter rating values. **Note:** These elements have been deprecated and will be removed in future releases.
Icon Rating	Select this option to add a drop-down menu that members can use to enter a rating value. By default, values entered in this field will appear as stars, but fork and dollar icons are also available. To specify the scale for the ratings from one to five, type the parameters in the Field Data field in the format `[star|fork|dollar],[1-5]`. For example, to define a rating scale of one to four forks, type the value `fork,4`.
Thumbs Up/Down	Select this option to add a drop-down menu members can use to enter a thumbs up/down rating value.

Community invitations

In addition to manually creating new member accounts, you can help prospective members join your community by enabling and sending email invitations. When you send an invitation, your prospect will receive an email containing a link to an account creation form. Once the form is completed and submitted, the new member will receive a second email containing an account activation link.

To provide invitations to a single member, refer to Managing member accounts.

To configure community invitation settings

1 Click the Admin **user link** to display community administration settings.

2 Click Invitations.

3 Enter the following field information.

Table 570: Invitation Settings Description

Field	Description
Enable/Disable Invitations	The following settings enable the sending of invitations for communities and **hives**.
Enable Invitations	Select this check box to enable community invitations.
Enable Invitations Directly to Hives	Select this check box to enable hive invitations for administrators.
New User Invitations	Type the number of invitations you want to automatically provide to new members.
Invitation Request	The following settings define the default text that appears in the invitation request form.
Default Subject	Type the subject for the invitation request form.
Default Body	Type the body text for the invitation request form.
Default Tip	Type the tip text for the invitation request form.

4 Click the Update Settings button.

To provide invitations to all members

1 Click the Admin **user link** to display community administration settings.

2 Click Invitations.

3 Type the number of invitations you want to provide to each member in the Provision Invitations to All Users section.

4 Click the Provision Invitations button.

Note When you provide invitations to all members, all members will have only the number of invitations you specify, regardless of how many they had previously.

Join codes

You can create join codes to be used when prospective members create an account. A join code is a simple alphanumeric code that can be appended to the join page URL in the following format:

```
http://<your_site>/join/<join_code>
```

When a prospective member loads this URL, they are redirected to the join form and their activity is tracked and associated with the code for reporting purposes. Join codes can be used to track the success of special promotions or when targeting prospective members. They can also be used to automatically associate new members with **user types** and **groups**.

You can distribute the join code URL to prospective members using whatever method you like, such as mailings, website links, or advertisements. Once a join code has been implemented, you can edit its settings, view its results and statistics, or retire it from use.

To create a join code

1 Click the Admin **user link** to display community administration settings.

2 Click Join Codes.

3 Click Create a New Join Code and enter the following field information.

Table 571: Create Join Code Description

Field	**Description**
Code	Type the join code you want to define. Join codes can contain lowercase letters, numbers, and hyphens (–). For example, if you type `mypromotionalcode`, the following URL will redirect to the join page and use the code to track the account. `http://<your site>/join/mypromotionalcode`
Number of Uses	Type the maximum number of members that can join using this code.
User Type	Click the User Type drop-down menu and select a user type for the joining members. Refer to User types.
Groups	Select one or more groups from this field to associate joining members with the group. **Note:** To select more than one group, press **Ctrl** while selecting the groups you want to associate.

Table 571: Create Join Code Description (Continued)

Field	Description
Redirect	Type the URL you want to redirect new members to once they join. By default, the join page redirects new members to the community home page at `/pages/home`.

4 Click the Create Join Code button.

To edit or expire a join code or view code statistics

1 Click the Admin **user link** to display community administration settings.

2 Click Join Codes.

3 In the list of join codes, click the code that you want to edit or expire. The page refreshes to display the join code settings and statistics, including the number of code submissions yet to be redeemed and a list of members who have joined using the code.

4 To edit the code's settings, enter the following field information in the Edit Code section.

Table 572: Edit Code Description

Field	Description
Code	Type the join code you want to define. Join codes can contain lowercase letters, numbers, and hyphens (–). For example, if you type `mypromotionalcode`, the following URL will load the join page and use the code to track the account. `http://<your site>/join/mypromotionalcode`
Remaining Uses	Type the remaining number of members that can join using this code.
User Type	Click the User Type drop-down menu and select a user type for the joining members. Refer to User types.
Groups	Select one or more groups from this field to associate with joining members. **Note:** To select more than one group, press **Ctrl** while selecting the groups you want to associate.

Table 572: Edit Code Description (Continued)

Field	Description
Redirect	Type the URL you want to redirect new members to once they join. By default, the join page redirects new members to the community home page at `/pages/home`.

a Click the Update Join Code button.

5 To change the code status, select an option from the Status field in the Expire/Unexpire Code section.

a To expire the code, select the Expired radio button.

b To activate the code, select the Active radio button.

c Click the Set Status button.

Groups

In communities, users may interact informally through **posts**, **comments**, and messages. You can also formalize their relationships through community groups, which can be accessed at the following location.

```
http://<your_site>/groups
```

Groups are used to associate **members** of a common interest, cause, or organization and provide a resource with which those members can interact. Groups feature their own page sets and member roles and can manage their own **hives**. Administrators can use groups to simplify the process of extending hive access across different user segments using **hive permissions**. Refer to Hive permissions.

Since groups are often used for different purposes, they can be organized and searched by **group type**. To define member roles within a group, administrators can assign different **member types**.

- Creating groups
- Editing group attributes
- Adding group members

Creating groups

New **groups** can be created from scratch or from a group **template** or copied from an existing group. When a group is created, it is initially owned and administered by its creator, who can then add **members**, moderators, and even other administrators who can share in the management duties of the group. Group **ownership** can also be transferred to another member when needed. Refer to Group ownership and delegation.

Copying a group also copies and associates the group's hives, but does not copy the group's memberships. Only the basic configuration and structure of the group is transferred to the group copy. However, hive associations are transferred as well.

Groups can also be classified by **group type**—such as department or fan base—for easy reference when organizing and searching members and content. Refer to To access group settings.

Note Many configuration labels that refer to a group are updated based on the hive's type. For example, if a group is set to a group type called Fan Club, the label Group Name may be updated to Fan Club Name. For simplicity, this documentation most often refers to labels using the default group type, Group.

To create or copy a group

1 Click the Admin **user link** to display community administration settings.

2 Click Groups.

3 To create a group type for the new group, click Create a New Group Type.
  a Type a name for the group type in the Name field.
  b Click the Create Group Type button.

4 Click Create a New Group.

5 To create a group by copying an existing group, click Browse Groups.
  a Click the name of the group you want to copy.
  b Click the About tab.
  c Click Create a Group Like This One and skip to step 7.

6 Click Create a Custom Group.

7 Click the Group Type drop-down menu to select a group type for the group.

8 Click the Group Language Tag drop-down menu to select a primary language for the group.

9 Type the group name in the Group Name field. This will be the name used for the group throughout the community, including the headers of group pages.

10 In the Group Tagline field, type a one-line summary for the group. The tagline will appear below the group name on group page headers.

11 In the About field, type a description of the group. This description will appear on the Group's About page.

Note The About field contains the same basic word processing functions available in the WYSIWYG/HTML **panel** type. For information about the HTML toolbar functions, refer to Editing WYSIWYG/HTML panel properties.

12 Click the Create Group button. The settings page of your new group opens. Refer to Editing group attributes.

Important By default, group pages display only the Summary tab and, to administrators, the Settings tab. To display additional tabs, such as About, Members, Hives, and Search, refer to Group pages.

To create a group from a group template

1 Click the Admin **user link** to display community administration settings.

2 Click Groups.

3 Click Create a New Group.

4 In the Create a Group from a Template section, click Create <Template Name> for the template you want to use.

5 Click the Group Type drop-down menu to select a group type.

6 Type the group name in the Name field. This will be the name used for the group throughout the community, including the headers of group pages.

7 In the tagline field, type a one-line summary for the group. The tagline will appear below the group name on group page headers.

8 In the About field, type a description of the group. This description will appear on the group's About page.

Note The About field contains the same basic word processing functions available in the WYSIWYG/HTML panel type. For information about the HTML toolbar functions, refer to Editing WYSIWYG/HTML panel properties.

9 Click the Create Group button. The settings page of your new group opens. Refer to Editing hive attributes.

Group pages

Each **group** consists of a set of pages that define its content. These pages are generally accessible from a navigation tab set that appears below the header of each group page. The standard group page set includes the following pages.

- **Summary**—The default landing page of a group. This page displays a customizable overview of the group. For example, the summary page of a discussion forum could be configured to display a list of recently active **members**, a few recent **posts**, and options for creating new posts. To customize this page, click the Settings tab and click Customize Summary Page. Refer to Adding panels to pages.
- **About**—Displays general information about the group such as its theme or goal. Refer to To create or copy a group.
- **Members**—Displays information about members of the group and an option to add or remove members. Refer to Adding group members.
- **Hives**—Displays information about hives associated with the group. Refer to Hive ownership and delegation.
- **Search**—Provides a keyword search capability for the group's content. Refer to Searching for content.

- **Settings**—Provides access to settings for configuring the group's functionality and content. This page is visible only to administrators. Refer to Editing group attributes.

Note These pages can be made accessible or hidden from view by enabling or disabling their tabs in the advanced hive settings. When a tab is disabled, you can still access its page by entering the group **hash** ID in the page URL in the following format.

```
http://<your_site>.com/groups/<group_hash_id>/<page_name>
```

For example, if the group hash ID were bbe47d0d5e, you could access the Summary page at http://<your_site>.com/groups/bbe47d0d5e/summary. Note that the hash and page name are in lowercase characters.

You can also edit the tabs' label text and designate the page that will serve as your group's landing page. Refer to To edit advanced group settings.

Editing group attributes

While a community can contain many **groups**, each group can be configured and customized separately to meet its own unique needs. The settings described in the following procedures define the group's page set appearance, privacy, members, and **hives**.

To access group settings

1. From the group pages, click the Settings tab.
2. Click a configuration option to access the settings you want to edit. The following table describes the available options.

Table 573: Group Configuration Options

Section	Description
Admin Only	Click Edit Admin Settings to edit the group's type and status. Refer to To edit group admin settings.
General	Click Change Avatar to upload, link to, or activate an avatar image. Click Edit General Settings to edit the **group type**, language, name, tagline, and About page description text. Refer to To create or copy a group.

Table 573: Group Configuration Options (Continued)

Section	Description
Privacy	Click Edit Privacy settings to select a group privacy level and related join and invitation options. Refer to To edit group privacy settings.
Members	Click Add or Remove Members to add or remove group members. Refer to Adding group members.
Hives	Click Create a New Hive to create a hive associated to the group. Refer to Hives. **Note:** To add or edit group association for an existing hive, refer to To edit hive admin settings.
Summary Page	Click Customize Summary Page to edit the layout of the group's summary page. Refer to Adding panels to pages.
Advanced	Click Edit Advanced Settings to access advanced group settings for defining the group's landing page, displaying tabs, and editing tab labels. Refer to To edit advanced group settings.
Delete	**Caution!** The deletion of a group and its content cannot be undone. To permanently delete the group and its content, click Continue in the Delete section. You must confirm that you want to delete the hive before it will be deleted.

To edit group admin settings

1 From the group pages, click the Settings tab.

2 Click Edit Admin Settings.

3 Click the Status drop-down menu to select a group state.

- **Active**—The group is active and available.
- **Template**—The group is not editable or searchable by members, but is available as a design template for creating other groups. Refer to Hives.

4 Click the Save Admin Settings button.

To edit group privacy settings

1 From the group pages, click the Settings tab.

2 Click Edit Privacy Settings.

3 Select the radio button for the privacy level you want the group to have. By default, groups are set to the Private privacy level.

- **Public**—The group's content will be visible to everyone, including **guest** users.
- **Community**—Only registered members can see the group.
- **Restricted**—Only group members can see the group.
- **Private**—Only group administrators can see the group.

4 To administer join permissions for groups with the Public or Community privacy level, select the radio button for the permissions you want to allow. Refer to Adding group members.

- **Open Join**—Any community member can join the group by viewing the Members page and clicking Join Group.
- **Request Membership**—Any community member can request membership by viewing the Members page and clicking Request Membership.
- **Owner Select**—Only group administrators can add new members to the group.

5 To allow group members to invite other users, select the Allow Group Members to Invite Others check box.

Note The Allow Group Members to Invite Others check box is not available for groups set to the Private privacy level.

6 To manage the group whitelist when using independent groups, refer to Group independence and member access restrictions.

7 Click the Save Privacy Settings button.

To edit advanced group settings

1 From the group pages, click the Settings tab.

2 Click Edit Advanced Settings.

3 To select a landing page for the group, click the Landing Page drop-down menu and select the page you want. By default, the Summary tab will serve as the group's landing page.

4 To add a tab to the group tab set, select the check box in the Tabs section next to the tab you want to display. Refer to Group pages.

5 To change a tab's label, type a new label in its text box.

6 To remove a tab from the group tab set, clear its check box.

7 Click the Save Advanced Settings button.

Adding group members

While general access to **groups** is governed by the group's privacy settings, specific member functions are governed by **member types** that define member roles in the group. When adding **members** to a group, you must decide what role the members will play within the group so that appropriate permissions can be assigned to them.

Depending on the group privacy settings, members may be able to join the group (or request an invitation to join) by clicking Join This Group (or Request Membership) on the group's Members page. Members can also be invited by group members or administrators, or permitted to join a group on their own. Refer to To edit group privacy settings.

By default, a community provides four member types—Administrator, **Builder**, Moderator, and Member—based on the degree of member involvement. Each member type establishes a level of access that determines what features and settings are accessible to members. The following figure provides additional detail about the permissions granted to each member type.

Group Member Types and Permissions

Permission	Group Member	Group Builder	Group Moderator	Group Admin
Have no default special permissions within the group	•		•	
Acquire other permissions on a per-hive basis	•	•	•	
Create new hives within the group		•		
Administer hives they create		•		
Moderate the group's hives			•	
Administer the group				•
Administer the group's hives				•

To add or remove group members

1 From the group pages, click the Members tab.

2 Click Add or Remove Members. A list of current members displays, organized in sections by role.

Note You can also access group member settings by clicking Add or Remove Members on the group's Members tab.

3 To add a member with a specific group member type, type any part of the user's name in the Add User by Name field in the Add Members with Member Type section.

- **a** Click the Search button to return a list of matching users.
- **b** Select the radio button for the user you want to add to the group.
- **c** Select a group member type for the member.
- **d** Click the Add button. The user is added with the specified group type.

4 To search for a user to add as a member, type three or more letters of the user's name in the Add Members section.

- **a** Click the Search button to return a list of matching users.

Note Users who are already members of the group are noted as added.

- **b** Click Add next to the user you want to add to the group. The user is added as a member.

5 To remove a member from the group, click Remove next to the member name listed under the member's role.

Group ownership and delegation

By default, a **group** is owned by the member who created it. The owner of a group has complete administrative permissions for the group. Depending on the size of a group, it is often helpful to delegate certain administration functions to other members so they can assist with the management and configuration of the group. Refer to Editing group attributes.

In some cases, the owner of a group may want to transfer ownership to another member. This can be accomplished using the following procedure.

To transfer group ownership

1 Click the Admin **user link** to display community administration settings.

2 Click Groups.

3 In the Transfer Ownership of a Group section, type the **hash** ID of the group in the Group Hash field.

Note The group's hash is found in the URL of its pages. For example, if a group's summary page is located at http://<your_site>.com/groups/bbe47d0d5e/summary, the group hash is bbe47d0d5e.

4 Type the name of the new owner in the New Owner field and click Search.

5 Select the new owner from the search results.

6 Click the Transfer Ownership button.

Group independence and member access restrictions

In some situations, you may have an important business need to carefully control the way that members of different groups interact in your community. For example, if you manage a community serving both resellers and customers, it may be critical to bar resellers from messaging or interacting with customers of yours (or those of other resellers), to prevent them from poaching accounts.

Using your community's independent groups features, you can limit interactions between members of groups, restricting access to member profile information, personal network connections, and private message functions. Independent groups allow your community to interact with distinct audiences while maintaining a private separation between them.

When enabled, the following restrictions are put into effect:

- Community members can message, network, and view extended profile information only for members with whom they have at least one group in common. For instance, members of distinct Group A can send private messages to each other, but not to members of distinct Group B. However, if a member of Group A and a member of Group B are also both members of Group C, they can send private messages to each other on that basis.
- Access to member functions—including extended profiles, private messaging, and networking—can still be provided based on user type, so administrators have full permissions regardless of their own group memberships.
- Group-level administrators can manage a whitelist that provides access to their group for any other group. However, granting access to a group does not automatically provide you with reciprocal access to that group. Your group must be granted access in the other group's whitelist in order to establish reciprocal access.

- Members who are not associated with any group are fully accessible to any group or member.

Important Private messages can be sent to a group only by a group that has access to it. In cases where group access is provided in one direction only, private messaging functions are restricted accordingly. In such a case, the recipient will be able to read the message, but will not be able to reply.

Access to group content is not governed by the Independent Groups setting, but by group and hive permissions.

To enable independent groups

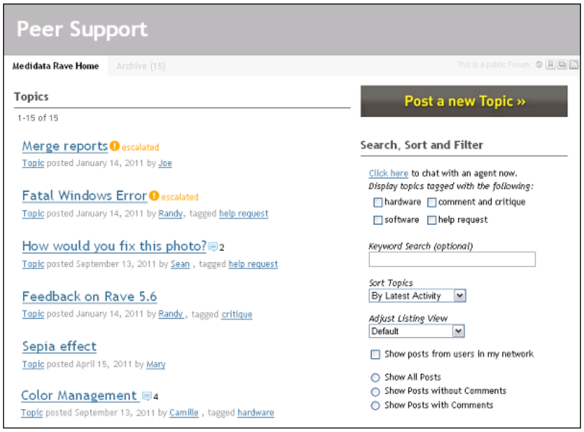
1. Click the Admin **user link** to display community administration settings.
2. Click Groups.
3. Select the Enable Independent Groups check box.
4. Click the Save button.

To manage group whitelists

1. From the group pages, click the Settings tab.
2. Click Edit Privacy Settings.
3. To add a group to the whitelist, type the group name in the Add Groups to Whitelist field and click the Search button.
   a. Click Add next to the group name.
4. To remove a group from the whitelist, click Remove next to the group name.

Hives

Communities can contain one or more hives. A hive is a community resource where people gather to communicate about a central topic, theme, or goal. Hives can be customized to take any of a number of forms based on their function and subject, such as blogs, forums, event calendars, and job boards.



Hives can be owned privately by **members** or **groups**, or stand alone for full community or public web access. As your community grows, you can add hives to accommodate new projects, services, and groups, and support the natural evolution of your community's content. The hives configured for your community can be accessed at the following location.

```
http://<your_site>/hives
```

Creating hives

Hives can be created from scratch or from a **hive template**, or copied from an existing hive. When a hive is created, it is initially owned and administered by its creator, who can then provide appropriate levels of access to other **members**. Also, hive **ownership** can be completely transferred to another member. Refer to Hive ownership and delegation.

Copying a hive does not copy its **group** association, if one exists, or content such as posts and comments. Only the basic configuration and structure of the hive is transferred to the hive copy, such as the hive's standard permissions (excluding those that were explicitly defined for users and groups), **post types**, and tags.

Hives can also be classified by **hive type**—such as blog or forum—for easy reference when organizing and searching content. Refer to To access hive settings.

Note Throughout the community interface, many labels, fields, and controls that refer to a hive (such as Hive Name) are labeled based on the hive's type. For example, if a hive is set to a hive type called Blog, the label Hive Name may be displayed as Blog Name when you view the hive or its settings. For clarity, this documentation most often refers to these labels using the hive type, Hive.

To create a hive

1 Click the Admin **user link** to display community administration settings.

2 Click Hives.

3 To create a hive type to classify your new hive, click Create a New Hive Type.

   a Type a name for the hive type in the Name field.
   b Click the Create Hive Type button.

4 In the Related Tasks section, click Create a New Hive.

5 Click Create a Custom Hive.

6 Click the Hive Type drop-down menu to select a hive type for the hive.

7 Click the Language Tag drop-down menu to select a primary language for the hive.

8 Type the hive name in the Name field. This will be the name used for the hive throughout the community, including the headers of hive pages.

9 To display a one-line summary below the hive name on hive page headers, type the summary text in the Tagline field.

10 To display a description of the hive on the About page, type the description text in the About field.

Note The About field contains the same basic word processing functions available in the WYSIWYG/HTML **panel** type. For information about the HTML toolbar functions, refer to Editing WYSIWYG/HTML panel properties. The contents of the About field can be indexed by search engines, subject to hive permissions.

11 To add the hive to your favorites, select the Add to Favorites check box.

12 Click the Create a Custom Hive button. The settings page of your new hive opens. Refer to Editing hive attributes.

Tip To view the hive as it appears to your users, click the hive name. The panels will display an edit link visible only to those who have the ability to edit the hive.

To copy a hive

1 Click the Admin **user link** to display community administration settings.

2 Click Hives.

3 Click the name of the hive you want to copy.

4 Click the About tab.

Note If the hive's About tab is hidden, you can access the About page by entering hive's **hash** ID in the page URL in the format http://<your_site>.com/hives/bbe47d0d5e/about, where the hive hash is bbe47d0d5e.

5 Click Create a Hive Like This One.

6 Type a new name for the hive in the Hive Name field. This will be the name used for the hive throughout the community, including the headers of hive pages.

7 Type a new tagline for the hive in the Tagline field. The tagline is a one-line summary for the hive that appears below the hive name on hive page headers.

Note Permissions, post types, and tags from the source hive are displayed for your review and will be copied as they appear. Note that only standard permissions will be copied. Customized user and group permissions will not be copied.

8 Click Create Hive. The settings page of your new hive opens. Refer to Editing hive attributes.

Tip To view the hive as it appears to your users, click the hive name. The panels will display an edit link visible only to those who have the ability to edit the hive.

To create a hive from a hive template

1 Click the Admin **user link** to display community administration settings.

2 Click Hives.

3 In the Related Tasks section, click Create a New Hive.

4 In the Create a Hive from a Template section, click the Create link for the template you want to use.

5 Type a new name for the hive in the Hive Name field. This will be the name used for the hive throughout the community, including the headers of hive pages.

6 Type a new tagline for the hive in the Tagline field. The tagline is a one-line summary for the hive that appears below the hive name on hive page headers.

Note Permissions, post types, and tags from the source hive are displayed for your review and will be copied as they appear. Note that only standard permissions will be copied. Customized user and group permissions will not be.

7 Click the Create Hive button. The settings page of your new hive opens. Refer to Editing hive attributes.

Tip To view the hive as it appears to your users, click the hive name. The panels will display an edit link visible only to those who have the ability to edit the hive.

Hive pages

Each **hive** consists of a set of pages that define its content. These pages are generally accessible from a navigation tab set that appears below the header of each hive page. The standard hive page set includes the following pages.

- **Summary**—The default landing page of a hive. This page displays a customizable overview of the hive's content. For example, the summary page can be configured to display a few recent **posts** from the hive as well as a list of subjects from a related blog. To customize this page, click the Settings tab and click Edit Panels in the Summary Page section. Refer to Adding panels to pages.
- **About**—Displays general information about the hive, such as its topic, theme, or goal. Refer to To create a hive.
- **Posts**—Displays a list of posts contained by the hive as well as options to create or filter by different types of posts. Refer to Posts.
- **Comments**—Displays comments contained by the hive. Refer to Comments.
- **Members**—Displays information about members of the hive. Refer to Members.
- **Search**—Provides a keyword search capability for the hive's content. Refer to Searching for content.

- **Settings**—Provides access to settings for configuring the hive's functionality and content. This page is visible only to hive administrators. Refer to Editing group attributes.

Note These pages can be made accessible or hidden from view by enabling or disabling their tabs in the advanced hive settings. When a tab is disabled, you can still access its page by entering the hive **hash** ID in the page URL in the following format.

```
http://<your_site>.com/hives/<hive_hash_id>/<page_name>
```

For example, if the hive hash ID were bbe47d0d5e, you could access the Summary page at http://<your_site>.com/hives/bbe47d0d5e/summary. Note that the hash and page name are in lowercase characters.

You can also edit the tabs' label text and designate the page that will serve as your hive's landing page. Refer to To edit advanced hive settings.

Editing hive attributes

While a community can contain many **hives**, each hive can be configured and customized separately to meet its own unique needs. The settings described in the following procedures define the hive's general appearance and available features.

Note Most of the settings described in this procedure are available only to members who have a **user type** of Admin–Community or higher. Refer to User types. To provide member access to a hive, including basic and administration functions, refer to Hive privacy levels.

To access hive settings

1 On the hive pages, click the Settings tab.

2 Click a configuration option to access the settings you want to edit. The following table describes the available options.

Table 574: Hive Configuration Options

Section	Description
Admin Only	Click Edit Admin Settings to edit the hive's status and parent group. Refer to To edit hive admin settings.

Table 574: Hive Configuration Options (Continued)

Section	Description
General	This section displays the current **hive type**, language, name, tag-line, and About page description text. To edit these settings, click Edit General Settings and refer to To create a hive. **Note:** A user type of Admin–Community or higher is required to set the hive type. Refer to User types.
Members and Permission	This section displays the hive's current privacy level. Click Edit Members and Permissions to add groups and members for the hive and grant permission for site actions. Refer to Hive privacy levels and Hive permissions.
Tags	Click Edit Tags to define tags for identifying related **posts** in the hive. Refer to Tagging content.
Post Types	Click Edit Post Types to select the **post types** you want to allow on the hive. Refer to Posts.
Summary Page	Click Edit Panels to edit the layout of the hive's summary page. Refer to Adding panels to pages. Click Edit Meta Tags to define the meta tags used by the site for search engine optimization.
Advanced	Click Edit Advanced Settings to access advanced hive settings, such as those defining the landing page, displaying tabs and post panels, selecting a ratings scale, and enabling an RSS feed for the hive. Refer to To edit advanced hive settings.
Delete	**Caution!** The deletion of a hive and its content cannot be undone. To permanently delete the hive and its content, click Continue in the Delete section. You must confirm that you want to delete the hive before it will be deleted.

To edit hive admin settings

1 From the hive settings, click Edit Admin Settings.

2 Click the Status drop-down menu to select a hive state.

- **Active**—The hive is active and available.
- **Template**—The hive is not editable or searchable by members, but is available as a design template for creating other hives. Refer to Hives.

3 Click the Parent Group drop-down menu to select a parent group for the hive.

Note Groups that have more restrictive privacy settings than the hive are not available for selection. Refer to Community privacy levels.

To edit advanced hive settings

1 From the hive pages, click the Settings tab.

2 Click Edit Advanced Settings.

3 Enter the following field information.

Table 575: Advanced Hive Settings Description

Setting	Description
Landing Page	Click this drop-down menu to select the hive's landing page from the list of hive pages. By default, the Summary tab will serve as the hive's landing page.
Feed	Select this check box to enable an RSS 2.0 feed for the hive. When active, the RSS feed is available at: `http://<your_community_site>/hives/<hive_hash>/feed`
Tabs	Select the check boxes next to the tabs you want to display on the hive tab set. To change a tab's label, type a new label in its text box. To remove a tab from the hive tab set, clear its check box.
Ratings	The following settings define the ratings scales used for posts and comments submitted to the hive.
Posts	Click this drop-down menu to select a rating scale for posts.
Comments	Click this drop-down menu to select a rating scale for comments.
Automatically Subscribe All Group Members	Select the Subscribe All Members check box to automatically subscribe all group members to new posts in the hive. **Note:** This option is available only to hives that are owned by a group.
Posts – Default List Settings	Click these drop-down menus to select filter values that will be applied by default on the Posts page.

Table 575: Advanced Hive Settings Description (Continued)

Setting	Description
Posts – Show/Hide Panels	Select the check boxes next to the **panels** you want to appear on the Posts page.
Comments	The following settings define the style and content of comments submitted to the hive.
Display Style	Select the radio button next to the ordering style you want comments to use. • **Chronological**—Orders comments by date created, from oldest to newest. Comments can be added to posts but not to other comments. • **Threaded**—Groups comments by thread. This option enables the Reply To This Comment link, allowing members to comment on comments. Related comments are grouped.
Comment Type	Select the comment type you want the hive to use. Refer to Comments.
Answers	Select this check box to allow a comment to be selected as a post's best answer. Click the drop-down menu to select the users who are allowed to select a best answer, either Admins and Authors or Admins Only. Comments that are selected as best are highlighted and displayed prominently, directly below the post.
Concept Tester	Select these check boxes to alter the display of the post and comment submission forms. The following options are available: • Defining a custom comment type for each post. • Allowing only one primary comment per user per post. • Hiding a post's comments from users until they have added their own.
Post Page Badge Type	Click this drop-down menu to select the style of badge to display to the left of post titles on the Posts page. • **Avatar**—Displays the member's avatar. • **Event Date**—Displays the date the post was added. • **Rating**—Displays the rating control defined by the Ratings > Posts advanced setting. • **Off**—Displays no badge.

4 Click the Save Advanced Settings button.

Hive permissions

Hive permissions are explicitly defined sets of privileges that permit **members** to perform specific actions in the **hive**, such as adding members, posting content, or commenting on posts. Permissions are checked before any hive content is displayed.

The hive **owner** always has full permission to access and edit the hive. Different permission sets can be defined for all registered members, and for specific **groups** and members, in various combinations. This provides the flexibility to ensure that all members have only those permissions appropriate for their role.

Hive permissions are also used with **community privacy levels** to determine a hive's privacy level. Users who attempt to access a private hive will be prompted to log in before they are allowed access. Information can be public only if the community itself is public. Refer to Hive privacy levels.

Note Hive permissions apply only to the hive they are configured for. If a community contains more than one hive, members can be assigned different permissions for each hive.

When adding permissions for specific members and groups, there can be some overlap between permissions, as well as those defined for all registered users. To resolve the overlap, member permissions are evaluated based on the following order of priority.

1 **Member permissions**—When permissions are explicitly granted to a specific member, those permissions will be given priority over any other permissions or restrictions resulting from their inclusion in a group or as a registered user.

Note Though member permissions are often used to provide rights exceeding those granted to groups or all users, they can also be used to restrict rights that would otherwise be granted. For example, if the Edit permission is enabled for All Registered Members, but disabled for a specific member, that member will not be able to edit content.

2 **Group permissions**—If permissions are not specifically granted to a member, but are granted to a group that member belongs to, the permissions and restrictions defined for the group are given priority over any permissions or restrictions specified for registered users.

Note If a member belongs to more than one group that has permissions defined, the member will receive all permissions enabled in each group, without restriction. For example, if Group A has only the Post permission enabled and Group B has only the Comment permission enabled, a member belonging to both groups will be able to both post and comment.

3 **Registered users**—Members who are not granted permissions specifically by name or by group are granted the permissions defined for registered users.

4 **Guest users**—When the community privacy level is set to Public, you can grant the Read permission to **guest** users. (Other permissions require being logged in as at least a registered user.)

To access and edit hive permissions

1 Click the Admin **user link** to display community administration settings.

2 Click Hives.

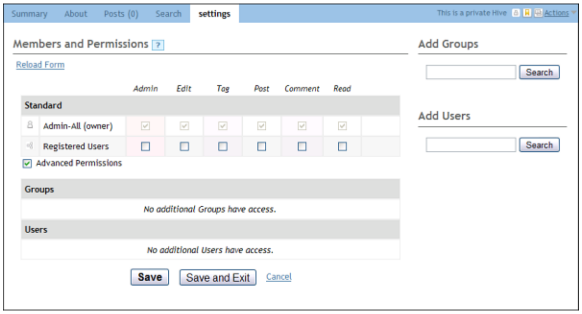
3 Click Browse All Hives in the Related Tasks section.

Or

Click Search For Hives to search for a specific hive. Refer to Searching for content.

4 Click Settings next to the hive you want to edit permissions for.

5 Click Edit Members and Permissions. By default, the Members and Permissions form displays the current permissions settings for the hive owner and all registered users.



Note If the hive is associated to a group, you can set permissions based on group roles. Refer to Editing group attributes.

If the hive is public, you can also set read permissions for **guest** users.

6 To access permission options for individual users and groups, select the Advanced Permissions check box.

7 To add a group to the form, type the name of the group name in the Add Groups field and click the Search button to return all matching groups.

   a Click Add next to the group you want to add to the permissions form.

8 To add a specific member to the form, type the member name in the Add Users field and click the Search button to return all matching members.

   a Click Add next to the member you want to add to the permissions form.

9 To edit hive permissions for a member or group listed on the form, select the appropriate check boxes described in the following table.

Table 576: Hive Permissions Description

Action	Description
Admin	Select this check box to grant access to the Settings tab for adjusting the structure of the hive, including adding and removing members, **post types**, and tags. This also gives moderator permissions, so the user can modify posts and comments, and leave moderator notes. Refer to Editing hive attributes. **Note:** Selecting this check box also enables permissions for edit, tag, post, comment, and read actions.

Table 576: Hive Permissions Description (Continued)

Action	Description
Edit	Select this check box to grant users permission to edit and tag posts and edit comments in the hive, including those of other members. Refer to Posts. You can enable Edit permissions to provide members with a simplified wiki-style environment for collaborative authoring. **Note:** Selecting this check box also enables permissions for tag, post, comment, and read actions.
Tag	Select this check box to grant users permission to view and tag their own posts. Refer to Tagging content.
Post	Select this check box to grant users permission to create, view, and edit their own posts.
Comment	Select this check box to grant users permission to comment on all posts and view and edit their own comments. **Note:** Selecting this check box also enables read permission.
Read	Select this check box to grant permission to view all posts and comments in the hive. Refer to Posts. **Note:** In public communities, read permissions can also be granted to **guest** users.

Note When enabling or disabling permissions for registered users, Oracle Service Cloud automatically applies the same permissions for groups and individual members that have been added to the form. This is done to avoid unintentionally granting members fewer permissions than their group membership or registered user status would normally allow. To override this function, clear the Auto-check Columns check box, or simply update the group and user permissions once registered user permissions have been updated.

10 Click the Save and Exit button.

Hive ownership and delegation

By default, a **hive** is owned by the member who created it. The owner of a hive has complete administrative permissions for the hive, as well as the ability to extend permissions to other members. Depending on the size of a hive, it is often helpful to delegate certain duties to other members so they can assist with the management and configuration of the hive. Refer to Hive privacy levels.

Note A hive can also be associated to a **group** and group members can be assigned permissions to manage or moderate the group's hive. Refer to Editing hive attributes.

In some cases, the owner of a hive may want to transfer ownership to another member. This can be accomplished using the following procedure.

To transfer hive ownership

1 Click the Admin **user link** to display community administration settings.

2 Click Hives.

3 In the Transfer Ownership of a Hive section, type the **hash** ID of the hive in the Hive Hash field.

Note The hive's hash is found in the URL of its pages. For example, if a hive's summary page is located at http://<your_site>.com/hives/bbe47d0d5e/summary, the hive hash is bbe47d0d5e.

4 Click the New Owner drop-down menu to select the method by which you want to identify the new owner of the hive. Available options include Name or Hash.

Note The user's hash is found in the URL of its pages. For example, if a user's summary page is located at http://<your_site>.com/people/bbe47d0d5e, the user's hash is bbe47d0d5e.

5 Type the selected value for the new owner.

6 Click the Transfer Ownership button.

Content management and moderation

While a **group** is defined by its membership, **hives** are defined by the content produced for and by its **members**. Communities provide a great deal of flexibility for the creation and presentation of that content. You can draw from a wide range of form elements and organize them to produce different types of **posts** and **comments** from your membership. As your community grows, you can moderate the content your members are submitting and suspend inappropriate posts, comments, or even members, as needed. In addition, you can promote positive activity by monitoring and rewarding your most valued members with reputation levels.

Note Communities frequently contain a vast amount of user-generated content that often includes links to other external sites. Links between web pages typically carry a certain degree of weight for search engine optimization. Search engines usually consider the number and type of links into and out of a page when ranking the relevancy of a particular page. For example, a link to your site from the page of a large, established company might be considered more valuable than a similar link from a relatively unknown site.

Communities can be configured to encourage or discourage search engines from considering links contained in user-generated content in your community by adding or removing "no-follow" code for all user-generated links. Contact your Oracle account manager or Customer Success Manager if you want to change the search engine optimization setting for your community.

Posts

Central to each **hive** are its posts, the content created and commented on by its users. Often, posts are listed on a **panel** on the hive's Summary page for efficient access. However, posts are also listed on the hive's standard Posts page. Simply click a post link to view it, or click Post a [Post Type] to create a new post.

Clicking a post in the list displays it in your browser along with its associated **comments**. The appearance and structure of a post—the sequence of fields and controls used to create its content—are defined by its **post type**. A variety of form elements are available to support a wide range of post types, and different sets can be used based on the hive's theme or purpose, such as sharing blog entries, photos, recipes, or video clips. For example, in a blog-style hive, a basic post might provide fields for entering text descriptions and tracking the time of entry as well as controls for embedding multimedia content.

Once a post has been configured, it must be enabled in a hive to be available for creating posts in that hive. A single hive can use multiple post types and, once defined, a post type can be used by any hive in the community.

To add or edit post types

1. Click the Admin **user link** to display community administration settings.
2. Click Posts. The following field information is displayed for existing post types in the Post Types section.

Table 577: Post Types Description

Field	Description
Name	Displays the name of the post type. Click this link to view details such as the description and field types used by the post type.
Fields	Lists the fields used by the post type.
Posts	Displays the number of posts that have used this post type. Click this link to view all posts associated with the post type.
Hives	Displays the number of hives that have used this post type. Click this link to view all hives associated with the post type.

3 To edit an existing post type, click Edit next to the post type and refer to step 5.

4 To add a post type, click Create a New Post Type.

5 Type a name for the post type in the Name field.

6 Type a description for the post type in the Description field.

Tip Compose your description to help members understand what kind of information the post type is intended to support. For example, a post form containing an image upload control for a photo-sharing hive might offer a description such as "Select a favorite photo to share with the group."

By default, the Fields section lists four rows representing undefined post fields. You can add post fields by clicking Add Field, or remove post fields by clicking the Delete button that appears at the end of each row.

7 Enter the following field information.

Table 578: Post Fields Description

Field	Description
 Order	Click the arrow to drag a post field to a new position in the field display sequence.
Field Name	Type the name of the field as you want it to appear to members on the post form.
Field Description	Type a text description that will be visible to members when they complete the field.
Field Type	Click this drop-down menu to select the type of field or control you want to add. For a description of available field types, refer to Post and comment fields.
Field Data	Type the field data parameters that define the field type. For a description of the parameters used for each field type, refer to Post and comment fields. **Note:** Field data may be required, optional, or not applicable, based on the field type.
Clip View	Select this check box to make the field visible in clip view.

Table 578: Post Fields Description (Continued)

Field	Description
Uses	When creating a post type, this column indicates it is new. When editing a post type that is already in use, this column displays the number of posts that have used this field. **Tip:** This is useful for identifying fields that should be modified or removed due to low usage.
Delete	Click this button to delete the post field. **Note:** Deleting a field cannot be undone and its data will be permanently discarded.
Metadata	Select this check box to display the value of the post field prominently beneath the post title in post lists. **Note:** This option applies only to certain list views. Refer to To edit Posts panel properties.
Add Field	Click this text to add post fields to the Fields section.

8 To display all post field names in the clip view, select the Show Field Names in Clip View check box.

9 Click the Create Post Type button.

To enable a post type for a hive

1 Click the Admin **user link** to display community administration settings.

2 Click Hives.

3 Click Browse All Hives.

4 Click Settings next to the hive you want to enable post types for.

Note You can also access post types by clicking the Settings tab on the hive itself.

5 Click Edit Post Types in the Post Types section.

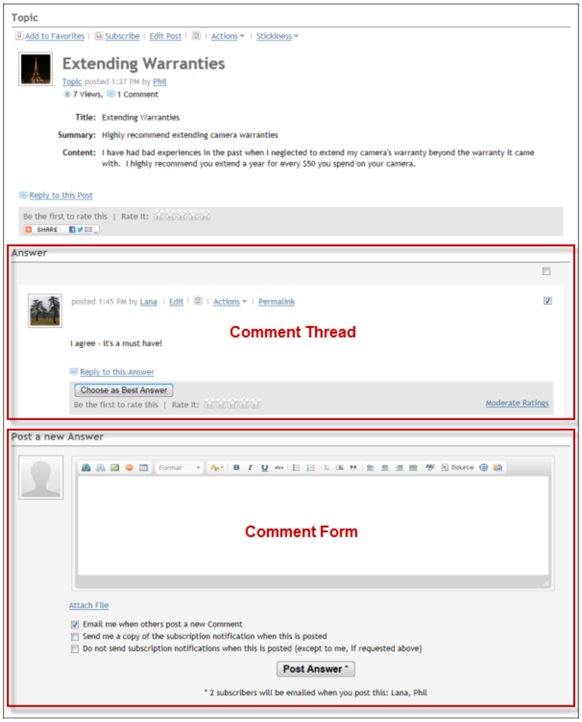
6 Select the check box next to each post type you want to enable for the hive.

7 To disable a post type, clear the check box next to its name.

8 Click the Save Post Type Settings button.

Comments

Expanding on the usefulness of **posts**, communities can provide users with the ability to comment on posts. Comments are commonly displayed beneath posts in the form of a discussion thread, allowing users to discuss the topic at hand and provide their own insight to add greater context.



At the bottom of the comments section is a form members can use to add their own comments to the thread and enable notifications for thread updates. Refer to <u>Post and comment subscriptions and notifications</u>.

Because any number of comments may be added to a post, it can be useful in some cases to call out the comment most relevant to the post. You can enable a “best answer” option so that administrators and authors can designate a comment as the best answer to a question posed in the post. Refer to <u>To edit advanced hive settings</u>.

To make threads more scalable and easier to read for posts containing a large number of comments, you can adjust pagination options. For instance, you can specify whether comments nested below other comments should be collapsed or expanded in the thread by default. You can also change the maximum number of comments displayed to customers on each page. Comments exceeding this limit will flow to additional pages with links to each page to easily navigate the thread. Also, each comment includes a permalink that can be used to ensure that links from external locations (such as web pages or blogs) will continue to work if the comment's location changes due to pagination or moderator action. Refer to Managing discussions.

The appearance and structure of a comment are defined by its comment type. Like a **post type**, a comment type must be enabled in a **hive** to be available for creating comments in that hive. A comment type may be set to primary (used for top-level replies to a post), threaded (used for replies to other comments), or both. Once defined, a comment type can be used by any hive in the community.

Tip While comments are most often displayed beneath their related posts, you can also enable a hive's Comments page to display comments associated with that hive. Refer to Hive pages.

To add or edit comment types

1 Click the Admin **user link** to display community administration settings.

2 Click Comments.

3 To edit an existing comment type, enter the following field information in the Edit Comment Types section.

Table 579: Edit Comment Types Description

Field	Description
Primary	Select this radio button to use the comment type for top-level replies to a post. **Note:** The primary comment type can be overridden at the hive level.
Threaded	Select this radio button to use the comment type for replies to other comments.

Table 579: Edit Comment Types Description (Continued)

Field	Description
Name	Click this link to view details such as the name, description, and field types used by the comment type.
Fields	Lists the fields used by the comment type.
# Hives	Displays the number of hives that have used this comment type.
# Comments	Displays the number of comments that have used this comment type.
Edit	Click this link to edit the comment type. Refer to step 5.
Delete	Select this check box to delete the comment type. **Note:** Comment types that have been used or set to primary or threaded cannot be deleted.

4 To add a comment type, click Create a New Comment Type.

5 Type a name for the comment type in the Name field.

6 Type a description for the comment type in the Description field.

Note By default, the Fields section lists four blank comment fields that you can define. You can add more comment fields by clicking Add Field, or remove comment fields by clicking the Delete button that appears at the end of each row.

7 Enter the following field information.

Table 580: Comment Fields Description

Field	Description
Order	Click the arrow to drag a comment field to a new position in the display sequence of fields.
Field Name	Type the name of the field as you want it to appear to members on the comment form.

Table 580: Comment Fields Description (Continued)

Field	Description
Field Description	Type a text description that will be visible to members when they complete the field.
Field Type	Click this drop-down menu to select the type of field or control you want to add. For a description of available field types, refer to Post and comment fields.
Field Data	Type the field data parameters that define the field type. For a description of the parameters used for each field type, refer to Post and comment fields. **Note:** Field data may be required, optional, or not applicable, based on the field type.
Uses	When creating a comment type, this column indicates it is new. When editing a comment type that is already in use, this column displays the number of comments that have used this field. **Tip:** This is useful for identifying fields that should be modified or removed due to low usage.
Delete	Click this button to delete the comment field. **Note:** Deleting a field cannot be undone and its data will be permanently discarded.
Add Field	Click this text to add comment fields to the Fields section.

8 To display all comment field names in the clip view, select the Show Field Names check box.

9 Click the Create Comment Type button.

To edit comment pagination options

1 Click the Admin **user link** to display community administration settings.

2 Click Comments.

3 To change the maximum number of comments displayed per page, type the number in the Comments Per Page. The default maximum number is 15.

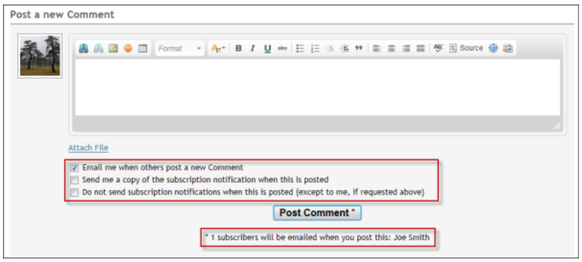
4 To expand nested comments by default, select the No radio button under Collapse Comments by Default. Comments are collapsed by default.

5 Click the Set Pagination Option button.

Post and comment subscriptions and notifications

Subscription notifications help thread participants stay abreast of community activity and participate more easily in ongoing conversations. When adding a post or comment, the following subscription notification check boxes are available.

- Email Me When Others Post a New Comment—Select this check box to be notified by email when subsequent comments are posted by others. Refer to step 8 in To access a community's general settings. (If the user is already subscribed, the check box is replaced with the message You are Already Subscribed by Email to All Comments in This Hive.)
- Send Me a Copy of the Subscription Notification When This is Posted—Select this check box to be notified by email when the user's own content is posted.
- Do Not Send Subscription Notifications When This is Posted (Except to Me, if Requested Above)—Select this check box to prevent subscription notifications from being sent when this content is posted. This check box is available only to users of type Admin–Community.



Users who have subscribed to receive notifications are listed at the bottom of the comment form for the submitting user to review. When 20 or more members are subscribed, the approximate total of subscribers is displayed and up to 1,000 subscriber names can be displayed by clicking the View Subscribers link. In addition, the system checks member statuses to ensure that update notifications are sent only to active members, excluding those marked inactive or disruptive. Refer to Moderating member content.

Notifications also provide special features for power users and moderators who interact with the community using mobile devices. For example, notification emails contain a Reply To This Post By Web link that allows users to reply to posts from a web browser. Though this page works well when accessed from workstations, it is also optimized for mobile devices.

In addition, you can enable a Reply To This Post By Email link, which allows users to compose an email reply from a mobile mail client. The contents of the reply email will be processed and added to the post as a new comment.

Both links default to one allowed use and expire in 72 hours. However, you can change these expiration parameters to customize the expiration time and maximum number of uses.

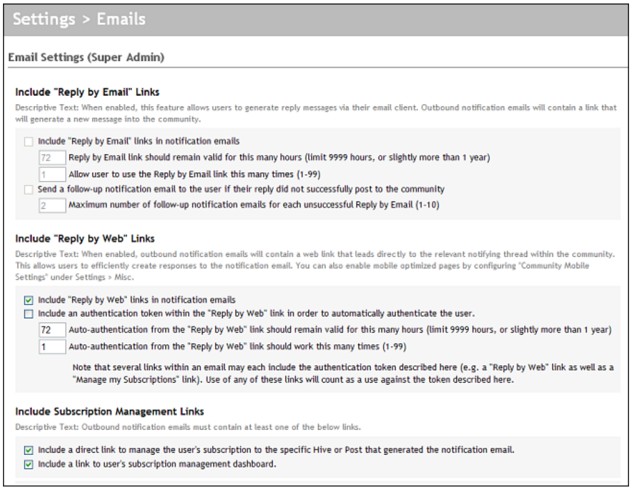
Note Mobile thread update pages are supported only for communities that use a single sign-on through the customer portal for Oracle Service Cloud. However, they are not part of the customer portal's mobile page set.

You can also modify the text content of the notifications used throughout your community, including the messages for new content, forgotten passwords, change email requests, invitations, account activations, private messages, and joined groups and networks.

Important Email administration settings are available only to users of the Admin–All user type.

To configure notification links

1. Click the Admin **user link** to display community administration settings.
2. Click Emails.



3 To include a link for replying by email, select the Include Reply by Email Links in Notification Emails check box.

  a Type the number of hours the Reply by Email link should remain valid.
  b Type the maximum number of uses for the link.
  c To notify users of mail processing issues, select the Send a Follow-up Notification Email to the User check box.
  d Type the number of follow-up notifications sent for each unsuccessful email reply.

Important Before Reply by Email settings take effect, a dedicated reply-to mailbox must be enabled for your community. To enable a reply-to mailbox, contact your Oracle account manager.

4 To include a link for replying by web browser, select the Include Reply by Web Links in Notification Emails check box. This option is enabled by default.

  a To automatically log users in when they click the Reply by Web link, select the Include an Authentication Token Within the Reply by Web link check box.
  b Type the number of hours the Reply by Web link should remain valid.
  c Type the maximum number of uses for the link.

5 To remove the link for managing the subscription for the notifying hive or post, clear the Include a Direct Link to Manage the User's Subscription to the Specific Hive or Post check box.

6 To remove the link configuring all subscriptions, clear the Include a Link to User's Subscription Management Dashboard check box.

7 Scroll to the bottom of the page and click the Save Email Settings button.

To edit the text of notification messages

1 Click the Admin **user link** to display community administration settings.

2 Click Emails.

3 To modify the signature included in all notification messages, type the new signature in the Default Signature field.

4 Locate the notification message you want to modify and type your changes in its field.

Tip The notification messages use tokens to automatically insert values such as post name, user name, group name, and comment content. Tokens supported by each message are listed below the message name. In addition, the group avatar token can be used in the body of subscription notification emails.

5 Click the Save Email Settings button.

Answer commenting on the customer portal

In addition to commenting on posts viewed on the community, your customers can comment on answers presented on the customer portal when you add the AnswerComments widget to the answer details page, shown here.

Answer commenting provides customers with a dedicated space beneath each answer for discussing its content with other customers, whether they are seeking clarity and context or sharing their own knowledge and expertise on the topic at hand. It is also a useful method for gathering feedback on the content you have provided so that you can respond or make adjustments accordingly. To enable answer commenting on your site, refer to Adding the Answer-Comments widget to the answer details page.

Note Oracle Service Cloud provides widgets that extend other community functions to the customer portal as well, such as presenting or submitting posts or displaying a customer's name and picture. For more information about enabling community functions on your customer portal, refer to Community integration widgets.

Post and comment fields

Communities provide a variety of form elements to support different types of posts and comments. The following fields and controls are available when creating and editing post and comment types.

Table 581: Post Fields Description

Post Type	Description
Text	The following elements allow members to enter text when adding a post or comment.
Textbox	Adds a text field to the post or comment form. You can also set parameters for field size and maximum number of characters allowed by typing them in the Field Data field in the format `[small|medium|large],[1-255]`. For example, to add a small field allowing twenty-four maximum characters, type the value `small,24`.
Textarea (WYSIWYG/ HTML)	Adds a text box featuring a WYSIWYG/HTML editor (1-4,000 characters). You can also set the text box height (in text rows) and specify whether to resize it fluidly based on the text it contains. Type these parameters in the Field Data field in the format `[2-50],[fixed|fluid]`. For example, to make the text box ten rows high and automatically resize it based on its contents, type the value `10,fixed`.

Table 581: Post Fields Description (Continued)

Post Type	Description
Textarea (Plain Text)	Adds a text box for entering plain text (1-4,000 characters). You can also specify field size and maximum number of characters allowed in the Field Data field in the format `[size|medium|large],[1-255]`. For example, to add a small field allowing twenty-four maximum characters, type the value `small,24`.
Textarea (Textile)	Adds a text box that supports Textile formatting (1-4,000 characters). Refer to Textile (markup language). You can also specify field size and maximum number of characters allowed in the Field Data field in the format `[size|medium|large],[1-255]`. For example, to add a small field allowing twenty-four maximum characters, type the value `small,24`.
Code	Adds a text box that members can use to display code or preformatted text when adding a post. Code formatting, including tabs and spaces, is retained and displayed when added to a post in this field. You can also specify field size and maximum number of characters allowed in the Field Data field in the format `[size|medium|large],[1-255]`. For example, to add a small field allowing twenty-four maximum characters, type the value `small,24`. **Note:** Code entered in this field will not be rendered and does not impact the security of the community.
Embedded Media	The following elements allow members to embed multimedia content when adding a post or comment.
Image	Select this option to allow members to upload or embed linked image files.
Flash	Select this option to allow members to embed linked Flash *(.swf)* files. **Note:** Although Flash is a supported field type, it can introduce potential misuse by malicious users. Use this field type with caution. Refer to Cross-site flashing.
Video	Select this option to allow members to upload or embed linked video files.

Table 581: Post Fields Description (Continued)

Post Type	Description
Form Controls	The following elements allow members to select options from form controls when adding a post or comment.
Select	Adds a drop-down menu that members can select a single option from. Type options for the menu in the Field Data field in comma-separated format. For example, `High, Medium, Low`.
Multi-select	Adds a multi-select field that members can select one or more options from. Type options for the field in the Field Data field in comma-separated format. For example, `France, Germany, Italy, Portugal, Spain`.
Radio Buttons	Adds radio buttons that members can select a single option from. Type options for the radio buttons in the Field Data field in comma-separated format. For example, `Yes, No, Maybe`.
Checkboxes	Adds check boxes that members can select one or more options from. Type options for the check boxes in the Field Data field in comma-separated format. For example, `Baseball, Basketball, Football, Golf, Tennis`.
Dates and Times	The following elements allow members to enter date values when adding a post or comment.
Date	Adds a date field to the post. Members can type the date in any of the following formats: • `MM/DD/YY` • `Mon DD, YYYY` • `DD Month YYYY` • `Next Day` The community will display the date in the format Month DD, YYYY.
Event Date	Adds a date field to the post or comment that can be used with calendar events and the RSVP feature.
Files	Select this option to allow members to attach files to the post or comment.
Special	The following elements allow members to enter special values when adding a post or comment.

Table 581: Post Fields Description (Continued)

Post Type	Description
Link	Adds a drop-down menu containing links. By default, links open in a new browser window. To open them in a parent window instead, type `internal` in the Field Data field.
Postal Address	Adds a postal address field. **Note:** Content displayed in this field is used to automatically create a link to the address in Google Maps.
Email Address	Adds an email address field.
Instant Messenger	Adds contact ID fields for several leading instant messenger services.
Fixed Value	Select this option and type a text value in the Field Data field to add that text to the post form.
Ratings (Deprecated)	The following elements allow members to enter rating values. **Note:** These elements have been deprecated and will be removed in future releases.
Icon Rating	Adds a drop-down menu that members can use to enter a rating value. By default, values entered in this field will appear as stars, but fork and dollar icons are also available. You can also set the scale for the ratings from one to five. Type these parameters in the Field Data field in the format `[star|fork|dollar], [1-5]`. For example, to define a rating scale of one to four forks, type the value `fork, 4`.
Thumbs Up/Down	Adds a drop-down menu members can use to enter a thumbs up/down rating value.

Sticky posts

To increase the visibility of important and timely information, admins can specify that a post should be "sticky," or always returned at the top of the results list when members view a Posts page or panel. When viewing a post, simply click the Stickiness drop-down menu and select whether you want the post to be sticky on a permanent or temporary basis using the available intervals.

Once a post is made sticky, it will appear at the top of post search results with a pin icon next to its title. For permanently sticky items, the pin will display with a lock, signifying that its sort order will not change.

In cases where multiple sticky posts are returned, posts that are permanently sticky will be sorted above those that are temporarily sticky. Temporary sticky posts are sorted by expiration interval (from shortest to longest) and will automatically revert to normal sorting at the beginning of the expiration date. Each post's expiration date is displayed below its header, visible to admins only.

Note Post stickiness applies only to items displayed on the Posts pages and panels. When posts marked as sticky are displayed on post widgets, they are sorted normally.

Tagging content

Posts can be tagged with simple keyword attributes that can be used to reference and quickly find related information throughout the community. You can add tags to any hive to make them available when members add or edit posts for that hive. Posts that have been tagged with a specific tag can be listed by clicking the tag link wherever it appears, or by appending the *tagName* parameter to the posts page URL, as follows.

```
http://<your_site>/posts?tagName=<tag_name>
```

To add tags to a hive

1 Click the Admin **user link** to display community administration settings.

2 Click Hives.

3 Click Browse All Hives in the Related Tasks section.

Or

Click Search For Hives to search for a specific hive. Refer to Searching for content.

4 Click Settings next to the hive you want to edit permissions for.

5 Click Edit Tags to display a list of tags that are currently configured for the hive.

Table 582: Tags List Description

Column	Description
Name	Displays the name of the tag.
# Posts	Displays the number of posts in the hive that contain the tag. Click the number link to view the posts.
Edit	Click this link to edit the tag name.
Delete	**Caution!** Deleting a tag from its hive will remove all references of the tag in existing posts. This action cannot be undone. Click this button to delete the tag from the hive.

6 Type the tag you want to add in the text field and click the Create Tag button.

7 To view all of the posts in the hive that contain a specific tag, click the # Posts link next to the tag.

8 To edit a tag name, click Edit next to the tag.

Content moderation

Providing a positive, constructive experience for your **members** is essential to the well being of your community. Users should feel welcome and excited about the content you are providing and their own role in producing and consuming it. Setting and maintaining a proper tone and atmosphere for your community can help promote participation.

Communities offer a variety of moderator functions for reporting abusive behavior and suspending inappropriate content. In addition, there may be cases where a member's **post** would simply be more suitable posted to another **hive**. Moderators can easily move posts and associated comments from one hive to another. They can also create incidents from posts, close posts to further commenting, or add notes about the content, such as why it was moved, suspended, or restored to the community.

To protect the member experience, it is vital to quickly detect any inappropriate content that can harm or detract from the value of your community. A number of useful tools are available to help monitor your site.

- **Content flagging**—When members come across a **post** or **comment** they feel is inappropriate, they can flag it for moderator review. If a certain flagging threshold is reached (for instance, if an item is flagged five times), the item is automatically suspended and hidden from community members and searches. Flagged and suspended content can also be tracked and manually suspended by a moderator. Moderators can view and manage suspended and flagged content by clicking an option in the Related Tasks section or clicking the Moderation user link on any page of the community. Refer to Moderating member content.
- **Disruptive user filtering**—To identify users who are engaging in disruptive behavior, your community can monitor the number of flags members have received relative to the number of posts and comments they have submitted. When disruptive users are identified, the system can automatically set their status to Disruptive, hiding them and their content from the community. Users can also be manually set to the Disruptive status by administrators.
- **CAPTCHA threshold**—Communities can also monitor a user's daily submission and private messaging attempts and, upon reaching a specified threshold, present a CAPTCHA challenge-response test on future submission attempts. This is designed to prevent instances of community forms from being submitted by web robots.
- **SmartSense thresholds**—Communities integrated with Oracle Service Cloud can also be configured to evaluate the emotive qualities of member content using the **SmartSense** function (refer to How SmartSense works). Content that exceeds a certain rating threshold will be automatically set to a pending status. Pending content is displayed in the community with an indication that it is pending review, and is automatically added to the Pending queue on the moderation dashboard. Refer to Moderating member content.

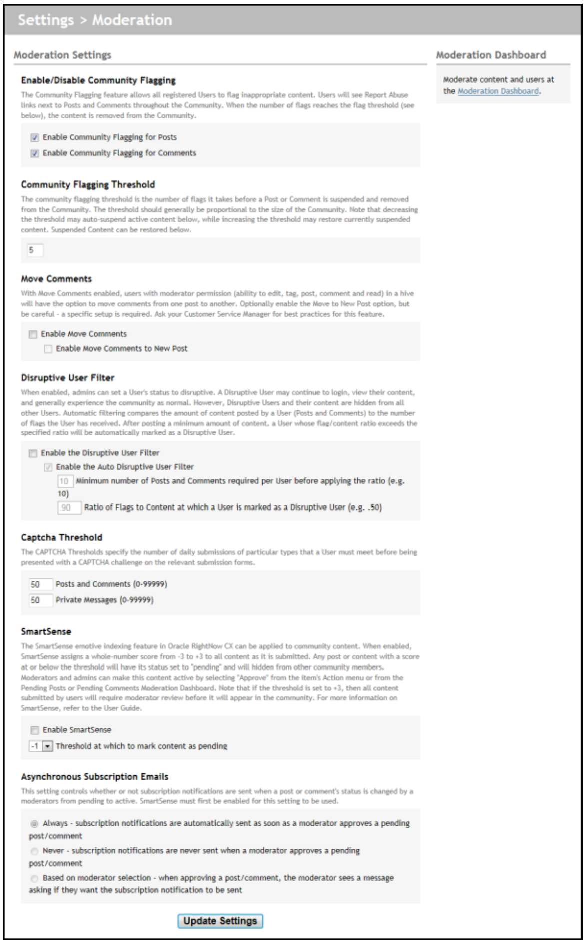
Note When SmartSense is enabled for communities, the Asynchronous Subscription Emails setting controls if subscription notifications are sent when the status of a post or comment is changed from pending to active by a moderator. For example, if a post has been in pending status for several weeks before the moderator approves it, the moderator may not want subscription emails to be sent, since members may assume the post or comment was submitted recently.

- **Profanity filtering**—Communities automatically filter profane words from content entered into the database. The filtered word list can be updated as needed to screen out terms that may be offensive or otherwise cause disruption to your community.

To enable community moderation

1 Click the Admin **user link** to display community administration settings.

2 Click Moderation to display moderation settings.



3 Enter the following field information.

Table 583: Moderation Settings Description

Field	Description
Enable/Disable Community Flagging	The following fields are used to enable or disable content flagging for the entire community.
Enable Community Flagging for Posts	Select this check box to enable content flagging for posts. Post flagging is enabled by default.
Enable Community Flagging for Comments	Select this check box to enable content flagging for comments. Comment flagging is enabled by default.
Community Flagging Threshold	Type the maximum number of flags that you want a post or comment to receive before it is automatically suspended and removed from the community. **Important!** The flagging threshold should be set proportionally to the size of the community, with larger communities having a larger threshold. Because adjustments to the threshold are applied immediately to all community content, decreasing the threshold may restore currently suspended content and increasing the threshold may immediately suspend content that exceeds it.
Move Comments	The following settings are used to enable the discussion management feature, allowing moderators to move comments among posts and to delete multiple comments at once. Refer to Managing discussions. **Note:** Enabling these settings makes this feature available to all moderators across all hives in the community.
Enable Move Comments	Select this check box to allow moderators to move comments from a post to another existing post. This setting is disabled by default.
Enable Move Comments to New Post	Select this check box to allow moderators to move comments from a post to a new post. This setting is disabled by default.
Disruptive User Filter	The following settings are used to enable and adjust automatic detection of disruptive user behavior.
Enable the Disruptive User Filter	Select this check box to allow administrators to manually set a user's status to Disruptive. Refer to Managing member accounts. **Note:** The disruptive user filter is disabled by default.

Table 583: Moderation Settings Description (Continued)

Field	Description
Enable the Auto Disruptive User Filter	Select this check box to enable the automatic filtering of disruptive users based on an appropriate ratio of flags to content. **Note:** This option is enabled by default but is available only when the disruptive user filter is enabled.
Minimum Number of Posts and Comments	Type the minimum number of posts and comments that users must create before the flag-to-content ratio is applied. The default minimum is 10.
Ratio of Flags to Content	Type the minimum ratio of flags to content that must be achieved for a user to be considered disruptive. By default, the ratio is set to .90.
Captcha Threshold	The following settings are used to set the threshold for daily form submissions upon which CAPTCHA challenge-response tests will be presented.
Posts and Comments	Type the maximum number of posts and comments (combined) that a user can submit each day before CAPTCHA challenge-response tests are presented upon form submits. By default, the threshold is set to 50.
Private Messages	Type the maximum number of private messages that a user is allowed to submit each day before CAPTCHA challenge-response tests are presented with the message field. By default, the threshold is set to 50.
SmartSense	The following settings are used to enable the SmartSense emotive indexing feature and to set the SmartSense rating threshold at which content is automatically set to pending status. Refer to SmartSense Emotive Rating.
Enable SmartSense	Select this check box to enable the SmartSense feature.

Table 583: Moderation Settings Description (Continued)

Field	Description
Threshold at Which to Mark Content as Pending	Use this dropdown field to select the SmartSense rating threshold value indicating when a post or comment will be placed in pending status, requiring moderator action to move it to active status. Any post or comment with a score at or below the threshold value will be placed in pending status. **Note:** Negative values correspond to negative SmartSense ratings, while positive values correspond to positive ratings. For example, if the threshold value is set at +3, all posts and comments will require moderator review, while if the value is set to -3, posts and comments with only the most negative SmartSense rating will require moderator review.
Asynchronous Subscription Emails	Select one of the following radio buttons to determine when subscription emails are sent to community members when a moderator changes the status of a post or comment from pending to active. **Note:** The Enable SmartSense check box must be selected for these radio buttons to be active.
Always	Select this radio button to send subscription notifications when a moderator approves a pending post or comment by changing its status to active.
Never	Select this radio button to never send subscription notificiations when a moderator approves a pending post or comment by changing its status to active.
Based on Moderator Selection	Select this radio button to give the moderator direct control of whether or not subscription notifications will be sent when the status of a pending post or comment is changed to active. When this option is selected, the moderator will see a pop-up message asking if subscription notifications should be sent. Refer to Moderating member content.

4 Click the Update Settings button.

To enable the profanity content filter

1 Click the Admin **user link** to display community administration settings.

2 Click Moderation to display moderation settings.

3 In the Profanity Filter Settings section, select the Enable Filtered Word List check box.

4 To filter additional words from community content, add them to the Filtered Word List field. Each word must appear on its own line followed by a return.

Caution The filtered word list contains numerous terms that are patently offensive and is accessible to any user associated with the Admin–All user type. Discretion is advised when viewing and modifying the contents of this list.

5 Click the Save Profanity Filter Settings button.

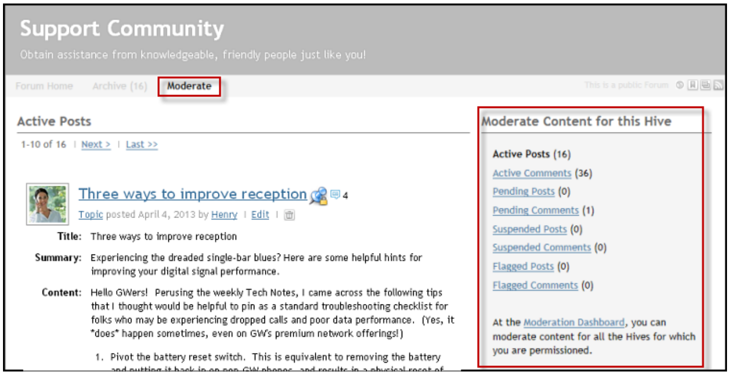
Moderating member content

Communities provide several moderation options for content, including ways to suspend posts and comments and remove ratings. As members review posts and comments on your site, they can flag inappropriate content by selecting Report Abuse from the Actions link appearing above each entry. If an item reaches a specified number of flags, it is automatically suspended and hidden from view.

The Actions link also contains a few options visible only to moderators and administrators, such as the ability to add private moderator notes or suspend content outright. In addition, administrators can edit metadata or suspend members who engage in repeated abusive behavior by editing their account and setting their status to Suspended. Refer to Managing member accounts.

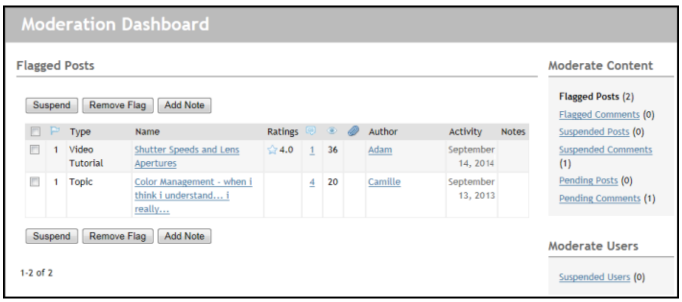
Communities connected to or merged with Oracle Service Cloud can be enabled with SmartSense content rating to automatically set posts and comments to a status of Pending when they exceed the defined SmartSense threshold.

Flagged, suspended, and pending content is listed on a special dashboard for review by moderators. Members permitted to moderate a specific hive can click the hive's Moderate tab to review flagged, suspended, and pending content associated with that hive.



Click the Moderation Dashboard link to access the expanded dashboard where you can moderate content from all the hives you are permitted to moderate. Users with more extensive moderation privileges throughout the community can click the Moderation **user link** on any community page to access the expanded dashboard.

The expanded moderation dashboard displays flagged, suspended, and pending posts and comments from all of the hives that you have permission to see throughout the entire community.



Links on the right provide access to alternate moderator queues, including flagged, suspended, and pending posts and comments. The dashboard provides information about items in the displayed queue, such as ratings, number of comments, number of views, activity time, and the author name. Posts and comments that contain file attachments display a file type indicator that you can click to view the file. Select any check box and click an available option to unflag, suspend, approve (set to Active status), or restore the content, or add a moderator note. Hovering over a post's link will reveal its first 150 characters, while hovering over a moderator note reveals its first 20 characters. Click on the number of comments item to go to the most recent comment.

Administrators can also click the Suspended Users queue, where they can edit, restore, or add moderator notes to members that are currently set to the Suspended status.

To moderate content as a hive moderator

1 On any hive page, click the Moderate tab of the tab set. The page refreshes with a list of active posts.

2 To display only active, pending, suspended, or flagged posts and comments, click an option in the Moderate Content section.

3 Click a post or comment title to view its content.

4 Hover over the content's Actions link and select from the following actions. The page refreshes with confirmation that the action was successful.

Table 584: Moderation Actions

Action	Description
Apply Tags	Select this action to apply tags to a post. **Note:** This option is available only when tags have been added to the hive.
Move Post	Select this action on a post to move it to a different hive.
Close Comments	Select this action on a post to prevent further comments.
Escalate	Select this action on a post to submit its content as an incident. Refer to Escalating a post to an incident.
Edit Metadata	Select this action on a post to edit its created and created by attributes. Refer to To edit post metadata.
Report Abuse	Select this action on a post or comment to flag its content for moderator review.

Table 584: Moderation Actions (Continued)

Action	Description
Resolve	Select this action on an escalated post to indicate that the question has been resolved. Refer to Escalating a post to an incident. **Note:** This action affects only the post. You must still edit the incident if you want to set it to the Solved status.
Approve	Select this action to change the status of a pending post or comment to active, making it visible to community members.
Suspend	Select this action on a post or comment to hide it from community members and searches.
Restore	Select this action to restore a suspended post or comment to the community.
Moderator Notes	Select this action to enter moderator notes. Refer to To add moderator notes.

Tip Use the expanded moderation dashboard to select multiple posts or comments and take a specified action on all of them with a single click.

5 To moderate the ratings of a post or comment, click Moderate Ratings. All current ratings for the post or comment are listed by member.
   a Select the check box next to one or more ratings that you want to remove.
   b Click the Delete Ratings button.

To add moderator notes

1 View a post or comment.

2 Hover over the content's Actions link and select Moderator Notes.

3 Type your note in the text field.

4 Click the Add Note button to add your note to the moderator notes thread.

To edit post metadata

1 From any open post, hover over the post's Actions link and select Edit Metadata.

2 To change the member that the post is attributed to, type the new member name in the Created By field.

3 To change the post's creation date, select an option from the Created radio buttons.
   - Current: <date and time>—Keep the post's creation date set to its current value.
   - Now—Set the creation date to the current date and time.
   - Custom—Type a new value for the creation date and time in this field.

4 Click the Update Metadata button to save your changes.

Managing discussions

An essential way to ensure that community content is relevant and useful is to encourage your members to keep comment threads consistent with the topic of each post. Often, it is helpful to identify conversations that are drifting off topic and move them to new or existing discussions elsewhere in the community. When the discussion management feature is enabled, staff members who have moderation rights for a hive (including Edit, Tag, Post, Comment, and Read privileges) can move comments from one post to another, as follows:

- Comments can be moved to a new post of the *same* post type in the *same* hive. The first selected comment will be used for the content of the new post, with the remaining selected comments (if any) added as comments to that post.
- Comments can also be moved to an existing post of *any* post type and *any* comment type in *any* hive across your community. All moved comments will be appended to the post's existing comment thread in chronological order. If the discussion is non-threaded, the comments will simply appear in their chronological position. In threaded discussions, the original structure will be maintained as much as possible. That is, the top-most comments will become top-level comments, and any child comments moved along with their parents will remain under their parents in the destination thread.

Note In order to move comments to a post in another hive, you must have moderation privileges for the destination hive as well as the hive you are moving comments from.

Due to the variety of content objects available in a community, it is typically much easier for moderators to use the Move to Existing Post option when moving comments between posts, even if moving content to a new post. This is because the Move to a New Post option strictly requires the destination post type to have identical field names, field types, and field data settings as the migrating comment type.

For this reason, we recommend that moderators use the Move to Existing Post option even when moving comments to a new post, as follows:

1 Create a new post in the destination hive.

2 Add a relevant title and body summarizing the content of the comments you will be moving.

3 Move the comments to the new post you've just created using the Move to Existing Post option.

In this way, you can avoid the strict requirements of the Move to New Post options while achieving the same result.

Comments that are moved will retain their ratings, flags, and attachments, but comments marked as Best Answer must be unmarked as such before they can be moved. Members who have subscribed to comments that are later moved will not be notified.

Once a comment has been migrated to a separate post, it is replaced in the original thread with a link to the content's new location. Comments containing these links are assigned to the moderator so they may be moved or edited for context.

Moderators can also, at their own discretion, delete one or more comments from a thread that do not contribute value or detract from the discussion.

Note To enable the discussion management feature for moderators, refer to Content moderation.

To move comments to another post

1 View a post with comments.

2 Select the check box at the upper right of each comment you want to move.

3 Hover over the content's Manage Discussion link in the footer of the discussion thread and select Move Comments. The Move Comments window opens.

4 To move the selected comments to a new post in the current hive, select the Move to a New Post radio button.

Tip Once a comment has been moved to a new post, that post can be moved to a different hive as a separate action. Refer to Moderating member content.

5 To move the selected comments to an existing post elsewhere in the community, select the Move To Existing Post radio button and type the URL of the post you want to move the comments to.

Note When you click the Move Comments button, the destination URL will be verified by Oracle Service Cloud to ensure it is valid. If the URL is invalid, an error will be returned.

6 Click the Move Comments button. The destination post displays in edit mode with the moved comments in place below it.

To delete multiple comments from a post

1 View a post with comments.

2 Select the check box at the upper right of each comment you want to delete.

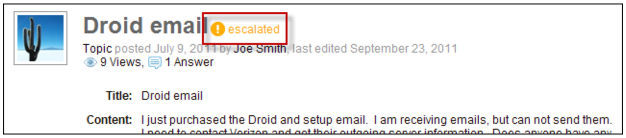
3 Hover over the content's Manage Discussion link in the footer of the discussion thread and select Delete Comments. A confirmation window opens.

4 Click the Delete Comments button.

Escalating a post to an incident

Occasionally, when reviewing a post, you may encounter a service issue that requires assistance from a support agent. When **Oracle RightNow Cloud Service (Service)** is enabled, you can use the Escalate moderation action to create an **incident** containing the post's title, summary, URL, and an excerpt of content in the incident Subject field. You can also add a private note to the incident thread to provide context to the issue you're submitting.

Escalated posts are marked with a yellow indicator next to the post title, as shown here. Once the issue is resolved, you can use the Resolve moderation action to clear the indicator.



Note To make the escalation indicator visible to administrators only, submit an incident on our support site.

Posts can be escalated multiple times. However, once a post is escalated, it cannot be escalated again until it has been marked as resolved. Each escalation will create a new incident in the system.

Note Incidents can also be created automatically for posts that do not receive a comment or best answer within a specified number of hours. To enable this function on a site that has Service enabled, submit an incident on our support site.

To enable Service, contact your Oracle account manager.

To escalate a post to an incident

1. While viewing a post, hover over the content's Actions link and select Escalate. The Escalate Post window opens.
2. To enter a private note in the incident thread, type the note in the Note field.
3. Click the Create Incident button. An incident is created and the post title is marked as escalated.

To clear a post escalation

While viewing an escalated post, hover over the content's Actions link and select Resolve. The escalation indicator is cleared.

Note Selecting the Resolve moderation action will not solve the incident, and setting an incident to the Solved status on the agent desktop will not clear the escalation indicator from the post. These actions must be performed separately.

To change an incident's status, refer to Incident statuses.

Member reputation levels

While moderation is important for protecting **members** from abusive behavior, your community can also help you track and promote positive user activity. Recognizing and rewarding users who are experienced, prolific, or helpful to others adds value to your community because it fosters meaningful relationships and encourages active participation.

To help identify your most valued members, you can create custom reputation levels, such as Expert, Mentor, and Advanced Member. Reputation levels are automatically assigned to members based on their level of activity within the community, represented by a point system.

When you create a reputation level, you define the number of points a member must accrue to reach that level. Then you assign point values to a variety of member actions within the community, such as 50 points for creating a **post**. Reputation actions can be assigned any point value from -100 to 100. A negative point value will decrease the number of member reputation points accrued.

While each of the monitored actions benefits your community to some degree, you can decide which actions you value more highly and assign them more points. You can also upload images for each reputation level that will be displayed along with profile information when members add posts and comments to the community.

Once configured, the process of identifying and rewarding your most valued members is completely automated. Member reputation levels are displayed for the benefit of the community, indicating their status as valued members.

Note The following procedures can also be used to edit reputation levels and actions. If you change the point values assigned to existing reputation levels or actions, the system will automatically recalculate all member reputations based on the new scoring you have defined. In most cases, this update will occur immediately, but in a few instances, such as sorts and filters based on reputation, the process may require up to fifteen minutes to complete.

To create member reputation levels

1 Click the Admin **user link** to display community administration settings.

2 Click Reputation to display reputation settings.

3 In the Reputation Levels section, click Add Level.

4 Type a name for the level in the Name field.

5 Type the number of points that must be accrued by members to achieve the level in the Points field.

6 To add an image for a reputation level, click Edit.
   - a Click the Browse button. A window opens and displays the files and folders on your workstation.
   - b Select the file to attach.
   - c Click the Open button to attach the file to the record.

Note Because images are not automatically resized when they are displayed, we recommend that you upload only small images approximately 20x20 pixels.

7 Repeat steps 3 through 6 for each reputation level you want to add.

8 To delete a reputation level, select the Delete check box for that level.

9 To change the name of the default Member level, type a new name in its Name field.

Note The default Member level cannot be deleted but it can be renamed.

10 Click the Save Reputation Levels button.

To assign reputation point values for user actions

1 Click the Admin **user link** to display community administration settings.

2 Click Reputation to display reputation settings.

3 In the Reputation Actions section, type a point value in the Points field next to each action to indicate its impact on member reputation.

Table 585: Member Reputation Actions

Action	Description
Create Post	A member creates a post.
Create Comment	A member comments on a post.
Rate Post	A member submits a rating for a post.
Rate Comment	A member submits a rating for a comment.
Invite Member	A member invites someone to join a group.
Comment Selected as Best	A member's comment is selected as the best answer to a question submitted in a post.
Comment on My Post	A member's post is commented on by another member.
Rating on My Post	A member's post receives a rating from another member.
Rating on My Comment	A member's comment receives a rating from another member.

Note Points received for post and comment ratings are proportional to the value of the rating. For example, if you assign 10 points to the Rating on My Posts action, thumbs up and thumbs down ratings will receive 10 and -10 points, respectively, while 1-5 star ratings will receive 10, 5, 0, -5, and -10 points, respectively.

4 Click the Save Reputation Actions button.

Customizing pages

In addition to your community's standard page sets (refer to Community page structure and navigation), you can create custom pages, defining design elements such as the page title and tagline, meta tags for search engine optimization, as well as tabs and **panels**. These options provide you with great flexibility for the appearance and function of your pages, tailoring your community to serve a wide variety of business needs.

You can create two types of custom pages: content and category. Content pages are used to add and edit design elements, including panels, that define the layout of a page. Category pages serve as landing pages for grouping and accessing sets of content pages and can be made available as links in the community navigation set. Refer to Community page structure and navigation.

Note While your community's standard and custom page sets provide extensive flexibility for the appearance and function of your site, access to high-level design elements (such as community style sheets) is restricted. Look and feel assets are stored on Oracle servers to ensure that your site's appearance remains consistent after upgrades and updates. To discuss high-level customization options, contact your Oracle account manager.

To create a custom page

1 Click the Admin **user link** to display community administration settings.

2 Click Custom Pages.

3 In the Create a Page section, select the type of page you want to create from the Page Type radio buttons. Options include Content and Category.

Note A page's type cannot be changed once it has been created.

4 Type a name for the page in the Page Name field.

5 Click the Create Page button. The page is added to the list of available pages in the Pages section.

To edit a custom page

1 Click the Admin **user link** to display community administration settings.

2 Click Custom Pages.

3 In the Pages section, click Edit next to the page you want to customize.

Note You can also edit a page you are viewing by clicking Edit Page on the right side of the page header.

4 To edit the page name or tagline, click Edit General Settings.

  a To change the page name that appears in the page heading, type a new page name in the Page Name field.
  b To add a one-line description of the page, type the description in the Tagline field.
  c Click the Update Settings button.

5 To define the meta tag of a content page, click Edit Meta Tags.

  a Type a title for the browser's title bar in the Title field.
  b Type a description for the meta tag in the Description field.
  c Type keywords for the meta tag in the Keywords field.

6 To add content panels to a custom page, click Edit Panels and refer to Adding panels to pages.

7 To add tabs to a category page, click Edit Tabs.

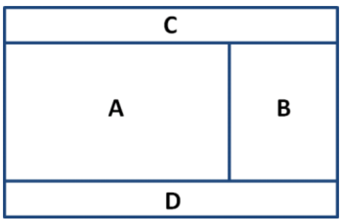
  a In the Tabs section, click Add Tab.
  b Type the text of the tab in the Text field.
  c Type a relative path for the tab in the URL field.

Note When defining a tab, you must enter a relative path to a page on the community, such as /pages/86ad8a11dc. The URL field does not support full URLs to pages outside of the community.

  d Click the Update Tabs button.

Adding panels to pages

The center area of most pages is used to display some form of content. This content section is structured as a simple table containing four content frames.



These frames are identified in the page layout by letters A through D. Each has a fixed width designed to present a different portion of the layout.

- **A**—Main content frame with a fixed width of 595 pixels.
- **B**—Related content frame with a fixed width of 305 pixels.
- **C**—Header frame with a fixed width of 920 pixels.
- **D**—Footer frame with a fixed width of 920 pixels.

The content of each frame is defined by adding panels, widget-like objects that display dynamic content from the **community**. You can select, position, and configure a variety of useful panels to meet your design objectives. Some panels display lists of community objects like users, **groups**, **hives**, or **posts**. Others are used to embed more specialized information like community statistics, custom HTML, or images. Panels can be customized using properties you define such as title text, sources and filters (for lists), privacy, and style attributes.

The following panels are available for adding to page frames.

Table 586: Panels Available for Community Pages

Type/Panel	Description
Community Content	The following panels are used to display community content on custom pages.
Users	Displays a list of **members** in various formats, such as a list of member names and statistics or a grid of member avatars. Refer to Editing Users panel properties.
Groups	Displays a list of groups in various formats, such as a list of group names and statistics or a grid of group avatars. Refer to Editing Groups panel properties.
Hives	Displays a list of hives in various formats, such as a list of hive names and statistics. Refer to Editing Hives panel properties.
Posts	Displays a list of posts in various formats, such as a list of post titles or summaries. Refer to Editing Posts panel properties.
Comments	Displays a list of comments in various formats, such as a list of comment summaries. Refer to Editing Comments panel properties.
Calendar Filter	Displays a calendar for filtering post panel content by date. Refer to Editing Calendar panel properties.

Table 586: Panels Available for Community Pages (Continued)

Type/Panel	Description
Search	Displays a basic keyword search box and advanced search link using properties you define for title, privacy, and style. Refer to Editing Search panel properties.
Community Stats	Displays community statistics using properties you define for title, privacy, and style. Refer to Editing Community Stats panel properties.
Hive Only	The following panels are available only when editing a hive summary page by clicking the hive's Settings tab and clicking Edit Panels page in the Summary Page section.
New Post	Displays options for creating new posts of available post types. Refer to Editing New Post panel properties.
Hive Stats	Displays statistics about the hive, including privacy level, owner, dates of creation and last activity, and the number of posts and comments created in the hive. Refer to Editing Hive Stats panel properties.
Media/Embed	The following panels are used to display media content on custom pages.
WYSIWYG/HTML	Displays custom HTML content that you define using a WYSIWYG editor. Refer to Editing WYSIWYG/HTML panel properties.
Image	Displays a web-hosted image that you specify by URL. Refer to Editing Image panel properties.
Flash (SWF)	Displays a web-hosted Flash *(.swf)* file that you specify by URL. Refer to Editing Flash panel properties. **Note:** Although Flash is a supported panel type, it can introduce potential misuse by malicious users. Use this panel type with caution. Refer to Cross-site flashing.
RSS Reader	Displays one or more RSS feeds using properties you define for feed view and URLs. Refer to Editing RSS Reader panel properties.
Admin Only	The following panels are used to display custom design elements, including HTML and iFrame content.

Table 586: Panels Available for Community Pages (Continued)

Type/Panel	Description
HTML	Displays custom HTML content using code that you define. Refer to Editing HTML panel properties.
iFrame	Displays an iFrame containing a web page that you specify by URL. Refer to Editing iFrame panel properties.

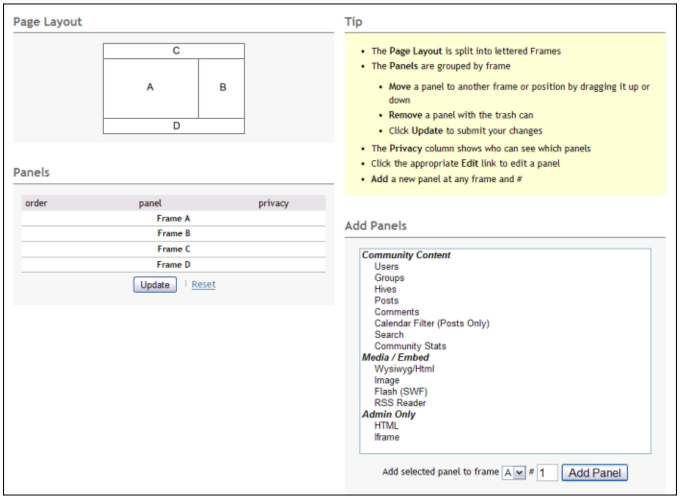
Panels can be customized in many ways according to their type. In addition to defining a panel header, source, and filters, most panels provide access and visibility properties. For instance, you can set a panel to be visible only to logged-in members or to members of a specific group. If a member doesn't have the attributes required to view a panel, that panel will not appear when the member views the page. Because visibility can also be defined by content sources, each member may experience a unique view of the same custom page, accessing only the content appropriate for them.

Panels can also define how content is presented, such as how much of each item displays and in what order.

To add a panel to a page

1 Open a page for editing by going to Admin > Custom Pages and clicking Edit next to the page you want to edit.

2 Click Edit Panels to display page layout editing options.



3 Select the panel you want to add from the Add Panels section.

4 Click the Add Selected Panel to Frame drop-down menu and select the frame you want to add the panel to.

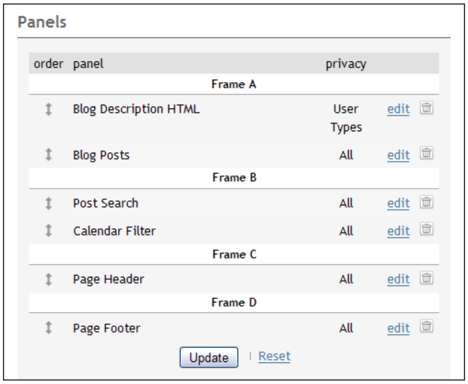
5 To customize the position of the panel when it is added to a frame with multiple panels, type an order number in the text field to the right of the drop-down menu.

6 Click the Add Panel button to edit properties for the panel you are adding. Refer to Editing Users panel properties.

7 Click the Save Panel button. The panel is added to the page layout and the panel name is listed in the Panels section.

To edit or remove a panel

1 From the page containing the panel, click Edit in the upper right corner of the panel you want to edit. A list of the panels on the page displays.



2 To move a panel, click the arrow next to the panel you want to move.

   a Drag and drop the panel to its new position.

Note You can drag panels to a different position in the same frame or a completely different frame.

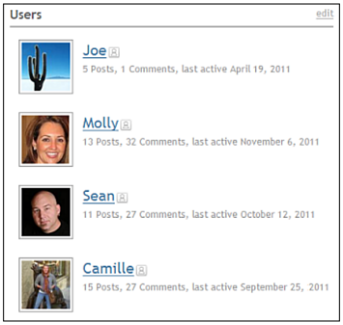
3 To edit panel properties, click Edit to the right of the panel and refer to Editing Users panel properties.

4 To remove a panel from the page, click the Delete button to the right of the panel.

5 Click the Update button to save your changes.

Editing Users panel properties

The Users panel displays a list of **members** in various formats, such as a list of member names and statistics or a grid of member avatars.



Once you add this panel to a page frame, you must edit its properties to define the list source and filters. You can also adjust the list's display, style, and privacy attributes.

To edit Users panel properties

1 Enter the following field information.

Table 587: Users Panel Properties

Property	Description
General	The following setting specifies the title displayed by the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
List Source	The following settings specify the source of the list data displayed by the panel.
Group	Type a group **hash** to list only members of a certain group. **Note:** The group's hash is found in the URL of its pages. For example, if a group's summary page is located at http://<your_site>.com/groups/bbe47d0d5e/summary, the group hash is bbe47d0d5e.
Active User	Click this drop-down menu and select In the Active User's Network to list only members in the logged-in user's network. This option provides a personalized panel view for each member.

Table 587: Users Panel Properties (Continued)

Property	Description
Hive Contributors	Select the List Users check box and type a hive hash to list only members who have contributed to that hive. Click the Contribution drop-down menu to select the type of contribution (post, comment, or both). **Note:** The hive's hash is found in the URL of its pages. For example, if a hive's summary page is located at http://<your_site>.com/hives/bbe47d0d5e/summary, the hive hash is bbe47d0d5e.
List Filters	The following settings are used to filter the list displayed by the panel. **Note:** List filters can be used instead of, or in addition to, a list source.
User Type Filter	Click this drop-down menu to select a **user type** to filter on. By default, members of all user types are listed. Refer to User types.
Reputation Level Filter	Click this drop-down menu to select a reputation level to filter on. By default, members of all reputation levels are listed. Refer to Member reputation levels.
Status Filter	Click this drop-down menu to select a user status to filter on. By default, the panel will filter for active members. Refer to Managing member accounts.
Advanced	Click these drop-down menus to select filters on members associated with comments, hives, posts, friends, or avatars. By default, all members with or without these associations will be listed.
List Options	The following settings define how the list is presented, including the details displayed, sort order, the number of records shown, and toolbar appearance.

Table 587: Users Panel Properties (Continued)

Property	Description
View	Click this drop-down menu to select the display type for the list. Options include the following: • **Title**—Displays each member's name only. • **Summary**—Displays each member's avatar, name, number of posts and comments, and the date last active. • **Summary without props**—Displays each member's avatar and name. • **Summary with points**—Displays each member's avatar, name, date last active, and number of points. Refer to Member reputation levels. • **Cloud**—Displays member names in various font sizes based on their level of activity. • **Grid**—Displays member avatars and names in grid form. • **Grid without name**—Displays member avatars in grid form.
Sort	Click this drop-down menu to select a sort order for the list. Options include sorting alphabetically, by date of last activity, number of posts, or date joined.
Count	Type the number of results you want the panel to return.
Toolbar	The following settings are used to specify the appearance of the toolbar beneath the panel header.
No Toolbar	Select this radio button to display no toolbar below the panel header.

Table 587: Users Panel Properties (Continued)

Property	Description
Pagination	Select this radio button to display pagination links. Selecting this option also causes the following settings to appear. • **Link Text**—Click this drop-down menu and select Custom Text to enter custom text for the pagination link. By default, the link text displays the total number of members returned and links to the next page and last page of the result set. • **Link URL**—Click this drop-down menu to select an alternate link URL such as the current page or a custom URL. By default, the link URL is based on the list source. When Current Page is selected, the Query String Override property should be set to Allow Query String Override. • **Which Panel Settings**—Click this drop-down menu to select the settings that are passed to the URL. Options include all settings, only start, and no settings. By default, all settings are passed.
Custom Links/Text	Select this radio button to display one or more custom links or text, defined as follows. • To define a link, type the link text in the first field and the URL in the second field. • To define only text, type the text value in the first field. • To add more links or text, click Add Link.
Query String Override	To allow the panel's settings to be overridden by parameters in the browser's query string, select Allow Query String Override from this drop-down menu. By default, the panel properties will define the display of the panel.
Hide Empty	Select this check box to hide the panel when no results are returned.
Privacy	The following setting defines privacy properties for the panel.

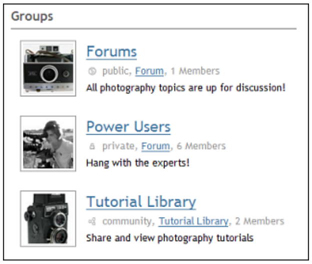
Table 587: Users Panel Properties (Continued)

Property	Description
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member’s view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing Groups panel properties

The Groups panel displays a list of groups in various formats, such as a list of group names and statistics or a grid of group avatars.



Once you add this panel to a page frame, you must edit its properties to define the list source and filters. You can also adjust the list's display, style, and privacy attributes.

To edit Groups panel properties

1 Enter the following field information.

Table 588: Groups Panel Properties

Property	Description
General	The following setting specifies the title displayed by the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
List Source	The following settings specify the source of the list data displayed by the panel.
Group	Type a group hash to list only information from a certain group. Separate multiple hashes with commas. If you want to include a large number of groups, it may be easier to use list filters. See List Filters in this table. **Note:** The group's hash is found in the URL of its pages. For example, if a group's summary page is located at http://<your_site>.com/groups/bbe47d0d5e/summary, the group hash is bbe47d0d5e.

Table 588: Groups Panel Properties (Continued)

Property	Description
Active User	Click this drop-down menu and select one of the following options to provide a personalized panel view for each member. • **None**—Do not return groups based on the active user. • **By the Active User**—Return only groups created by the logged-in member. • **In Groups the Active Member is a Member Of**—Return only groups the logged-in member is associated with.
List Filters	The following settings are used to filter the list displayed by the panel. **Note:** List filters can be used instead of, or in addition to, a list source.
Group Type Filter	Click this drop-down menu to select a group type to filter on. By default, members of all groups are listed. Refer to Groups.
Advanced	Click these drop-down menus to select filters on groups associated with hives or avatars. By default, all groups with or without these associations will be listed.
List Options	The following settings define how the list is presented, including the details displayed, sort order, the number of records shown, and toolbar appearance.
View	Click this drop-down menu to select the display type for the list. Options include the following: • **Title**—Displays each group's name only. • **Summary**—Displays each group's avatar, name, number of posts and comments, and the date last active. • **Summary without props**—Displays each group's avatar and name. • **Cloud**—Displays group names in various font sizes based on their level of activity. • **Grid**—Displays group avatars and names in grid form. • **Grid without name**—Displays group avatars in grid form.
Sort	Click this drop-down menu to select a sort order for the list. Options include sorting alphabetically, by number of members, date created, or privacy.
Count	Type the number of results you want the panel to return.

Table 588: Groups Panel Properties (Continued)

Property	Description
Toolbar	The following settings are used to specify the appearance of the toolbar beneath the panel header.
No Toolbar	Select this radio button to display no toolbar below the panel header.
Pagination	Select this radio button to display pagination links. Selecting this option also causes the following settings to appear. • **Link Text**—Click this drop-down menu and select Custom Text to enter custom text for the pagination link. By default, the link text displays the total number of members returned and links to the next page and last page of the result set. • **Link URL**—Click this drop-down menu to select an alternate link URL such as the current page or a custom URL. By default, the link URL is based on the list source. When Current Page is selected, the Query String Override property should be set to Allow query string override. • **Which Panel Settings**—Click this drop-down menu to select the settings that are passed to the URL. Options include all settings, only start, and no settings. By default, all settings are passed.
Custom Links/Text	Select this radio button to display one or more custom links or text, defined as follows. • To define a link, type the link text in the first field and the URL in the second field. • To define only text, type the text value in the first field. • To add more links or text, click Add Link.
Query String Override	To allow the panel's settings to be overridden by parameters in the browser's query string, select Allow Query String Override from this drop-down menu. By default, the panel properties will define the display of the panel.
Hide Empty	Select this check box to hide the panel when no results are returned.
Privacy	The following setting defines privacy properties for the panel.

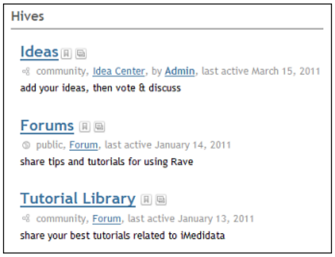
Table 588: Groups Panel Properties (Continued)

Property	Description
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing Hives panel properties

The Hives panel displays a list of hives in various formats, such as a list of hive names and statistics.



Once you add this panel to a page frame, you must edit its properties to define the list source and filters. You can also adjust the list's display, style, and privacy attributes.

To edit Hives panel properties

1 Enter the following field information.

Table 589: Hives Panel Properties

Property	Description
General	The following setting specifies the title displayed by the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
List Source	The following settings specify the source of the list data displayed by the panel.
Group	Type a group hash to list only information from a certain group. **Note:** The group's hash is found in the URL of its pages. For example, if a group's summary page is located at http://<your_site>.com/groups/bbe47d0d5e/summary, the group hash is bbe47d0d5e.
Hives	Type a hive hash to list only information from a certain hive. Separate multiple hashes with commas. If you want to include a large number of hives, it may be easier to use list filters. See List Filters in this table. **Note:** The hive's hash is found in the URL of its pages. For example, if a hive's summary page is located at http://<your_site>.com/hives/bbe47d0d5e/summary, the hive hash is bbe47d0d5e.

Table 589: Hives Panel Properties (Continued)

Property	Description
Active User	Click this drop-down menu and select one of the following options to provide a personalized panel view for each member. • **None**—Do not return hives based on the active user. • **By the Active User**—Return only hives created by the logged-in member. • **In the Active User's Favorites**—Return only hives that have been added as favorites by the logged-in member. • **In Groups the Active Member is a Member Of**—Return only hives from groups the logged-in member is associated with.
List Filters	The following settings are used to filter the list displayed by the panel. **Note:** List filters can be used instead of, or in addition to, a list source.
Group Type Filter	Click this drop-down menu to select a group type to filter on. By default, hives are not filtered by group. Refer to Groups.
Hive Type Filter	Click this drop-down menu to select a hive type to filter on. By default, hives of all types are listed. Refer to Hives.
Advanced	Click these drop-down menus to select filters on hives associated with posts or comments. By default, all hives with or without these associations will be listed.
List Options	The following settings define how the list is presented, including the details displayed, sort order, the number of records shown, and toolbar appearance.
View	Click this drop-down menu to select the display type for the list. Options include the following: • **Title**—Displays each hive's name only. • **Summary**—Displays each hive's avatar, name, number of posts and comments, and the date last active. • **Summary without props**—Displays each hive's avatar and name. • **Cloud**—Displays hive names in various font sizes based on their level of activity. • **Table**—Displays hive avatars and names in table form.

Table 589: Hives Panel Properties (Continued)

Property	Description
Sort	Click this drop-down menu to select a sort order for the list. Options include sorting alphabetically, by date of last activity, number of posts, date created, or privacy.
Count	Type the number of results you want the panel to return.
Toolbar	The following settings are used to specify the appearance of the toolbar beneath the panel header.
No Toolbar	Select this radio button to display no toolbar below the panel header.
Pagination	Select this radio button to display pagination links. Selecting this option also causes the following settings to appear. • **Link Text**—Click this drop-down menu and select Custom Text to enter custom text for the pagination link. By default, the link text displays the total number of members returned and links to the next page and last page of the result set. • **Link URL**—Click this drop-down menu to select an alternate link URL such as the current page or a custom URL. By default, the link URL is based on the list source. When Current Page is selected, the Query String Override property should be set to Allow Query String Override. • **Which Panel Settings**—Click this drop-down menu to select the settings that are passed to the URL. Options include all settings, only start, and no settings. By default, all settings are passed.
Custom Links/Text	Select this radio button to display one or more custom links or text, defined as follows. • To define a link, type the link text in the first field and the URL in the second field. • To define only text, type the text value in the first field. • To add more links or text, click Add Link.
Query String Override	To allow the panel's settings to be overridden by parameters in the browser's query string, select Allow Query String Override from this drop-down menu. By default, the panel properties will define the display of the panel.

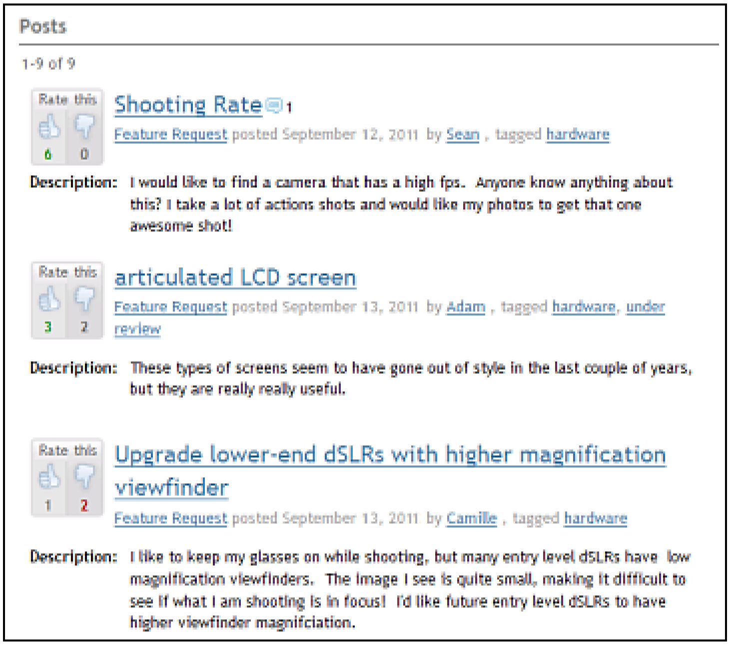
Table 589: Hives Panel Properties (Continued)

Property	Description
Hide Empty	Select this check box to hide the panel when no results are returned.
Privacy	The following setting defines privacy properties for the panel.
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing Posts panel properties

The Posts panel displays a list of posts in various formats, such as a list of post titles or summaries.



Once you add this panel to a page frame, you must edit its properties to define the list source and filters. You can also adjust the list's display, style, and privacy attributes.

To edit Posts panel properties

1 Enter the following field information.

Table 590: Posts Panel Properties

Property	Description
General	The following setting specifies the title displayed by the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
List Source	The following settings specify the source of the list data displayed by the panel.

Table 590: Posts Panel Properties (Continued)

Property	Description
Group	Type a group hash to list only posts from a certain group. **Note:** The group's hash is found in the URL of its pages. For example, if a group's summary page is located at http://<your_site>.com/groups/bbe47d0d5e/summary, the group hash is bbe47d0d5e.
Hives	Type a hive hash to list only posts from a certain hive. Separate multiple hashes with commas. If adding the panel to a hive page, type `[[self]]` to list posts from the current hive. If you want to include posts from a large number of hives, it may be easier to use list filters. See List Filters in this table. **Note:** The hive's hash is found in the URL of its pages. For example, if a hive's summary page is located at http://<your_site>.com/hives/bbe47d0d5e/summary, the hive hash is bbe47d0d5e.
Posts	Type a post hash to list only information from a certain post. Separate multiple hashes with commas. If you want to include a large number of posts, it may be easier to use list filters. See List Filters in this table. **Note:** The post's hash is found in the URL of its pages. For example, if a post is located at http://<your_site>.com/posts/bbe47d0d5e, the post hash is bbe47d0d5e.
User	Type a user hash to list only posts from a certain user. **Note:** The user's hash is found in the URL of its pages. For example, if a user's summary page is located at http://<your_site>.com/people/bbe47d0d5e, the user's hash is bbe47d0d5e.

Table 590: Posts Panel Properties (Continued)

Property	Description
Active User	Click this drop-down menu and select one of the following options to provide a personalized panel view for each member. • **None**—Do not return posts based on the active user. • **By the Active User**—Return only posts created by the logged-in member. • **In the Active User's Network**—Return only posts by members in the logged-in user's network. • **In the Active User's Favorites**—Return only posts that have been added as favorites by the logged-in member. • **In Groups the Active Member is a Member Of**—Return only posts from groups the logged-in member is associated with.
List Filters	The following settings are used to filter the list displayed by the panel. **Note:** List filters can be used instead of, or in addition to, a list source.
Group Type Filter	Click this drop-down menu to select a group type to filter on. By default, posts are not filtered by group type. Refer to Groups.
Hive Type Filter	Click this drop-down menu to select a hive type to filter on. By default, posts are not filtered by hive type. Refer to Hives.
Post Type Filter	Type the name of a **post type** to filter on. By default, posts of all types are listed. Refer to Posts.
Tag Filter	Type the name of a tag to filter on. Separate multiple tags with a tilde (~) to use OR logic or a bar (|) to use AND logic. By default, posts are not filtered by tag.
Created Date Filter	Click this drop-down menu and select a time range to filter by post creation date. By default, posts are not filtered by creation date.
Event Date Filter	Click this drop-down menu and select a time range to filter by the date of any events associated with a post. By default, posts are not filtered by event date.
Stickiness Filter	Click this drop-down menu and select a stickiness type to filter by the type of stickiness associated with a post. By default, posts are not filtered by stickiness type. Refer to Sticky posts.

Table 590: Posts Panel Properties (Continued)

Property	**Description**
Advanced	Click these drop-down menus to select advanced filters for the list. Options include the following: • Posts with or without comments • Posts with or without answers • Posts that have been or have not been read (updated) by the logged-in member • Posts with or without file attachments By default, posts are not filtered by comments, answers, attachments or read status.
List Options	The following settings define how the list is presented, including the details displayed, sort order, the number of records shown, and toolbar appearance.

Table 590: Posts Panel Properties (Continued)

Property	Description
View	Click this drop-down menu to select the display type for the list. Options include the following: • **Title**—Displays each post's name only. • **Summary**—Displays each post's avatar, name, number of posts and comments, and the date last active. • **Summary without props**—Displays each post's avatar and name. • **Cloud**—Displays post names in various font sizes based on their level of activity. • **Date**—Displays posts in chronological order, starting with the most recent. • **Rating**—Displays posts with a rating indicator. • **Table**—Displays post avatars and names in table form. • **Forum**—Displays each post in a forum-style table with columns for name, rating, total comments, total views, author, and date last active. • **Field #1–x**—Displays a field from the post based on field order. The value is displayed as non-linked text. • **Clip**—Displays a truncated view of each post, generally including avatar, title, comments, with as many additional fields as will fit in the panel's allowed space. • **Clip without pic**—Displays the Clip view without avatars. • **Clip fields only**—Displays the Clip view without comments. • **Clip and comments**—Displays the Clip view with comment excerpts. • **Full**—Displays each post's data in its entirety, including all visible fields.
Sort	Click this drop-down menu to select a sort order for the list. Options include sorting alphabetically, by date of last activity, date posted, rating, or number of comments.
Consider stickiness when ordering	Select this check box to consider the post stickiness attribute when ordering search results.
Count	Type the number of results you want the panel to return.
Toolbar	The following settings are used to specify the appearance of the toolbar beneath the panel header.

Table 590: Posts Panel Properties (Continued)

Property	Description
No Toolbar	Select this radio button to display no toolbar below the panel header.
Pagination	Select this radio button to display pagination links. Selecting this option also causes the following settings to appear. • **Link Text**—Click this drop-down menu and select Custom Text to enter custom text for the pagination link. By default, the link text displays the total number of posts returned and links to the next page and last page of the result set. • **Link URL**—Click this drop-down menu to select an alternate link URL such as the current page or a custom URL. By default, the link URL is based on the list source. When Current Page is selected, the Query String Override property should be set to Allow Query String Override. • **Which Panel Settings**—Click this drop-down menu to select the settings that are passed to the URL. Options include all settings, only start, and no settings. By default, all settings are passed.
Custom Links/Text	Select this radio button to display one or more custom links or text, defined as follows. • To define a link, type the link text in the first field and the URL in the second field. • To define only text, type the text value in the first field. • To add more links or text, click Add Link.
Query String Override	To allow the panel's settings to be overridden by parameters in the browser's query string, select Allow Query String Override from this drop-down menu. By default, the panel properties will define the display of the panel.
Hide Empty	Select this check box to hide the panel when no results are returned.
Privacy	The following setting defines privacy properties for the panel.

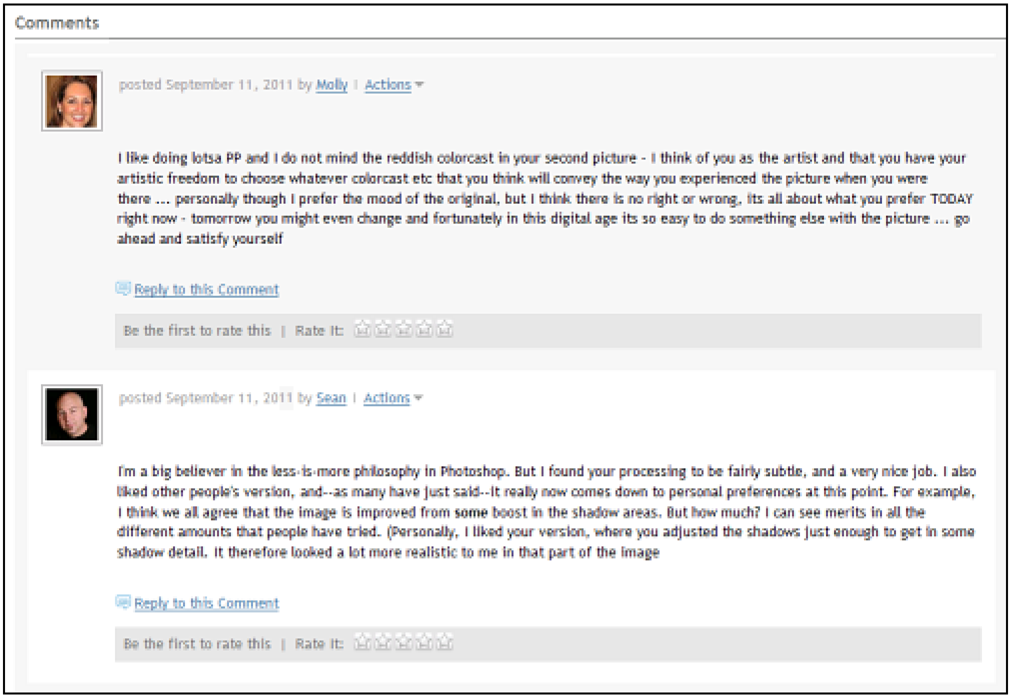
Table 590: Posts Panel Properties (Continued)

Property	Description
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing Comments panel properties

The Comments panel displays a list of comments in various formats, such as a list of comment summaries.



Once you add this panel to a page frame, you must edit its properties to define the list source and filters. You can also adjust the list's display, style, and privacy attributes.

To edit Comments panel properties

1 Enter the following field information.

Table 591: Comments Panel Properties

Property	Description
General	The following setting specifies the title displayed by the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
List Source	The following settings specify the source of the list data displayed by the panel.

Table 591: Comments Panel Properties (Continued)

Property	Description
Hives	Type a hive hash to list only comments from a certain hive. Separate multiple hashes with commas. If adding the panel to a hive page, type `[[self]]` to list comments from the current hive. If you want to include comments from a large number of hives, it may be easier to use list filters. See List Filters in this table. **Note:** The hive's hash is found in the URL of its pages. For example, if a hive's summary page is located at http://<your_site>.com/hives/bbe47d0d5e/summary, the hive hash is bbe47d0d5e.
Group	Type a group hash to list only comments from a certain group. **Note:** The group's hash is found in the URL of its pages. For example, if a group's summary page is located at http://<your_site>.com/groups/bbe47d0d5e/summary, the group hash is bbe47d0d5e.
User	Type a user hash to list only comments from a certain user. **Note:** The user's hash is found in the URL of its pages. For example, if a user's summary page is located at http://<your_site>.com/people/bbe47d0d5e, the user's hash is bbe47d0d5e.
Active User	Click this drop-down menu and select one of the following options to provide a personalized panel view for each member. • **None**—Do not return comments based on the active user. • **By the Active User**—Return only comments created by the logged-in member. • **In the Active User's Network**—Return only comments by members in the logged-in user's network. • **In the Active User's Favorites**—Return only comments from the logged-in member's favorite hives, groups, and posts. • **In Groups the Active Member is a Member Of**—Return only comments from groups the logged-in member is associated with.
List Filters	The following settings are used to filter the list displayed by the panel. **Note:** List filters can be used instead of, or in addition to, a list source.

Table 591: Comments Panel Properties (Continued)

Property	Description
Hive Type Filter	Click this drop-down menu to select a hive type to filter on. By default, comments are not filtered by hive type. Refer to Hives.
Group Type Filter	Click this drop-down menu to select a group type to filter on. By default, comments are not filtered by group type. Refer to Groups.
Created Date Filter	Click this drop-down menu and select a time range to filter by comment creation date. By default, comments are not filtered by creation date.
Advanced	Click these drop-down menus to filter on whether a comment is an answer or whether it contains a file attachment. By default, comments are not filtered on either of these criteria.
List Options	The following settings define how the list is presented, including the details displayed, sort order, the number of records shown, and toolbar appearance.
View	Click this drop-down menu to select the display type for the list. Options include the following: • **Title**—Displays each comment's name only. • **Summary**—Displays each comment's avatar, name, number of posts and comments, and the date last active. • **Summary without props**—Displays each comment's avatar and name. • **Full**—Displays each comment's data in its entirety, including all visible fields.
Sort	Click this drop-down menu to select a sort order for the list. Options include sorting by date posted, rating, or privacy.
Count	Type the number of results you want the panel to return.
Toolbar	The following settings are used to specify the appearance of the toolbar beneath the panel header.
No Toolbar	Select this radio button to display no toolbar below the panel header.

Table 591: Comments Panel Properties (Continued)

Property	Description
Pagination	Select this radio button to display pagination links. Selecting this option also causes the following settings to appear. • **Link Text**—Click this drop-down menu and select Custom Text to enter custom text for the pagination link. By default, the link text displays the total number of comments returned and links to the next page and last page of the result set. • **Link URL**—Click this drop-down menu to select an alternate link URL such as the current page or a custom URL. By default, the link URL is based on the list source. When Current Page is selected, the Query String Override property should be set to Allow Query String Override. • **Which Panel Settings**—Click this drop-down menu to select the settings that are passed to the URL. Options include all settings, only start, and no settings. By default, all settings are passed.
Custom Links/Text	Select this radio button to display one or more custom links or text, defined as follows. • To define a link, type the link text in the first field and the URL in the second field. • To define only text, type the text value in the first field. • To add more links or text, click Add Link.
Query String Override	To allow the panel's settings to be overridden by parameters in the browser's query string, select Allow Query String Override from this drop-down menu. By default, the panel properties will define the display of the panel.
Hide Empty	Select this check box to hide the panel when no results are returned.
Privacy	The following setting defines privacy properties for the panel.

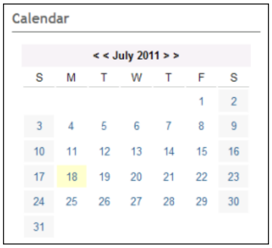
Table 591: Comments Panel Properties (Continued)

Property	Description
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing Calendar panel properties

The Calendar panel displays a calendar for filtering post panel content by date.



Once you add this panel to a page frame, you must edit its properties to define the list source and filters. You can also adjust the list's display, style, and privacy attributes.

To edit Calendar Filter panel properties

1 Enter the following field information.

Table 592: Calendar Filter Panel Properties

Property	Description
General	The following settings specify basic attributes for the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
Target URL	Type an alternate URL for the panel to link to. Leave the field blank to link to the current page.
Date Type	Click this drop-down menu to select the type of date to filter on. Options include date created or event date. **Note:** The event date option applies only to posts that include an Event Date field.
Month	Type the calendar month that you want to display, using the format YYYY-MM. For example, to display January 2011, type the value `2011-01`. Leave the field blank to display the current month.
List Source	The following settings specify the source of the list data displayed by the panel.

Table 592: Calendar Filter Panel Properties (Continued)

Property	Description
Group	Type a group hash to list only event posts from a certain group. **Note:** The group's hash is found in the URL of its pages. For example, if a group's summary page is located at http://<your_site>.com/groups/bbe47d0d5e/summary, the group hash is bbe47d0d5e.
Hives	Type a hive hash to list only event posts from a certain hive. Separate multiple hashes with commas. If you want to include comments from a large number of hives, it may be easier to use list filters. See List Filters in this table. **Note:** The hive's hash is found in the URL of its pages. For example, if a hive's summary page is located at http://<your_site>.com/hives/bbe47d0d5e/summary, the hive hash is bbe47d0d5e.
User	Type a user hash to list only event posts from a certain user. **Note:** The user's hash is found in the URL of its pages. For example, if a user's summary page is located at http://<your_site>.com/people/bbe47d0d5e, the user's hash is bbe47d0d5e.
Active User	Click this drop-down menu and select one of the following options to provide a personalized panel view for each member. • **None**—Do not return event posts based on the active user. • **By the Active User**—Return only event posts created by the logged-in member. • **In the Active User's Network**—Return only event posts by members in the logged-in user's network. • **In the Active User's Favorites**—Return only event posts that have been added as favorites by the logged-in member.
List Filters	The following settings are used to filter the list displayed by the panel. **Note:** List filters can be used instead of, or in addition to, a list source.
Group Type Filter	Click this drop-down menu to select a group type to filter on. By default, event posts are not filtered by group type. Refer to Groups.

Table 592: Calendar Filter Panel Properties (Continued)

Property	Description
Hive Type Filter	Click this drop-down menu to select a hive type to filter on. By default, event posts are not filtered by hive type. Refer to Hives.
Post Type Filter	Type the name of a post type to filter on. By default, posts of all types are listed. Refer to Posts.
Tag Filter	Type the name of a tag to filter on. Separate multiple tags with a tilde (~) to use OR logic or a bar (|) to use AND logic. By default, posts are not filtered by tag.
List Options	The following setting defines how results are affected by parameters in the browser's query string.
Query String Override	To allow the panel's settings to be overridden by parameters in the browser's query string, select Allow Query String Override from this drop-down menu. By default, the panel properties will define the display of the panel.
Privacy	The following setting defines privacy properties for the panel.
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.

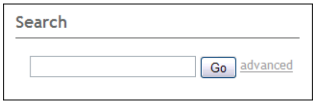
Table 592: Calendar Filter Panel Properties (Continued)

Property	Description
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing Search panel properties

The Search panel displays a basic keyword search box and advanced search link.



Once you add this panel to a page frame, you must edit its properties to define its style and privacy attributes.

To edit Search panel properties

1 Enter the following field information.

Table 593: Search Panel Properties

Property	Description
General	The following settings specify basic attributes for the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
Search Scope	Type the URL of any community search page to override the contextual behavior of the search function. Leave the field blank to search the context the panel is used in.

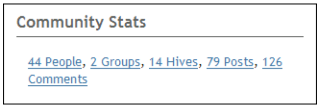
Table 593: Search Panel Properties (Continued)

Property	Description
Button Label	Type the text of the search button label in this field.
Misc Settings	Select the Show Advanced Link check box to display an advanced search link next to the search form.
Privacy	The following setting defines privacy properties for the panel.
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing Community Stats panel properties

The Community Stats panel displays community statistics.



Once you add this panel to a page frame, you must edit its properties to define the search scope, and you can also adjust style and privacy attributes.

To edit Community Stats panel properties

1 Enter the following field information.

Table 594: Community Stats Panel Properties

Property	Description
General	The following settings specify basic attributes for the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
View	Click this drop-down menu to select a view style for the panel. The following options are available. • **Row**—Displays statistics in single-line format. • **Column**—Displays statistics in column format. This option is suitable for site panels.
Privacy	The following setting defines privacy properties for the panel.

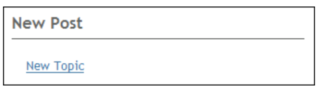
Table 594: Community Stats Panel Properties (Continued)

Property	Description
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member’s view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing New Post panel properties

The New Post panel displays options for creating new posts of available post types.



Once you add this panel to a page frame, you can adjust style and privacy attributes.

To edit New Post panel properties

1 Enter the following field information.

Table 595: New Post Panel Properties

Property	Description
General	The following setting specifies the title displayed by the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
Privacy	The following setting defines privacy properties for the panel.
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`

Table 595: New Post Panel Properties (Continued)

Property	Description
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing Hive Stats panel properties

The Hive Stats panel displays statistics about the hive, including privacy level, owner, dates of creation and last activity, and the number of posts and comments created in the hive.

Once you add this panel to a page frame, you can adjust style and privacy attributes.

To edit Hive stats panel properties

1 Enter the following field information.

Table 596: Hive Stats Panel Properties

Property	Description
General	The following settings specify basic attributes for the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
View	Click this drop-down menu to select a view style for the panel. The following options are available. • **Row**—Displays statistics in single-line format. • **Column**—Displays statistics in column format. This option is suitable for site panels.
Privacy	The following setting defines privacy properties for the panel.

Table 596: Hive Stats Panel Properties (Continued)

Property	Description
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing WYSIWYG/HTML panel properties

The WYSIWYG/HTML panel displays custom HTML content that you define using a WYSIWYIG editor. Once you add this panel to a page frame, you must edit its properties to define the content, and you can also adjust style and privacy attributes. Using the editor toolbar, you can create HTML using many of the same options available in basic word processing applications.

Available toolbar functions include:

- Add or remove hyperlinks
- Add an image
- Add an emotive icon
- Add a table
- Select a text style and color
- Apply font style attributes (including bold, italic, underline, and strikethrough)
- Format text in bulleted or numbered lists
- Adjust indentation
- Apply quoted text formatting
- Left-justify, center, right-justify, or force-justify text and images
- Spell check text in different languages
- Edit the HTML source
- Maximize the text editor to the full size of the browser window
- Paste content from Microsoft Word

To edit WYSIWYG/HTML panel properties

1 Enter the following field information.

Table 597: WYSIWYG/HTML Panel Properties

Property	Description
General	The following settings specify basic attributes for the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
*Text	Type the content you want to appear in the panel. **Note:** You can format the content using the editor controls and add elements such as hyperlinks, images, and tables.
Privacy	The following setting defines privacy properties for the panel.

Table 597: WYSIWYG/HTML Panel Properties (Continued)

Property	Description
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing Image panel properties

The Image panel displays a web-hosted image that can optionally serve as a hyperlink. Once you add this panel to a page frame, you must edit its properties to define the image location, and you can also adjust link, style, and privacy attributes.

To edit Image panel properties

1 Enter the following field information.

Table 598: Image Panel Properties

Property	Description
General	The following settings specify basic attributes for the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
Image Properties	Type the URL and dimensions of the image you want the panel to display.
Link Properties	Type a URL in this field to make the image a hyperlink. To open the URL in a new window, click the Target drop-down menu and select New Window. By default, the URL will open in the same window.
Privacy	The following setting defines privacy properties for the panel.
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.

Table 598: Image Panel Properties (Continued)

Property	Description
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing Flash panel properties

The Image panel displays a web-hosted Flash *(.swf)* file. Once you add this panel to a page frame, you must edit its properties to define the image location, and you can also adjust style and privacy attributes.

To edit Flash panel properties

1 Enter the following field information.

Table 599: Flash Panel Properties

Property	Description
General	The following settings specify basic attributes for the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
Flash (SWF)	Enter the following field information to define the attributes of the Flash file you want to display in the panel. • **Flash URL**—Type the URL of the Flash *(.swf)* file. • **Width/Height/Version**—Type the dimensions and version of Flash supported by the file. • **Window Mode**—Click this drop-down menu to select a window mode. Options include transparent, window, and opaque.

Table 599: Flash Panel Properties (Continued)

Property	Description
Privacy	The following setting defines privacy properties for the panel.
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing RSS Reader panel properties

The RSS Reader panel displays one or more RSS feeds. Once you add this panel to a page frame, you must edit its properties to define the feed view and URLs, and you can also adjust style and privacy attributes.

To edit RSS Reader panel properties

1 Enter the following field information.

Table 600: RSS Reader Panel Properties

Property	Description
General	The following settings specify basic attributes for the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
RSS View	The following settings are used to specify the attributes of the RSS view displayed by the panel.
View Layout	Click this drop-down menu and select a layout for feed results. • **Full View**—Select this layout to display the full text of feed results. • **Title View**—Select this layout to display only the titles of feed results.
Show Media	Select this check box to display any media included in the feed results. **Note:** This option is available only when the Full View layout is selected.
Number of Posts Per Feed	Type the number of feed results you want the panel to display. To remove a feed, clear its Feed URL field. By default, five results are shown.
RSS Feeds	Type the URLs of up to three RSS feeds to use as content sources for the panel. To specify additional feeds, click Add Feed.
Privacy	The following setting defines privacy properties for the panel.

Table 600: RSS Reader Panel Properties (Continued)

Property	Description
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing HTML panel properties

The HTML panel displays custom HTML content. Once you add this panel to a page frame, you must edit its properties to define the custom HTML code, and you can also adjust style and privacy attributes.

To edit HTML panel properties

1 Enter the following field information.

Table 601: HTML Panel Properties

Property	Description
General	The following settings specify basic attributes for the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
Text/HTML	Type or paste the HTML or text content you want the panel to display. For information about the HTML toolbar functions, refer to Editing WYSIWYG/HTML panel properties.
Privacy	The following setting defines privacy properties for the panel.
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`

Table 601: HTML Panel Properties (Continued)

Property	Description
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Editing iFrame panel properties

The iFrame panel displays an iFrame containing a web page. Once you add this panel to a page frame, you must edit its properties to define the URL of the page you want to display, and you can also adjust style and privacy attributes.

To edit iFrame panel properties

1 Enter the following field information.

Table 602: iFrame Panel Properties

Property	Description
General	The following settings specify basic attributes for the panel.
Title	Type a header for the panel in this field. Leave the field blank for a panel without a header.
URL	Type the URL and dimensions of the web page you want to display in the iFrame.
Height	Type the height of the iFrame in pixels. **Note:** The width of the frame is fixed and based on the frame you are adding the panel to. Refer to Adding panels to pages.
Scrollbars	Click this drop-down menu to select a scroll bar display option. • **Auto**—Display scroll bars only when the web page exceeds the size of the iFrame. • **On**—Always display scroll bars. • **Off**—Do not display scroll bars.
Privacy	The following setting defines privacy properties for the panel.

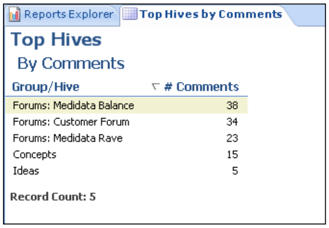
Table 602: iFrame Panel Properties (Continued)

Property	Description
Privacy	Select a radio button to set a privacy level for the panel. The following options are available. • **Anyone**—The panel will be visible to all site visitors. • **All registered users**—The panel will be visible to all registered logged-in members. • **User types**—The panel will be visible to members of selected user types. Click Show/Hide to select a user type from a multi-select field. • **Groups**—The panel will be visible to members of selected groups. Click Show/Hide to select a group from a multi-select field. • **No one**—The panel will be hidden from everyone. For options that have multi-select fields, press **Ctrl** when selecting multiple items. **Note:** Because content visibility can also be defined by sources, each member's view of panel content may vary accordingly.
Style	The following settings define the appearance of the panel.
Background Color	Type a color value in this field to set a background color for the panel using one of the following formats. • `rgb(255,255,255)` • `#FFFFFF` • `#FFF`
Custom Styles	To specify custom style attributes for the panel, header, or content, type them in the appropriate field. **Note:** Refer to the setting description for a list of supported attributes.

2 Click the Save Panel button to save your changes.

Community analytics

Community analytics are available in the Reports explorer under Public Reports > Community (refer to Reports explorer). An extensive collection of standard reports provides information about activity, users, and content quality in your community. Many of these reports display information about content that has been created, edited, or viewed in the community during certain intervals over a specified date range. For example, the Top Hives by Comments report displays the number of comments created for each hive over a specified period, ordered by volume.



In some cases, the data is **rolled up** by an attribute—such as Hive, Hive Type, Group, Group Type, or User Type—providing for greater granularity and insight into community trends. In many cases, you can drill down to view a list of records created for the selected interval and click a record to view it in a web browser.

In addition to content, you can report on many aspects of community membership, including registrations, profiles, statuses, group memberships, reputation, top performance, and account inactivity. Other reports provide information about community responsiveness, record details, content ratings, hive and content activity, and best answers given.

Tip For a complete list of Community report names, locations, and descriptions, generate the View Report Descriptions report in the Report Management component and filter on Community reports. Refer to Producing a catalog of reports.

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Channels

Channels are the forms of communication by which your staff members listen and respond to your customers. In Oracle Service Cloud, channels refer to all of the available sources of social messaging, incoming incidents, and outgoing responses that are monitored and processed by your site. Oracle Service Cloud supports a broad range of channels that fall into two main categories:

- **Standard channels**—Traditional channels through which incidents are created and responded to. These include CSS Email (email submitted to a Service mailbox), MA Email (email submitted to an Outreach mailbox), Phone, Fax, Post, CSS Web (Ask a Question), MA Web (created by a campaign or advanced survey), Chat, and Email (responses sent to customers by email). Standard channels are most commonly used to reference incident thread sources that are configured in Oracle Service Cloud and Oracle RightNow Outreach Cloud Service, such as mailboxes, chat sessions, and campaign flow actions. Refer to Responding to incidents.
- **Social channels**—Channels used by **Oracle RightNow Social Monitor Cloud Service** (also known as the social monitor) to search the social web for comments, opinions, and issues related to your organization and its products. These channels include a variety of social media such as **communities**, Facebook, Twitter, YouTube, and **RSS** feeds. Social channels are most commonly used when performing cloud searches and to indicate the sources of incident thread entries. Social channels can be configured in a variety of ways based on the unique blend of services that each social media source provides. Refer to Social channels overview.

Channels are also helpful for routing new incidents to the agent desktop using business rules. Incidents created from standard and social channels can be routed using the Incident.Channel field as a rule condition. Refer to Choosing conditions.

You can edit the name of each channel to suit your business needs. However, the default names are appropriate for most implementations.

❖ Social Monitoring

To edit a channel name

1 Click the Configuration button on the navigation pane.

2 Double-click Channels under Service in the configuration list. The Channels tree displays on the content pane.

3 Click the down arrow containing the channel that you want to edit and select the channel. The channel's settings display on the Channels editor.

4 Type a new name for the channel in the Name field.

5 Click the Save and Close button to save your changes.

Social channels overview

Social channels are used with the social monitor to search the social web for posts and comments related to your organization and its products. These channels include a variety of social media such as **communities**, Facebook, Twitter, YouTube, and RSS feeds. While most social channels feature default channels that can be used to monitor public feeds, Oracle Service Cloud supports additional functions based on the services each social media source provides.

- **Custom channels** are used to define and extend the range of sources that your organization can monitor. For example, if your organization maintains a Facebook page, you can create a custom channel to focus your cloud searches on the posts and comments on that page. Custom channels can be created for communities, Facebook, and RSS feeds using the Channels editor.
- **Channel accounts** enable your staff members to monitor and respond to incidents from your organization's social media accounts. A channel account is a shared credential that allows designated **staff accounts** to perform service functions through a single social media account that requires login and password authentication. In this way, you can provide agents with the access they need to assist customers while maintaining the confidentiality of your social media account logins. Because channel accounts can be associated with specific staff members and groups, they can be used to govern access to different custom channels from the same social media site. This is helpful if, for example, your product teams maintain separate Twitter accounts for different purposes. Channel accounts can be created for communities, Facebook, and Twitter using the Channel Accounts editor. Refer to Responding through social channels.

- **Channel types** can be used with Facebook, Twitter, and YouTube to associate social monitor incidents with contacts based on their social media user names. Refer to Storing social media user names.

Because most social media services are external to Oracle Service Cloud, it is important to consider potential security risks and take the appropriate precautions associated with third-party login information, customer data, and application code. Refer to Social Experience security.

- ❖ Adding Facebook channels
- ❖ Adding community channels
- ❖ Adding Twitter channel accounts
- ❖ Adding RSS channels
- ❖ YouTube channel

Adding Facebook channels

Facebook is a popular social media network on which users can post personal profile information, submit status updates, exchange messages, and participate in groups and events. Oracle Service Cloud provides a default Facebook channel that you can access through the **social monitor** to perform searches of Facebook's public feed. Refer to Searching the social cloud.

In addition, you can add custom channels to focus your searches to specific Facebook pages. Facebook pages—also known as fan pages—are public web pages on Facebook that you can use to share your organization and its products and services. By adding a custom Facebook channel, you can perform cloud searches that are confined to the posts on your organization's Facebook page.

If you want your staff to be able to interact with customers on Facebook, you can also define a **channel account** to permit specific staff members to monitor your Facebook pages and send responses. When agents reply to Facebook posts, their replies appear to come from the fan page and not from individual personas. Refer to Responding to Facebook posts.

Note Because each Facebook page is associated with a specific Facebook account, each custom Facebook channel can have only one channel account per fan page. For this reason, Facebook account credentials are configured on the Channels editor and the Channel Accounts editor is used to specify which staff accounts have access.

You can also configure Oracle Service Cloud to store Facebook user names in contact records. Refer to Storing social media user names.

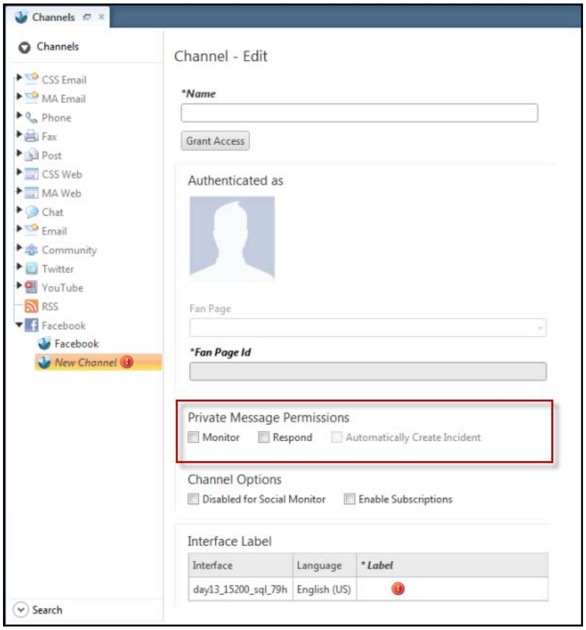
Tip Oracle RightNow Self Service for Facebook Cloud Service is a powerful complement to Facebook channels. With this special Facebook application, you can embed a set of Service and community features directly on your organization's Facebook page. In this way, your organization can deliver a consistent experience to customers and fans on Facebook while maintaining a unified view of customer interactions across channels. Refer to Self Service for Facebook.

To add a custom Facebook channel

1 Click the Configuration button on the navigation pane.

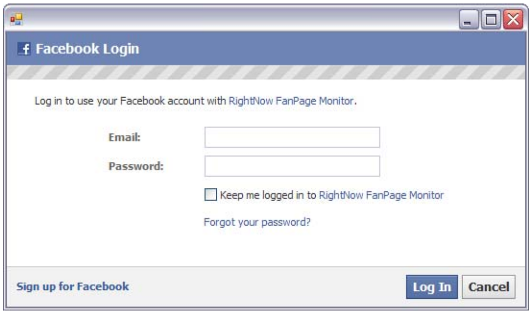
2 Double-click Channels under Service in the configuration list. The Channels tree displays on the content pane.

3 Click Facebook and then click the New button on the ribbon to display the editor.



4 Type a name for the custom channel in the Name field.

5 Click the Grant Access button. The Facebook Login window displays.



Note If you are already logged in to Facebook in Internet Explorer, access may be granted automatically without prompting for authentication so you can proceed to step 8.

6 Type the email address and password for the Facebook account associated with the page you want to monitor.

Important If you are using a Facebook account other than the one used to administer the page, the person who administers the Facebook page must add your account as an admin for the page through Facebook.

7 Click the Log In button to sync the account with the channel you are creating. Once this process is complete, the profile name and image of the authenticated account is displayed on the Channels editor and a message informs you that you have been granted access.

8 Click the OK button.

9 Enter the following field information.

Table 603: Facebook Channel Editor Description

Field	Description
Fan Page	Click this drop-down menu to select the page that you want to monitor. Available options include all pages administered by the Facebook account you are using. To enter a different fan page ID, select Advanced: Custom Fan Page ID. If you do not want to indicate a specific fan page at this time, select None. **Note:** When you select an existing page, its fan page ID is automatically populated in the Fan Page ID field.
***Fan Page ID**	Type the Facebook page ID. **Note:** This field is editable only when you select Advanced: Custom Fan Page ID from the Fan Page menu. To manually obtain a Facebook page ID, navigate to your organization's fan page in Facebook. The Facebook page ID is the 15-digit number visible near the end of the URL in the browser address bar.
Private Messaging Permissions	These options define define how private messages received by this account will be processed by Oracle Service Cloud.
Monitor	Select this check box to allow staff members to monitor the account's private messages. Private messages will be reflected on the Social Monitor dashboard and will appear in search results.
Respond	Select this check box to allow staff members to send incident responses to a customer's private messages using the channel account. Responses to a customer's private message will default to a private message response, although the agent can specifically mark it as a public message. Private message conversations must be initiated by a customer.
Automatically Create Incident	Select this check box to automatically create new incidents from all private messages received by the channel account. **Note:** This check box is available only when the Monitor option is selected.
Channel Options	These options are used to manage monitoring of the channel
Disabled for Social Monitor	Select this check box to disable the channel, which will prevent staff members from using it.

Table 603: Facebook Channel Editor Description (Continued)

Field	Description
Enable Subscriptions	Select this check box to make the channel available for monitoring on a **subscription** basis. Refer to Searching the social cloud.
Interface Label	This section contains the names of all available **interfaces**, the languages they are implemented in, and the language-specific label of the channel. Refer to Overview of multiple interfaces. **Note:** By default, the Label field is populated with the name you typed in the Name field. When using multiple-language interfaces, you must type the label in the Label field in the language of the interface.

Note Once the channel is saved and has been used to perform cloud searches, the Search Manager button on the Channels editor ribbon will become active. This function provides access to a utility for managing cloud searches by channel. Refer to Managing cloud searches by channel.

10 Click the Save and Close button on the ribbon.

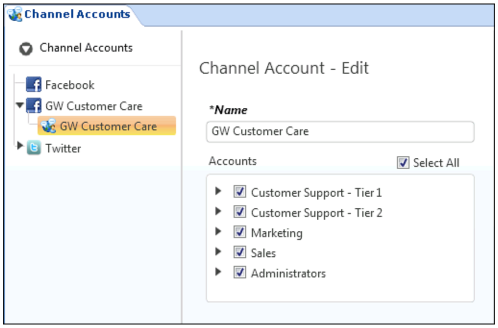
To provide staff access to a Facebook channel account

1 Click the Configuration button on the navigation pane.

2 Double-click Channel Accounts under Service. The Channel Accounts tree displays on the content pane.

Note The social monitor must be enabled in order to use channel accounts with your application. To enable the social monitor, contact your Oracle account manager. Refer to Social Monitoring.

3 Click the arrow next to a Facebook custom channel to expand it and then click its contained channel account to display it on the editor.



4 Enter the following field information.

Table 604: Facebook Channel Accounts Editor Description

Field	Description
*Name	Type a name for the Facebook channel account in this field.
Accounts	Select a group check box to associate all staff members in the group with the channel account or expand the group to select staff members individually. To select all groups, select the Select All check box. **Note:** You can also assign a staff member to a channel account from the Staff Accounts editor. Refer to Granting agent access to channel accounts.

5 Click the Save and Close button on the ribbon.

- ❖ Monitoring social channels
- ❖ Responding through social channels
- ❖ Self Service for Facebook

Adding community channels

Communities are comprehensive, highly customizable social solutions that enable customers to meet, communicate, and collaborate through a variety of forum types (hives). When a community is enabled on your site, Oracle Service Cloud provides a default Community channel that you can access through the social monitor to perform searches of your community feed. Refer to Searching the social cloud.

In addition, you can add custom channels to focus your searches to the posts and comments on specific hive types. If you want your staff to be able to interact with (not just monitor) members of your community, you can also define a **channel account** to permit specific staff members to monitor the community and send responses.

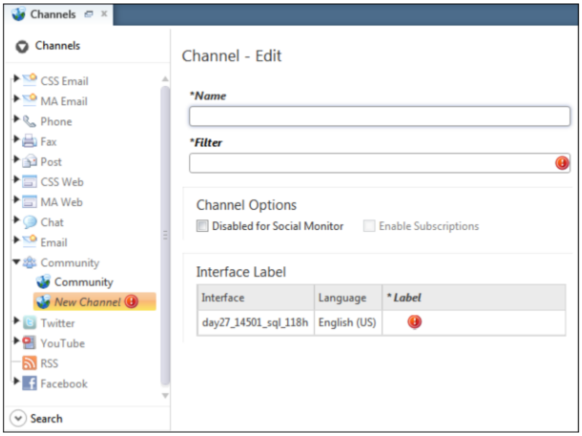
Community channels can be associated with multiple channel accounts. For instance, your product teams may maintain separate hives for different purposes. Channel accounts allow you to extend authentication to these different sources for different staff members or groups.

To add a custom Community channel

1 Click the Configuration button on the navigation pane.

2 Double-click Channels under Service in the configuration list. The Channels tree displays on the content pane.

3 Click Community and then click the New button on the ribbon to display the editor.



4 Enter the following field information.

Table 605: Community Channel Editor Description

Field	Description
*Name	Type a name for the custom channel in this field. **Note:** When you move to another field, the Label field in the Interface Label section is populated with the name you typed in the Name field.
*Filter	Type the **hive type** (such as `forum` or `blog`) to filter on when monitoring the community. Contact your administrator for a list of available hive types for your application.
Disabled for Social Monitor	Select this check box to disable the channel, which will prevent staff members from using it in the social monitor.
Interface Label	This section contains the names of all available **interfaces**, the languages they are implemented in, and the language-specific label of the channel. Refer to Overview of multiple interfaces. **Note:** When using multiple-language interfaces, you must type the label in the Label field in the language of the interface.

Note Because community channels do not support social monitor subscriptions, the Enable Subscriptions check box is inactive for this channel.

5 Click the Save and Close button on the ribbon.

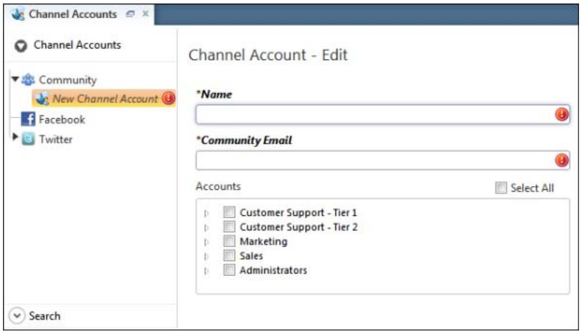
To add a Community channel account

Note To display Community in the Channel Accounts tree, a community must be enabled. Contact your Oracle account manager.

1 Click the Configuration button on the navigation pane.

2 Double-click Channel Accounts under Service. The Channel Accounts tree displays on the content pane.

3 Click Community and then click the New button on the ribbon to display the editor.



4 Enter the following field information.

Table 606: Community Channel Accounts Editor Description

Field	Description
*Name	Type a name for the Community channel account in this field.
*Community Email	Type the email address of the community account you are providing access to in this field.
Accounts	Select a group check box to associate all staff members in the group with the channel account or expand the group to select staff members individually. To select all groups, select the Select All check box. **Note:** You can also assign a staff member to a channel account from the Staff Accounts editor. Refer to Granting agent access to channel accounts.

5 Click the Save and Close button on the ribbon.

- ❖ Monitoring social channels
- ❖ Responding through social channels

Adding Twitter channel accounts

Twitter is a popular social media site on which users can post short messages (tweets) and follow similar posts from other users. Oracle Service Cloud provides a default Twitter channel that you can access through the social monitor to perform searches of Twitter's public feed. Refer to Searching the social cloud.

In order to monitor the public feed, you must first create a Twitter **channel account** and then select it from the Twitter channel editor. Channel accounts enable staff members to monitor the account and send responses. They also provide the option to monitor and automatically create incidents from private messages sent to your organization's Twitter account.

Important When you add a channel account, your agents can respond to Twitter messages publicly or privately from the agent desktop. However, because handling customer issues publicly can be problematic, you should always encourage your customers to communicate privately when resolving support issues through the Twitter channel. Refer to Responding to Twitter posts.

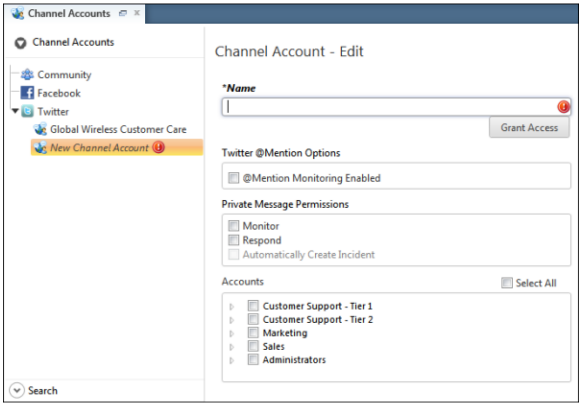
Access to Twitter channel accounts can be restricted to specific groups and accounts. For instance, your product teams may maintain separate Twitter accounts for different purposes. Channel accounts allow you to extend authentication to these different channels for different staff members or groups.

You can also configure Oracle Service Cloud to store Twitter user names in contact records. Refer to Storing social media user names.

Note The social monitor must be enabled in order to use channel accounts with your application. To enable the social monitor, contact your Oracle account manager. Refer to Social Monitoring.

To add a channel account for Twitter

1. Click the Configuration button on the navigation pane.
2. Double-click Channel Accounts under Service. The Channel Accounts tree displays on the content pane.
3. Click Twitter and then click the New button on the ribbon to display the editor.



4 Enter the following field information.

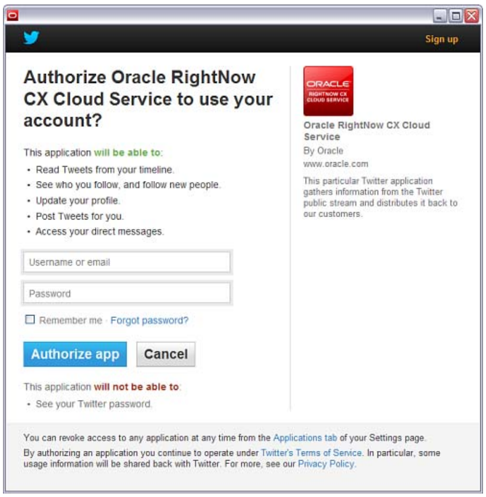
Table 607: Twitter Channel Accounts Editor Description

Field	Description
***Name**	Type a name for the Twitter channel account in this field.
Twitter Mention Options	Select the @Mention Monitoring Enabled check box to allow staff members to perform cloud searches for mentions of this Twitter channel account in the Twitter public stream. Refer to Searching the social cloud.
Private Message Permissions	The following permissions define how private messages received by this account will be processed by Oracle Service Cloud. **Note:** Unlike public messages, Twitter allows private messages to be sent only to accounts that are following the sending account. For this reason, you can receive private messages only from Twitter accounts that your account is following. For more information about this restriction, refer to Twitter.
Monitor	Select this check box to create a new cloud search option, allowing staff members to monitor the account’s private messages. Private message search results will be displayed in the social monitor when you click the new Private Messages button on the ribbon. Refer to Monitoring private messages from Twitter.

Table 607: Twitter Channel Accounts Editor Description (Continued)

Field	Description
Respond	Select this check box to allow staff members to send incident responses using this channel account. Refer to Responding to Twitter posts.
Automatically Create Incident	Select this check box to automatically create new incidents from all private messages received by the channel account. **Note:** This option is available only when the Monitor option is selected.
Accounts	Select a group check box to associate all staff members in the group with the channel account or expand the group to select staff members individually. To select all groups, select the Select All check box. **Note:** You can also assign a staff member to a channel account from the Staff Accounts editor. Refer to Granting agent access to channel accounts.

5 Click the Grant Access button on the Channel Accounts editor. The Twitter Login window displays.



6 Type the user name and password of the Twitter account.

7 Click the Authorize App button. A message informs you that you have been granted access.

8 Click the OK button.

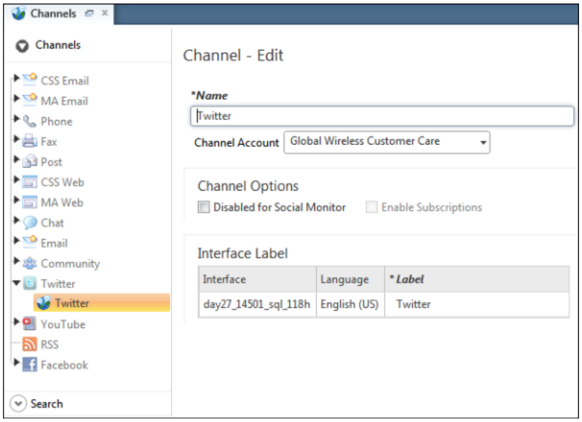
9 Click the Save and Close button on the ribbon.

To enable the public Twitter channel for social monitoring

1 Click the Configuration button on the navigation pane.

2 Double-click Channels under Service in the configuration list. The Channels tree displays on the content pane.

3 Click the Twitter down arrow and then select the Twitter channel to display the editor.



4 Enter the following field information.

Table 608: Facebook Channel Editor Description

Field	Description
*Name	Type a name for the channel in this field. **Note:** When you move to another field, the Label field in the Interface Label section is populated with the name you typed in the Name field.

Table 608: Facebook Channel Editor Description (Continued)

Field	Description
Channel Account	Click this drop-down menu to select the channel account you want to use to authenticate cloud searches. **Note:** You must select a channel account in order for the public Twitter channel to be available for monitoring.
Disabled for Social Monitor	Select this check box to disable the channel, which will prevent staff members from using it.
Interface Label	This section contains the names of all available **interfaces**, the languages they are implemented in, and the language-specific label of the channel. Refer to Overview of multiple interfaces. **Note:** By default, the Label field is populated with the name you typed in the Name field. When using multiple-language interfaces, you must type the label in the Label field in the language of the interface.

Note Because Twitter channels do not support social monitor subscriptions, the Enable Subscriptions check box is inactive for this channel.

Once the channel is saved and has been used to perform cloud searches, the Search Manager button on the Channels editor ribbon will become active. This function provides access to a utility for managing cloud searches by channel. Refer to Managing cloud searches by channel.

5 Click the Save and Close button on the ribbon.

❖ Monitoring social channels

❖ Responding through social channels

Adding RSS channels

In addition to monitoring leading social media services, you can define custom RSS channels to monitor content posted in publicly accessible RSS feeds. Oracle Service Cloud supports feeds that conform to the RSS 2.0, ATOM, and RSS (RDF) 1.0/.90 standards.

With custom RSS channels, staff members can monitor RSS feeds (such as news headlines) for content. For example, if your organization releases a new product or service, you can search for your product or service using an RSS channel to see what the media are reporting. Because you are generally searching news headlines with RSS channels, it is not possible to respond to RSS feeds.

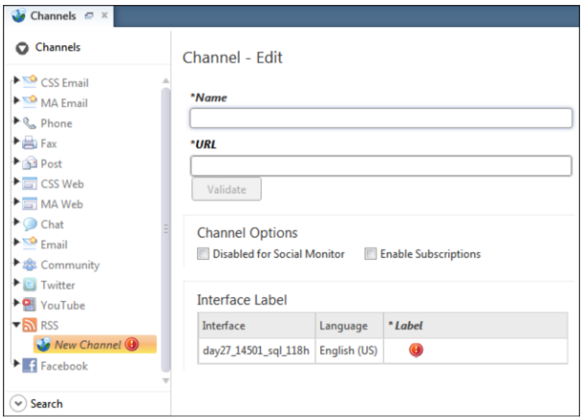
Note RSS channels do not support channel accounts because agents cannot respond to customers through RSS.

To add a custom RSS channel

1 Click the Configuration button on the navigation pane.

2 Double-click Channels under Service in the configuration list. The Channels tree displays on the content pane.

3 Click RSS and then click the New button on the ribbon to display the editor.



4 Enter the following field information.

Table 609: RSS Channel Editor Description

Field	Description
*Name	Type a name for the custom channel in this field. **Note:** When you move to another field, the Label field in the Interface Label section is populated with the name you typed in the Name field.
*URL	Type the URL of the RSS feed. The URL must begin with http:// or https://. **Note:** Oracle Service Cloud supports RSS 2.0, ATOM, and RSS (RDF) 1.0/.90 feeds.
Validate	Click this button to verify that the feed's URL and format are valid. A message will appear next to the button indicating that the feed is valid or invalid.
Disabled for Social Monitor	Select this check box to disable the channel, which will prevent staff members from using it.
Enable Subscriptions	Select this check box to make the channel available for monitoring on a subscription basis. Refer to Searching the social cloud.
Interface Label	This section contains the names of all available **interfaces**, the languages they are implemented in, and the language-specific label of the channel. Refer to Overview of multiple interfaces. **Note:** When using multiple-language interfaces, you must type the label in the Label field in the language of the interface.

5 Click the Save and Close button on the ribbon.

❖ Monitoring social channels

YouTube channel

YouTube is a popular social media site on which users can view and share videos. Oracle Service Cloud provides a default YouTube channel that you can access through the social monitor to perform searches of YouTube's public feed. Refer to Searching the social cloud.

You can also configure Oracle Service Cloud to store YouTube user names in contact records. Refer to Storing social media user names.

Note The YouTube channel does not support custom channels or channel accounts because agents cannot respond to customers through YouTube. In this case, the channel is provided strictly for monitoring purposes so that you can see what YouTube users are saying about your products or services.

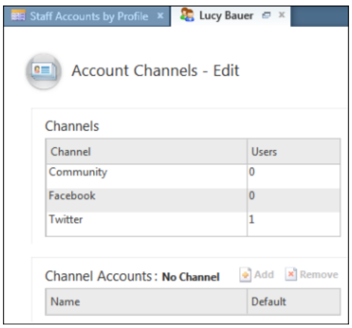
❖ Monitoring social channels

Granting agent access to channel accounts

In order to respond to incidents created through a social channel, agents must first be granted access to a **channel account** configured for that channel. You can grant channel account access to groups and agents through the Channel Accounts editor (refer to Social channels overview), or you can provide access to specific agents by editing their **staff accounts** using the following procedure.

To grant channel account access to a staff account

1. Click the Configuration button on the navigation pane.
2. Double-click Staff Accounts by Profile under Staff Management. The report opens on the content pane.
3. Double-click the account that you want to edit. The Staff Accounts editor opens.
4. Click the Channels button on the ribbon. The Channel Accounts page opens.

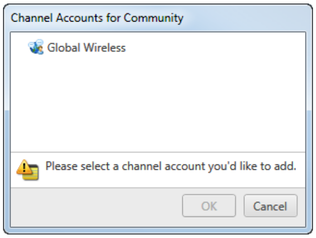


The Channels section lists the default and custom social channels configured in Oracle Service Cloud and the number of associated channel accounts for which the staff account has been granted access. The Channel Accounts section is not populated until a channel is selected from the list.

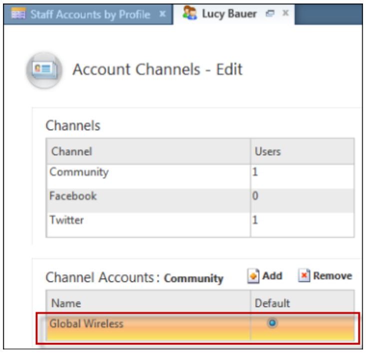
Note The Users column total includes any channel account for which the agent has been granted access, whether access was granted with this editor or through the Configuration > Service > Channel Accounts editor.

5 Click the channel that you want to provide access for. The Channel Accounts section lists any channel accounts that are currently associated with the staff account for the selected channel.

6 Click the Add button. The Channel Accounts window displays all of the channel accounts associated with the channel you selected that are not restricted from or already associated to the staff account.



7 Double-click the channel account you want to add. The Channel Accounts window closes and the channel is added to the Channel Accounts section on the Channel Accounts page.



Note If no other channel accounts are listed under the Name column, the channel account is automatically selected as the default channel account. The default channel account is the channel account that staff members will use when responding to incidents. However, if they have been granted access to more than one channel account, they will have the option to select another channel account at that time. Refer to Responding through social channels.

8 Click the Save and Close button on the ribbon.

- Adding and editing staff accounts
- Social channels overview
- Responding through social channels

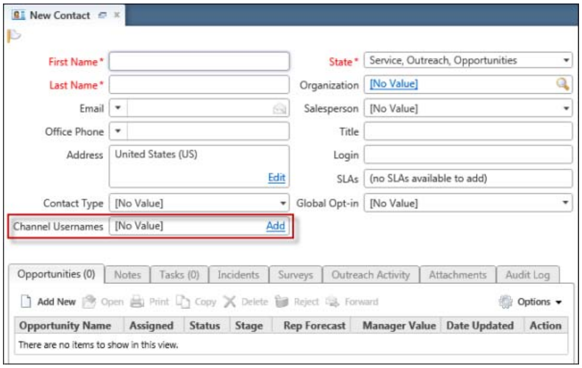
Storing social media user names

When monitoring certain **channel types**, Oracle Service Cloud can store your customers' social media user names in their contact records. Tracking this identifying information allows you to associate incoming social monitor incidents with contacts based on their social media accounts.

When an incident is created through Facebook, Twitter, or YouTube, Oracle Service Cloud searches all contacts for an instance of the associated social media user name. If a matching user name is located, the incident is automatically associated with the contact. If no matching user name is found, a new contact containing the user name is created for the incident. Once user names have been defined in a contact record, they can be used to help agents identify where posts originate.

In addition to this automated process, contacts and staff members can be permitted to add and edit user names for each channel type, based on the visibility settings on the Channel Types editor and the configuration of the customer portal and agent workspace.

- Contacts can add, edit, and view their Facebook, Twitter, and YouTube user names through the ChannelAllInput and ChannelAllDisplay **widgets** on the customer portal. Refer to Input and output widgets.
- Staff members can add and edit Facebook, Twitter, and YouTube user names for contacts from a custom contact **workspace**. Before staff members can add and edit channel types, the Channel Usernames field must be added. Refer to Creating custom workspaces.



Important Channel types are not interface specific and cannot be deleted.

To edit a channel type

1 Click the Configuration button on the navigation pane.

2 Double-click Customizable Menus under Application Appearance. The Customizable Menus tree opens on the content pane.

3 Click Channel Types under System Menus to display the editor.

4 To rename a channel, click it in the Label column. The Interface Visibility section displays.

Note The Interface Visibility section contains the names of all available interfaces, the languages they are implemented in, and the language-specific label of the channel. When using multiple-language interfaces, type the label in the Label field in the language of the interface.

a Type the name of the channel type. When you move to another field, the Label field in the Interface Visibility section is populated with the name you typed in the Name field.

5 To remove channel type visibility for staff members and contacts, clear the Contact Visible check box next to the applicable channel type. This removes staff member visibility for the channel type in the Channel Usernames field on custom contact **workspaces**. In addition, visibility is removed from the applicable **widget** on the customer portal.

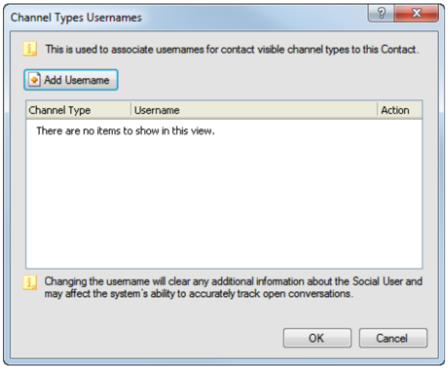
6 To change the display sequence of channel types on the custom contact workspace and the customer portal, click the up or down arrow next to the Contact Visible column.

7 Click the Save and Close button on the ribbon.

To add a social media user name for a contact

Note The following procedure must be performed from a custom contact workspace in which the Channel Usernames field has been added. Refer to Editing workspaces.

1 While editing a contact record, click Add in the Channel Usernames field. The Channel Types Usernames window opens.



2 Click the Add Username button. A drop-down menu displays under the Channel Type column.

3 Click the Channel Type drop-down menu and select Facebook, Twitter, or YouTube.

4 Type the contact's user name in the Username column.

5 Click the OK button.

6 Click the Save and Close button on the ribbon.

❖ Editing workspaces

❖ Input and output widgets

Managing cloud searches by channel

The Channels editor provides a Cloud Search Manager utility for viewing and managing cloud searches that have been added for each channel. With this utility, you can view and manage the list of agents who have selected each search as a favorite as well as remove searches that were entered incorrectly or are no longer needed.

To manage cloud searches for a channel

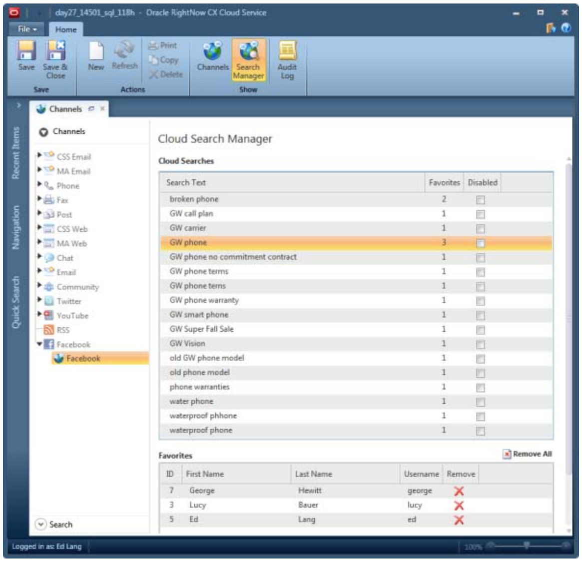
1 Click the Configuration button on the navigation pane.

2 Double-click Channels under Service in the configuration list. The Channels tree displays on the content pane.

3 Click a channel to display it on the editor.

4 Click the Search Manager button on the ribbon.

Note The Search Manager button is active only when a cloud search has been added to the channel using the social monitor.



The Cloud Searches section displays a list of cloud searches that have been added for the channel, including the search text and the number of instances that each search has been set as a favorite.

5 Select a cloud search from the list to populate the Favorites panel with a list of all agents who have set that search as a favorite.

6 To remove the search from an agent's list of favorites, click the Remove button next to the agent name.

7 To remove the search from all favorite lists, click the Remove All button.

8 To hide a cloud search from all standard reports and remove it from all agent favorite lists, select the Disabled check box next to the search.

Caution Removing cloud searches from all agent favorites cannot be undone. If you disable a search in error, close the Channels editor without saving your changes.

9 Click the Save and Close button to save your changes to the channel's cloud searches.

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Social Monitoring

With a growing portion of the world's population now depending on social media like Twitter and Facebook for communicating with friends and colleagues, it has become crucial for organizations to monitor the dialogue about their products and services that is taking place on the social web. The power of customer perspectives multiplied through social channels can have a dramatic impact, be it harmful or helpful, on business revenue. To extend great customer experiences across these emerging channels and protect your organization's valued reputation, it is essential to employ a social media strategy that includes monitoring, and sometimes participating in, conversations in the cloud.

Using Oracle RightNow Social Monitor Cloud Service (also known as the social monitor), you can interact with your customers by searching social media services, create **incidents** in **Oracle Service Cloud**, and include social media in your **Oracle RightNow Outreach Cloud Service** and **Oracle RightNow Feedback Cloud Service** messages. You can improve customer experiences by identifying trends in customer issues and opinions, and proactively communicate with customers through social channels using incidents. Refer to Responding through social channels.

Important The social media services described here are not provided by or affiliated with Oracle. To obtain support or information about terms and conditions for any of the services mentioned, contact the service provider.

- Channels

Configuring social monitoring

Before you can monitor the social cloud to search for information related to your organization, you need to configure your application to provide access to the tools used to manage **cloud searches** and respond to customer **posts**.

Note These configuration options will not be available until social monitoring is enabled for your site. To enable social monitoring, contact your Oracle account manager.

To provide access to the social monitor

1 Add the Social Monitor navigation button and component to navigation sets. Refer to Adding social monitor to navigation sets.

2 Add or update **profiles** to include social monitor permission. Refer to Adding social monitor permission to profiles.

3 Add or update **staff accounts** to use profiles that include social monitor permission. Refer to Managing staff accounts.

❖ Adding social monitor to navigation sets
❖ Adding social monitor permission to profiles
❖ Managing staff accounts

Adding social monitor to navigation sets

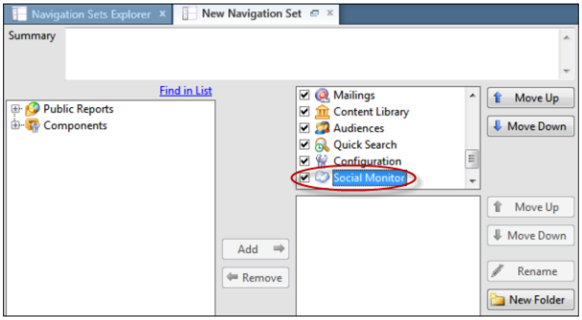
In order for staff members to monitor the social cloud, you must first add the Social Monitor component to one or more navigation sets. Refer to Modifying navigation sets.

To add the Social Monitor component to a navigation set

1 Click the Configuration button on the navigation pane.

2 Double-click Navigation Sets under Application Appearance. The Navigation Sets explorer displays on the content pane.

3 Double-click the navigation set that you want to add the Social Monitor component to. The Navigation Sets editor displays on the content pane.



4 On the right side of the content pane, select the Social Monitor check box.

5 On the left side of the content pane, click the plus sign next to Components > Service.

6 Drag the Social Monitor component from the left column and drop it in the lower portion of the right column to add it to the Social Monitor navigation button.

Note The Social Monitor component is not available unless social monitoring is enabled for your site. To enable social monitoring, contact your Oracle account manager.

7 Click the Save and Close button on the ribbon.

Now, you need to assign this navigation set to one or more profiles and also assign social monitor permission in the profiles.

❖ Modifying navigation sets

Adding social monitor permission to profiles

Social monitoring is not fully available until social monitor permission has been added to one or more profiles. Refer to Customizing profiles.

To add social monitor permission to a profile

1 Click the Configuration button on the navigation pane.

2 Double-click Profiles under Staff Management. The Profiles report displays on the content pane.

3 Double-click the profile you want to add permission to. The Profiles editor displays on the content pane.

4 If the Navigation Set field in the Interfaces section does not display the navigation set that you added the Social Monitor component to, click the Search button and select it. Refer to Adding social monitor to navigation sets.

5 Click the Permissions button on the ribbon.

6 Click the Service tab.

7 Select the Social Monitor–Search check box under Social Monitor.

8 Click the Save and Close button on the ribbon.

Now, when staff members with this profile run any of the social monitoring reports, they can schedule **cloud searches**, ignore results, respond to **posts**, and manage favorites.

Note Before staff members can search the social cloud, you must update their staff account to use a profile containing social monitor permission. Refer to Adding and editing staff accounts.

- Customizing profiles
- Adding and editing staff accounts

Social monitoring overview

To monitor the social cloud, you will add, execute, and analyze **cloud searches** for any of the available social channels. As each new cloud search is added, it is listed on the content pane along with information about who added it, what social channel is searched, what text is searched for, the time it was last executed, and how many results have been returned. A search can also be designated as a favorite, which prevents it from being deleted and enables it to be scheduled on a recurring basis. Refer to Managing favorites.

To view the results of a cloud search, simply click a total listed in the New Results or Total Results column. The content pane will display a report based on the social channel you chose when searching. Twitter, Facebook, **Oracle RightNow Social Experience communities**, and RSS searches can return a maximum of 100 new results per search instance, while YouTube searches are limited to 50 new results. Results returned over multiple searches are combined in the Total Results statistic.

Note Social monitoring reports can also be accessed directly at Public Reports > Common > Social Monitor. Refer to Reports explorer.

For a complete list of social monitoring report names, locations, and descriptions, generate the View Report Descriptions report in the Report Management component and filter on Common > Social Monitor reports. Refer to Producing a catalog of reports.

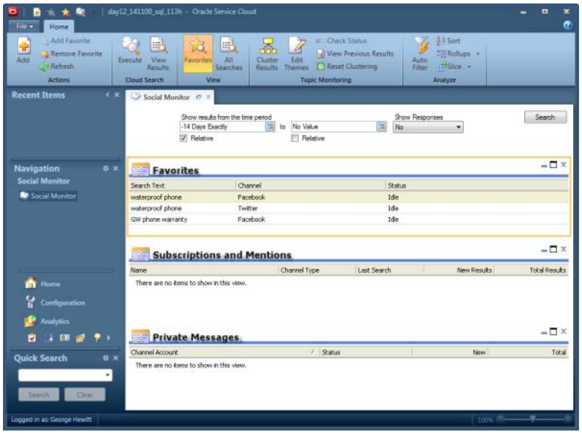
The social channels available for cloud searches are configured through the Channels editor. Refer to Social channels overview.

In addition, the Channels editor provides a utility for viewing and managing cloud searches that have been added for each channel. With the Cloud Search Manager, you can view and manage the list of agents who have selected each search as a favorite as well as remove searches that were entered incorrectly or are no longer needed. Refer to Managing cloud searches by channel.

To access the social monitor

1. Click the Social Monitor button on the navigation pane.
2. Double-click Social Monitor in the navigation list. The social monitor opens on the content pane.

Note Search results do not display on the content pane until you perform a cloud search. Refer to Searching the social cloud.



The **docked filters** at the top of the content pane are used to search for information that is displayed in the Social Monitor dashboard. The filters include start and end dates—in relative or absolute format—and whether responses to social incidents should be shown in the results.

The Social Monitor dashboard results are divided into three sections.

- **Favorites**—Contains a list of previous cloud searches. Each time you perform a new cloud search, it is automatically marked as a favorite and added to this section. Refer to Managing favorites.
- **Subscriptions and Mentions**—Contains a list of cloud searches that have been added on a **subscription** basis and mentions of Twitter channel accounts in customer tweets. Refer to Searching the social cloud.
- **Private Messages**—Contains messages received through Facebook and Twitter private messages. Refer to Responding to Facebook posts and Responding to Twitter posts.

The following table describes the buttons on the social monitor ribbon.

Table 610: Social Monitor Ribbon Description

Group/Button	Description
Actions	
Add	Click this button to add a cloud search. Refer to Searching the social cloud.

Table 610: Social Monitor Ribbon Description (Continued)

Group/Button	Description
Add Favorite	Click this button to add the selected cloud search as a favorite. Refer to Managing favorites.
Remove Favorite	Click this button to remove the selected cloud search as a favorite. Refer to Managing favorites.
Refresh	Click this button to refresh the social monitor and update any rows that have been acted upon in the associated report.
Cloud Search	
Execute	Click this button to execute all selected cloud searches. **Note:** The data in the New Results and Total Results columns may change as a result of this action.
Get More Results	Click this button to retrieve additional results based on your initial search. This button is disabled unless additional search results are available.
View Results	Click this button to view search results from the selected cloud search. **Note:** If more than one cloud search is selected, this button is disabled as results can be viewed for only one search.
View	
Favorites	Click this button to list only the cloud searches that you have selected as favorites. Refer to Managing favorites.
All Searches	Click this button to list all cloud searches. Refer to Searching the social cloud.
Topic Monitoring	
Cluster Results	Click this button to cluster the selected cloud search results. **Note:** If **themes** are specified, they are used during the clustering process. Refer to Topic monitoring for cloud searches.
Edit Themes	Click this button to edit the themes used in clustering. Refer to Editing and adding themes for clustering.

Table 610: Social Monitor Ribbon Description (Continued)

Group/Button	Description
Check Status	Click this button to check the status of clustering. Refer to Topic monitoring for cloud searches.
View Previous Results	Click this button to open the Topic Monitoring for Cloud Results report, where you can view previous clustering results.
Reset Clustering	Click this button to recluster the cloud search results without using themes. Refer to Editing and adding themes for clustering.
Analyze	
Auto Filter	Click this button to enable auto-filtering in the report. Auto-filtering provides column filtering after the report has been generated. Refer to Using Auto Filter.
Sort	Click this button to open the Sort window and select which output columns to sort by and the sort method. Refer to Changing sort options.
Rollups	Click this button to select **rollup** options and open the Rollups window. Refer to Displaying rollup levels.
Slice	Click this button to select slice options and open the Slice window. Slicing groups data so you can view only the subset of records you are interested in. Refer to Slicing report data.

Note Cluster Results, Edit Themes, Check Status, and Reset Clustering require the Marketing daemon to be running before buttons are active on the ribbon.

- Working with the ribbon
- Displaying shortcut keys on the ribbon

Monitoring social channels

Monitoring social channels consists of searching the social cloud to track your organization's reputation for the products or services it offers. You can manage your favorite **cloud searches** and **subscriptions**, schedule cloud searches, ignore or respond to **posts**, and create incidents from posts. You can also append posts to existing incidents as note thread entries.

Note The CLOUD_INCIDENT_REOPEN_DEADLINE configuration setting controls the timeframe in which a solved incident will reopen to allow a post to be appended to the incident thread.

Important By default, cloud search results that are not responded to, ignored, or added to an incident within seven days are automatically deleted from the system. To change this frequency, modify the PURGE_CLOUD_RESULTS configuration setting.

Searching the social cloud

The first step to monitoring the social cloud is to add **cloud searches** so you can search for **posts** mentioning your organization, products, services, or anything else related to your organization that you are interested in. You can also add **subscriptions** to monitor all content from an entire Facebook page or RSS feed, or select a Twitter channel account to monitor all tweets and public replies sent from your customers through Twitter.

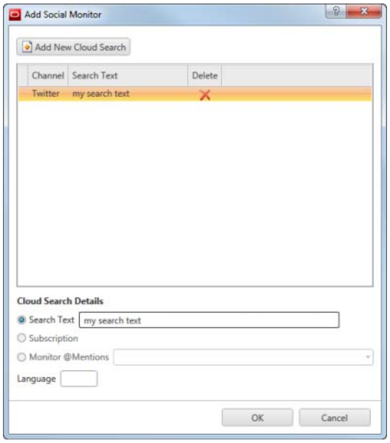
To add a cloud search

1 Click the Social Monitor button on the navigation pane.

2 Double-click Social Monitor in the navigation list. The social monitor displays on the content pane. Refer to Social monitoring overview.

3 Click the Add button. The Add Social Monitor window opens.

4 Click the Add New Cloud Search button and select the social channel you want to search. The channel is added to the list of cloud searches.



The following information displays for each cloud search in the list.

Table 611: Add Social Monitor Window—Cloud Search List

Field	Description
Channel	The name of the social channel that the cloud search will be performed on.
Search Text	The text that the social monitor will search the social channel for.
Delete	Click this button to remove the cloud search from the table.

5 Type a search term, such as your organization name or product name, in the Search Text field.

Note With the exception of Adding RSS channels, all search terms are controlled by the social media service you are searching. Since RSS feeds do not have a search function, the feed content is retrieved and stored in the *cloud_results* table. The following three search rules apply when searching RSS data.

- **Exact match searching**—When performing an exact match search, the first and last characters of the search string must be double quotes.
- **Multiple keyword searching**—When performing a search with multiple search words, an OR operator is assumed. Do not use double quotes when performing a multiple keyword search.
- **Regular expression searching**—Any search that is not an exact match search or multiple keyword search is treated as a regular expression search. This search feature is for advanced users only. Refer to Regular Expressions.

6 To add a **subscription** for a custom Facebook or RSS channel, select the Subscription radio button.

Note Because subscriptions pull all available channel content every fifteen minutes, you cannot enter search text or a recurrence schedule for a subscription.

7 To search for all tweets and public replies sent from your customers to your Twitter channel account, select the Monitor @Mentions radio button and select the channel account.

8 To filter and return search results for a specific language, type the two-letter ISO-639-1 language code. English (en) is the default language code.

Note Language filters apply only to cloud searches for Twitter and YouTube.

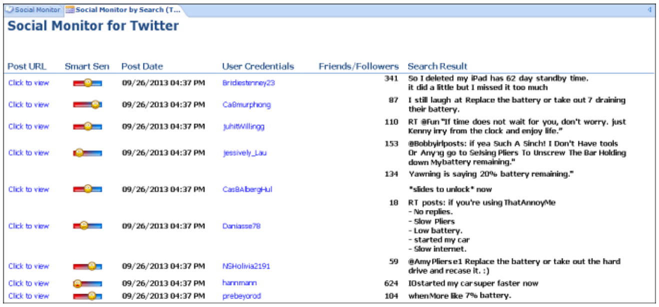
9 To filter and return Facebook search results for a specific language locale, type a five-letter locale code in the Language field. For example, the locale code for United States English is en_US. A list of case-sensitive locale codes can be found here.

Tip You can click the Add New Cloud Search button again and repeat these steps to add multiple searches before closing the Add Social Monitor window.

10 Click the OK button. The Add Social Monitor window closes and the cloud search is added to the social monitor. Text searches are added to the Favorites section, while subscriptions are added to the Subscriptions section.

Note Your new search can now be accessed by other staff members when they click the All Searches button on the ribbon.

11 Click a link under the New Results or Total Results column to open the search report. Results for searches you select are displayed on a separate content pane tab.



Tip To view a more user-friendly social media display name than the user's social media handle, right-click the Friends/Followers column heading, select Insert Hidden Column, and then select Display Name. The hidden column will display as the last column in the report.

Note Depending on your search terms, searching the social cloud may take a few minutes. During this time, buttons on the ribbon are disabled.

The appearance of cloud search results may vary based the channel you have selected. For example, while most search results are sorted by post date, clicking a Total Results link for a Facebook search will display results grouped by conversation, making it easier to follow comment threads from Facebook posts.

Cloud results for Twitter and Facebook include additional social profile information about post authors, including the number of friends or followers of each post author and a link to the author's social media user page. You can add other helpful information, such as whether the user has a contact record or open incident, by right-clicking the column headings and selecting Insert Hidden Column. For Twitter users, you can also display columns for author location and total number of posts.

Social profile attributes can also be viewed on a contact workspace by adding the Contact Social Profile report to the workspace. Refer to Adding reports and relationship items to custom workspaces and scripts.

12 To view a post in a web browser, click the Click To View link in the Post URL column.

13 To view a user's social media profile, click the user's ID in the User Credentials column.

14 To respond to a post, refer to Responding through social channels.

15 To mark a post as read, select the post and click the Mark Read button on the ribbon.

16 To remove a post from the search results, refer to Ignoring posts in search results.

17 To create an incident from a post, select the post and click the Create Incident button.

Tip Once an incident has been created for a post, it can be assigned to a staff member from the cloud search report by selecting the post and clicking the Assign button on the ribbon. To send an incident response, refer to Responding through social channels.

18 To exclude retweets from Twitter report search results, click the Search button on the ribbon, click the Include Retweets drop-down menu and select No, and click the Search button.

19 To filter the list of posts by the number of followers per social media user name, click the Search button on the ribbon, type a number in the Number of Friends/Followers field, and click the Search button.

Ignoring posts in search results

With the large number of new **posts** appearing in the social cloud each day, it is inevitable that some of the search results returned by the social monitor will not be relevant to your purposes. You can ignore any posts that do not apply and focus on the ones that do. This function is enabled by default and can be disabled by profile, giving you the option to reserve its use for your most reliable or experienced agents.

This section shows you how to ignore search results and also control and monitor which profiles should have permission to ignore results.

Note The Social Monitor Daily Trend, Social Monitor Hourly Trend, and Social Monitor Monthly Trend reports (Common > Social Monitor > Trend) help you track ignored results by specific intervals. In addition, you can monitor how often specific agents are using the Ignore Results function with the Social Monitor Ignored Posts report (Common > Social Monitor) and Social Monitor Ignored Post Trend report (Common > Social Monitor > Trend).

To ignore search results

1. From an open cloud search report, select the posting you want to remove from the search results list. To remove multiple postings, press **Ctrl** while selecting each posting.
2. Click the Ignore Result button on the ribbon.

To remove Ignore Results permission by profile

1. Click the Configuration button on the navigation pane.
2. Double-click Profiles under Staff Management. The Profiles report displays on the content pane.
3. Double-click the profile you want to remove the permission from. The Profiles editor displays on the content pane.
4. Click the Permissions button on the ribbon.
5. Click the Service tab.

6 Clear the Ignore Results check box under Social Monitor.

7 Click the Save and Close button on the ribbon.

Now, when staff members with this profile run any of the social monitoring reports, they will no longer see the Ignore Results button on the ribbon.

❖ Click here

Managing favorites

When you add a **cloud search**, it is automatically marked as a favorite, indicated by a gold star when you view all searches. Just as browser bookmarks provide easy access to your favorite web pages, cloud search favorites provide easy access to cloud searches and **subscriptions** you want to keep track of. You can also view cloud searches and subscriptions added by other staff members, but they are not marked as favorites unless you manually add them to your favorites. When you add someone else's search as a favorite, a copy of the search is created and added to the end of your favorites list.

Although searches cannot be deleted from the social monitor, you can remove them from your favorites and hide them from view. To display only searches that are marked as favorites, simply click the Favorites button.

Note You can use the Cloud Search Manager on the Channels editor to view and manage the list of agents who have selected each search as a favorite as well as remove searches and subscriptions that were entered incorrectly or are no longer needed. Refer to Managing cloud searches by channel.

To add a cloud search to favorites

1 On the social monitor, click the All Searches button on the ribbon.

2 Select a cloud search or subscription that is not marked as a favorite. To add multiple cloud searches as favorites, press **Ctrl** while selecting each search.

3 Click the Add Favorite button.

To remove a cloud search from favorites

1 Select a cloud search or subscription that is marked as a favorite. To remove multiple cloud searches from favorites, press the **Ctrl** key while selecting each search.

2 Click the Remove Favorite button.

Monitoring private messages from Twitter

In addition to posting public messages, Twitter users can send private messages directly to other Twitter accounts. With social monitoring, you can view and respond to private messages received by your organization's Twitter account.

Once you have enabled private message permissions in a Twitter **channel account** (refer to Adding Twitter channel accounts), the **Dbstatus** utility automatically checks for private messages every fifteen minutes and displays them on the social monitor. Private message search results function like other cloud search results—you can create incidents from them, append them to existing incidents, mark them read, or ignore them.

To monitor private messages from Twitter

1 On the social monitor, click the Favorites button on the ribbon. The Private Messages section of the dashboard lists each channel account monitored, its status, and the number of new and total private messages retrieved.

Note In order for private messages to appear in the monitor, you must first enable the Monitor private message permission in your Twitter channel account. Refer to Granting agent access to channel accounts.

2 Click a link under the New or Total column next to a channel account to view its private messages. Results for the channel account you select are displayed on a separate content pane tab.

3 To respond to a private message, select the message from the search results list and click the Respond button on the ribbon. Refer to Responding to Twitter posts.

Tip You can configure each Twitter channel account to automatically create incidents from all private messages it receives. Refer to Adding Twitter channel accounts.

Monitoring private messages from Facebook

In addition to posting public messages on your custom Facebook channels (fan pages), Facebook users can send private messages that you view and respond to with social monitoring. A Facebook user can provide sensitive information related to an incident (such as account information) by transitioning to using a Facebook private message without leaving the Facebook channel. Incidents will be updated with both public and private customer replies, allowing agents to monitor the entire conversation in the incident response thread.

To set up Facebook channels to monitor private messages, see Adding Facebook channels.

To monitor private messages from Facebook

1. On the social monitor, click the Favorites button on the ribbon. The Private Messages section of the dashboard lists each channel account monitored, its status, and the number of new and total private messages retrieved.

2. Click a link under the New or Total column next to a channel account to view its private messages. Results for the channel account you select are displayed on a separate content pane tab.

3. To respond to a private message, select the message from the search results list and click the Respond button on the ribbon. Refer to Responding to Facebook posts.

Tip You can configure each Facebook channel to automatically create incidents from all private messages it receives. Refer to Adding Facebook channels.

Topic monitoring for cloud searches

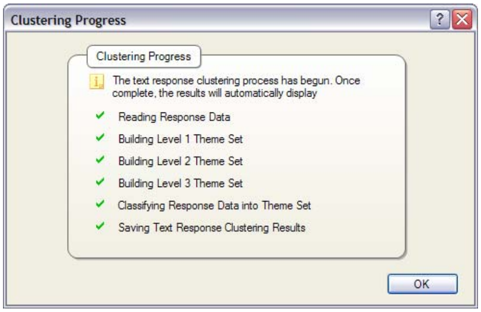
Posts in the social cloud can often provide valuable business intelligence about issues experienced by large segments of your customer base. However, reviewing a large number of posts can be time-consuming and tedious. To make this easier, the social monitor provides a topic monitoring process called “clustering” that you can use to quickly analyze the results of large cloud searches and identify posts that contain similar themes. This analysis is then available in a special report that organizes the cloud search results by theme to help you identify emerging issues.

To cluster cloud search results

1 On the social monitor, select a search and click the Cluster Results button on the ribbon.

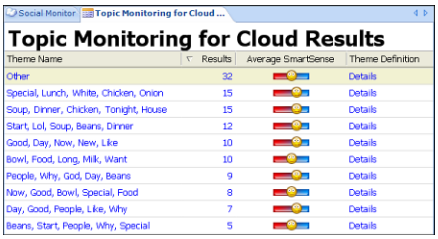
Note If any themes are specified in the Themes to Include section of the Edit Themes window, they will be used during the clustering process. Refer to [Editing and adding themes for clustering](#).

2 To check the status of the clustering process while it is running, click the Check Status button. The Clustering Progress window opens.



a After clustering has finished, click the OK button.

3 To view the Topic Monitoring for Cloud Results report, click the View Previous Results button. This report enables you to view clustering results from previous cloud searches, including theme information, result counts, and **SmartSense** ratings.



Social Monitor | Topic Monitoring for Cloud ...

Topic Monitoring for Cloud Results

Theme Name	Results	Average SmartSense	Theme Definition
Other	32		Details
Special, Lunch, White, Chicken, Onion	15		Details
Soup, Dinner, Chicken, Tonight, House	15		Details
Start, Lol, Soup, Beans, Dinner	12		Details
Good, Day, Now, New, Like	10		Details
Bowl, Food, Long, Milk, Want	10		Details
People, Why, God, Day, Beans	9		Details
Now, Good, Bowl, Special, Food	8		Details
Day, Good, People, Like, Why	7		Details
Beans, Start, People, Why, Special	5		Details

4 To recluster the cloud search results without using themes, click the Reset Clustering button.

Note If the Topic Monitoring for Cloud Results report is open, you must close it and click the View Previous Results button again in order to see new or reset cluster results.

❖ Editing and adding themes for clustering

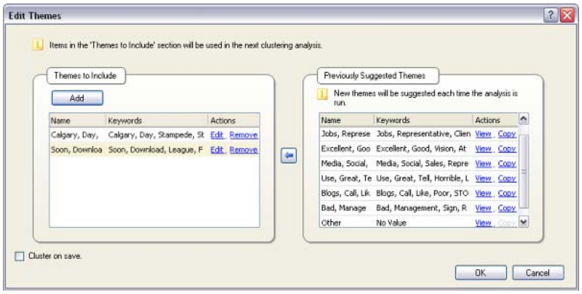
Editing and adding themes for clustering

A theme is comprised of a group of keywords used to identify and group related content items. In the social monitor, themes are automatically generated during the clustering process by processing cloud search results and identifying common keywords. Refer to Topic monitoring for cloud searches.

If you want to add your own keywords for clustering, you can edit the themes generated by Oracle Service Cloud or you can create your own themes. During the clustering process, the themes you create manually are given greater emphasis than automatically generated themes.

To edit a theme for clustering

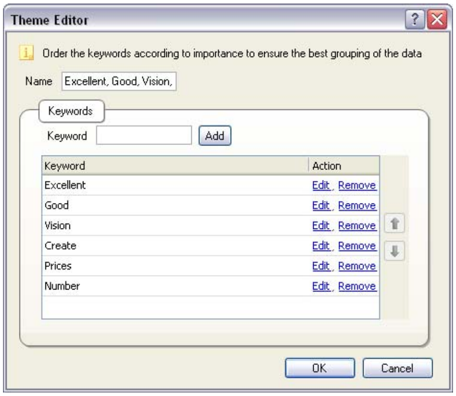
1 On the social monitor, select a search result row and click the Edit Themes button on the ribbon. The Edit Themes window opens.



The Edit Themes window is divided into two sections: the Themes to Include and Previously Suggested Themes sections. The Themes to Include section displays a list of themes that will be used in clustering. You can also add themes from this section. Refer to To add a theme for clustering.

The Previously Suggested Themes section displays a list of themes that were created by Oracle Service Cloud during the clustering process. Suggested themes change each time cloud searches are clustered. However, you can manually edit a suggested theme or prevent it from being automatically modified by moving it to the Themes to Include section.

2 Click Edit next to the theme you want to edit in the Themes to Include section. The Theme Editor opens.



3 To edit a keyword, click Edit next to the keyword.

4 To remove a keyword from the list, click Remove next to the keyword.

5 To move a keyword up or down in the list, use the up or down arrow to the right of the keyword list.

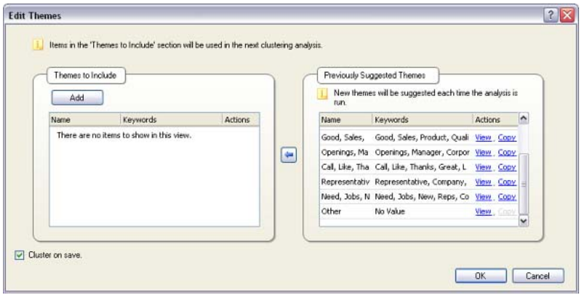
Note When cloud search results are clustered, the keywords at the top of the list are given more consideration than the keywords at the bottom of the list.

6 To cluster results upon saving your edits, select the Cluster On Save check box.

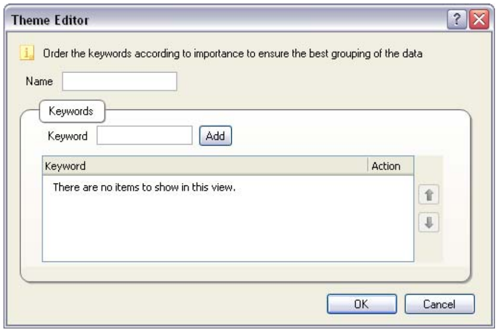
7 Click the OK button to save your edits.

To add a theme for clustering

1 On the social monitor, select a search result row and click the Edit Themes button on the ribbon. The Edit Themes window opens.



2 Click the Add button in the Themes to Include section. The Theme Editor opens.



3 Type a name for the theme in the Name field.

4 In the Keyword field, type a keyword that you want associated with this theme and click the Add button. The keyword displays in the Keyword list.

Note Multiword keywords are not supported by the topic monitor. If multiple words are entered for a single keyword value, only the first word will be used. If the resulting outcome produces too many matches that are irrelevant to your search, try adding other keywords that relate to an appropriate subset of your topic. For example, adding the multiword phrase “customer experience” as a keyword will produce the same effect as adding the single keyword “customer,” and the word “experience” will be ignored. For a more accurate result set, add keywords “customer” and “experience” separately instead.

5 To edit a keyword, click Edit next to the keyword.

6 To remove a keyword from the list, click Remove next to the keyword.

7 To move a keyword up or down in the list, use the up or down arrow to the right of the keyword.

Note When cloud search results are clustered, the keywords at the top of the list are considered more important than the keywords at the bottom of the list.

8 To cluster results upon saving your theme, select the Cluster On Save check box.

9 Click the OK button to save your theme.

❖ Topic monitoring for cloud searches

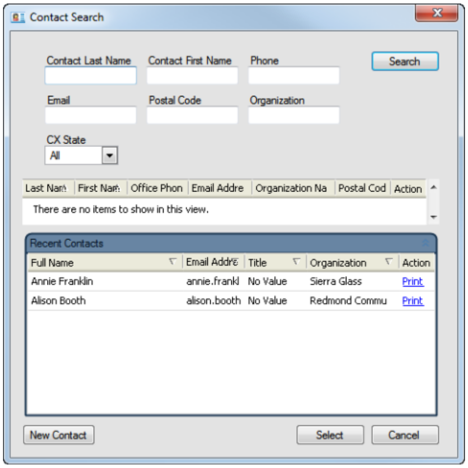
Responding through social channels

When monitoring social media, you can add **posts** from Facebook, Twitter, and **Oracle RightNow Social Experience communities** to new or existing incidents so they can be processed on the agent desktop. In this way, you can document the customer interaction and provide the customer with assistance or follow-up contact. This is useful for helping customers who have a question, thanking customers for positive comments, or participating in a discussion about your products and services.

Note You cannot respond to **RSS** feeds or YouTube posts through Oracle Service Cloud. However, you can create incidents from them, which can be helpful for other business purposes. To do so, simply right-click a post and select Create Incident. These incidents will be associated with a common generic contact (such as rss@rss.invalid).

When you create an incident from a social channel, the content of the post is added as a customer thread entry. By default, the incident's subject field will contain the name of the channel and the leading text of the post, together exceeding no more than 240 characters. However, you can customize the subject field contents by editing the CLOUD_INC_SUBJECT_TEXT configuration setting. Refer to Searching configuration settings.

The method used to associate incoming social incidents with contacts varies by channel. Incidents created from community posts are associated with contacts based on contact email address. Incidents created from Facebook, Twitter, and YouTube posts are associated with a contact based on social media user name. If you create an incident for a Twitter or Facebook user who is not associated with a contact, and the system identifies one or more contacts whose display name is close to that of the user, you will be prompted to associate an existing contact or create a new one. If no matching contact is found, a new contact record is created and associated with the incident.



Note Contact social media user names are stored in the *sm_user.username* field and can be displayed by adding the Channel Usernames field to a custom contact **work-space**.

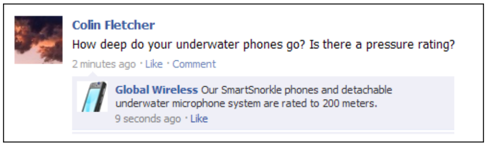
The way you respond to social incidents also varies by channel. Oracle Service Cloud tracks each incident's originating channel in the *incidents.channel_id* field and selects the same channel by default when you send a response. Each response is posted back to the contact using the unique messaging conventions of the originating media service. For example, when an agent responds to a Facebook or Twitter post and leaves the incident set to a non-Solved status, and the customer replies publicly through the same channel, the reply is automatically appended to the incident thread. (However, automatic thread updates are not applied for Twitter private messages.) Refer to the following sections for more about responding in supported social media channels.

Important Because social media contacts often have no email address, before you can respond to them, you must customize your incident workspace to make the Email field on the Contacts tab non-required, either by modifying the field's Required attribute or by creating a workspace rule to set the attribute based on incident channel. Refer to Creating custom workspaces and Overview of workspace rules.

- Editing incidents
- Responding through social channels

Responding to Facebook posts

In Facebook, social conversations take the form of **posts** and comments on pages. While the social monitor allows you to monitor (but not respond to) posts from the public Facebook feed, you can respond to incidents created from customer posts on your organization's Facebook fan page. When you respond to a post on your organization's Facebook page, the response appears as a comment beneath the post, as shown here.



The post is attributed to the name of the Facebook page designated by the **channel account**, rather than the agent's name. For information about configuring a channel account, refer to Adding Facebook channels.

To respond to a Facebook post

1 Perform a cloud search on a custom Facebook channel and view your search results. Refer to Searching the social cloud.

2 From the open cloud search report, select the post you want to create an incident from in the search results list.

3 Click the Respond button on the ribbon. A new incident opens on the content pane containing the details of the post.

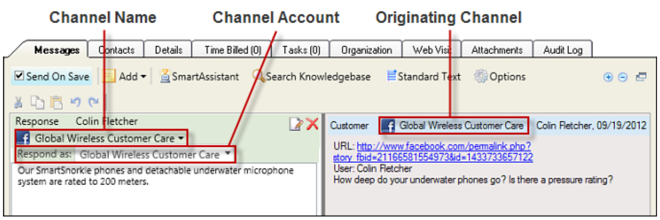
Note If your profile allows you to create incidents, the Respond button and the Create Incident button (both located on the ribbon) provide the same functionality. Clicking either of them results in a new incident opening on the content pane. Only one incident can be created from a post.

If the contact's social account user name is associated with previous cloud incidents, you will be prompted to select from a list of existing incidents or create a new incident.

Alternately, you can append the post to the thread of an existing incident by clicking the Append Incident button and selecting an incident from the contact's incident history or recent incidents that you have opened.

If your profile does not allow you to create incidents, the Create Incident button is disabled. Clicking the Respond button results in a warning message indicating that you do not have the permissions required to create incidents. Refer to [Service permissions](#).

4 Select the Send On Save check box. The incident thread expands to reveal Facebook channel response options. The thread displays the name of the post's originating channel and automatically selects the same channel for the response. The default channel account associated with the responding agent is also displayed.



In this example, Global Wireless Customer Care is the name of the originating channel, the response channel, and the default channel account.

Note When you reply to a private Facebook message, your reply will be sent as a private message unless you clear the Send Private check box. A private conversation must be initiated by the Facebook user.

5 If your site has more than one Facebook channel account, click the Respond As drop-down menu in the header of the response thread.

Note If enabled, the Cc, Bcc, and Attach buttons and the email encryption fields will not display since you are bypassing email and responding directly to the Facebook post.

6 Fill in any remaining details for the incident. Refer to Editing incidents.

7 Click the Save and Close button on the ribbon.

❖ Granting agent access to channel accounts

Responding to Twitter posts

Twitter is among the world's most popular social media, but its architecture is different than most other services. Twitter **posts**, called "tweets," are short messages designed mainly for public, one-way communication to a group of followers. Tweets are posted publicly to Twitter's vast global feed, where they can be accessed by anyone. In a sense, this function more closely resembles a public message board than a conventional messaging service. Because tweets are public and indirect, using Twitter as a channel for business communication presents a significant challenge. Although the social monitor can track customer replies to your messages and append them to an incident as an ongoing conversation, those back-and-forth communications can be read, reposted, and replied to by any other Twitter user. For this reason, using tweets to resolve sensitive service issues can be risky.

To more successfully engage with customers using the Twitter channel, you should advise them to use Twitter's private messaging feature, which is also supported by the social monitor. Private messaging is an alternate, direct messaging feature that makes interactions more secure by keeping them out of Twitter's public feed.

Important In order to control spam, Twitter will deliver private messages only to an account that follows the sending account. This means that you cannot send a private message to a customer unless the customer's Twitter account is following your organization's account. And in order for your customer to reply privately, your organization's account must be following the customer's account. In other words, both Twitter accounts must follow each other before they can engage in a private, back-and-forth conversation.

For this reason, your initial response will be a public tweet because the customer will not yet be following your organization's Twitter account. However, you should strongly encourage the customer to reply by private message, and to follow your organization's account so that you can communicate with them privately. This step is essential to ensure the best customer experience and minimize the potential for interference from other Twitter users.

Also note that Oracle Service Cloud can create incidents automatically from private Twitter messages when you select the Automatically Create Incident option in the Twitter channel accounts editor. Refer to Adding Twitter channel accounts.

To respond to a Twitter post

1 Perform a cloud search on a Twitter channel and view your search results. Refer to Searching the social cloud.

2 From the open cloud search report, select the post you want to create an incident from in the search results list.

3 Click the Respond button on the ribbon. A new incident opens on the content pane containing the details of the post.

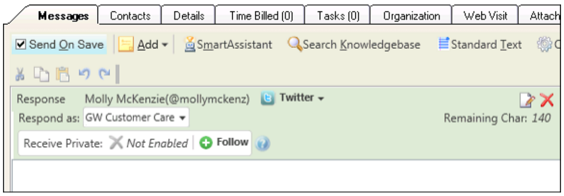
Note If your profile allows you to create incidents, the Respond button and the Create Incident button (both located on the ribbon) provide the same functionality. Clicking either of them results in a new incident opening on the content pane. Only one incident can be created from a post.

If the contact's Twitter account user name is associated with previous cloud incidents, you will be prompted to select from a list of existing incidents or create a new incident.

Alternately, you can append the post to the thread of an existing incident by clicking the Append Incident button and selecting an incident from the contact's incident history or recent incidents that you have opened.

If your profile does not allow you to create incidents, the Create Incident button is disabled. Clicking the Respond button results in a warning message indicating that you do not have the permissions required to create incidents. Refer to Service permissions.

4 Select the Send on Save check box. The response thread header expands to reveal Twitter channel response options.



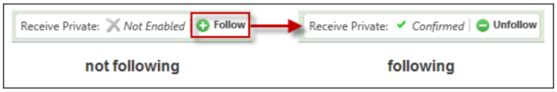
5 If your site has more than one Twitter channel account, click the Respond As drop-down menu and select the account you want to respond from.

Important To ensure the best customer experiences, the channel account you respond from must include Private Message Response permissions. Refer to To add a channel account for Twitter.

If the customer's Twitter account is following your organization's Twitter account, the Send Private check box will be visible and selected by default. You can clear this check box to post the message to the public feed. However, for the reasons mentioned above, you should always send messages privately whenever the option is available.

If the customer's account is *not* following your organization's account, the Send Private check box will not be shown and all sent messages will be public.

6 If your organization's Twitter account is not yet following your customer's Twitter account, click the Follow button.



Note Following the customer's account will allow the customer to send private messages to your organization's account.

7 Type your response in the response thread. Remember to limit each response to 140 characters, the maximum number allowed by Twitter.

8 Fill in any remaining details for the incident. Refer to Editing incidents.

9 Click the Save and Close button on the ribbon to send the response through Twitter.

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Self Service for Facebook

In the age of the social web, your organization can no longer dictate when, where, and how it interacts with customers—you must engage customers in their channels of choice. With more than a half billion active users spending more than three billion hours per month sharing information, Facebook's global social network has emerged as a critical interaction point.

Oracle RightNow Self Service for Facebook Cloud Service (Self Service for Facebook) is a special Facebook application served by Oracle Service Cloud that provides your customers with access to features from **Oracle RightNow Cloud Service** and **Oracle RightNow Social Experience communities** right from your organization's Facebook page, in both its standard and mobile web interfaces. Using Self Service for Facebook, customers can:

- Search the Oracle Service Cloud knowledge base, including results from your community and natural language search using **Oracle RightNow Virtual Assistant Cloud Service (Virtual Assistant)**, if enabled.
- Submit questions privately to your support team or publicly to your community.
- Rate and comment on answers.
- Browse community discussions.
- Submit and track community posts and comments.
- Share service and community experiences on Facebook.

As needed, your agents can field and respond to Facebook incidents right from their agent desktop. In this way, your customers can receive the same exceptional support they receive from your other service channels without having to leave Facebook. As a result, your organization can deliver a consistent experience to customers and fans on Facebook while maintaining a unified view of customer interactions across all service channels.

In addition to the Self Service for Facebook application, Oracle Service Cloud provides tools for monitoring and responding to comments submitted to your organization's Facebook fan page. Refer to Social channels overview.

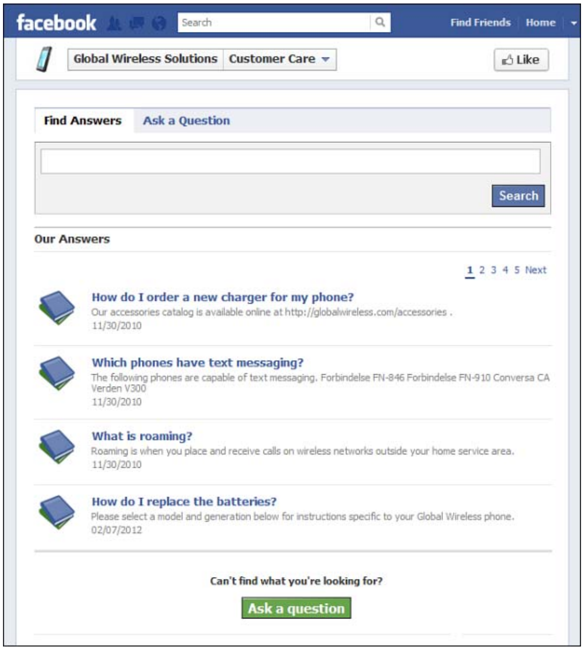
For in-depth best practices and strategies for defining a comprehensive social strategy for your organization, refer to Answer ID 4647 on our support site.

Self service features in Facebook

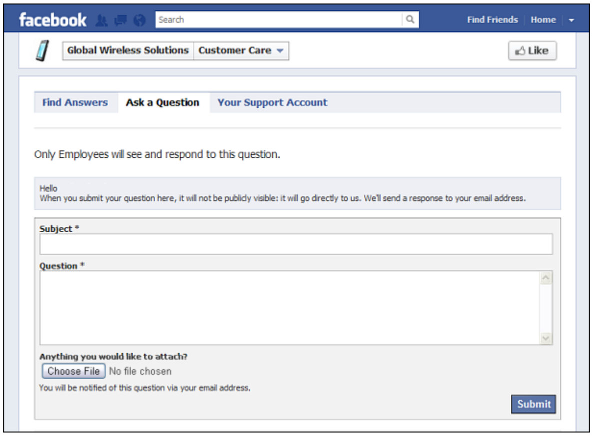
Self Service for Facebook helps customers find the information they need by browsing or searching your knowledge base from the Facebook social networking site. Once connected, the Find Answers tab displayed in Facebook presents the same answers that are visible in the answer search report defined for your **customer portal**.

Note The report will also include results from your **community** and **Virtual Assistant**, if enabled.

The following figure shows the Self Service for Facebook application connected to a consumer products support site.



Similar to visiting the customer portal, customers can click an answer to view its contents, including **guides**, without leaving Facebook. They can also click the Ask a Question tab to submit questions to your Oracle Service Cloud. Incidents submitted in this manner are processed by your system just like incidents submitted through the **customer portal**, and can then be accessed by your staff using the **agent desktop**.



Note Self Service for Facebook will create or update contact records on your site as needed, regardless of your site's pass-through authentication (PTA) settings.

When customers attempt to use the Ask a Question feature for the first time, they will be prompted to log in to Facebook (if they haven't already) and grant application access to basic account information. This data will be used to link their Facebook account to their contact record in Oracle Service Cloud. Facebook accounts will be associated with existing contacts that share the same email address (whether primary or alternate). In a case where no matching contact is found, a new contact will be created and automatically associated using the email address from the Facebook account. Agent responses to incidents submitted through Facebook are sent by email to that address.

When **email address sharing** is enabled in Oracle Service Cloud, Facebook account association is subject to a contact-matching process. Refer to Email address sharing.

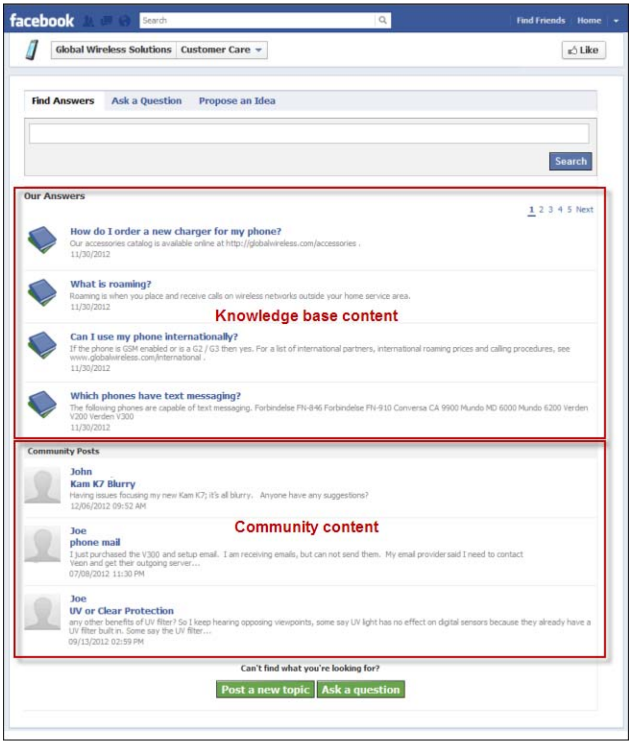
Customers can also click the Your Support Account tab to view and update incidents from their recent support history.

Incidents created through Self Service for Facebook will be processed through whatever business rules and escalation paths you have configured for your site. If a SmartAssistant rule is active, suggested answers will be displayed when questions are submitted, just as they are in the customer portal. If you want to route these incidents through a distinct set of rule actions, you can do so by using "Incident.Channel equals Facebook" as a business rule condition. Refer to Choosing conditions.

Note In addition to responding to incidents submitted by Facebook users, your staff can proactively monitor and respond to Facebook wall posts using the social monitor. Although complementary, the social monitor is separate and distinct from the Self Service for Facebook application and is configured and managed separately in Oracle Service Cloud. Refer to Monitoring social channels.

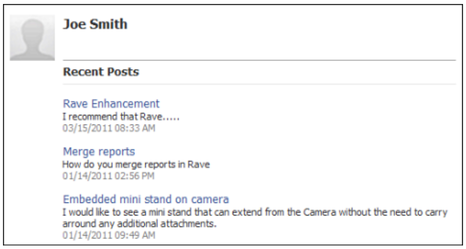
Community features in Facebook

When a **community** is enabled for your site, your customers can search your knowledge base and community at the same time. Content from both sources is presented together in one set of search results for easy review.



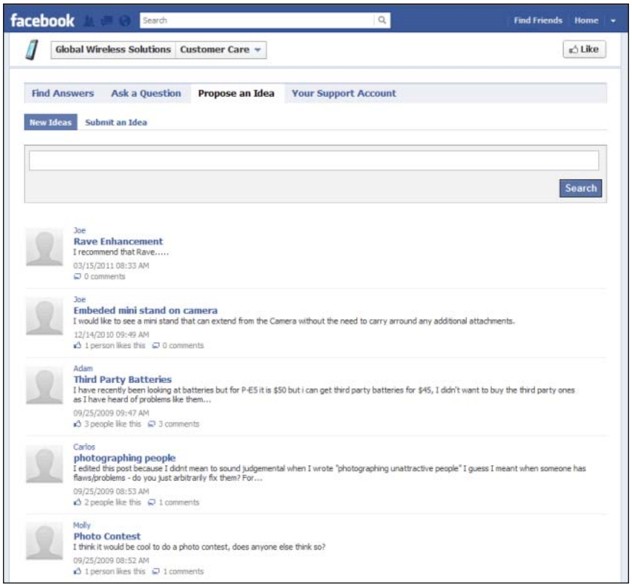
Clicking the subject line of any answer or post will display its details within Facebook. Here, customers can rate and comment on the content to discuss it with other customers and provide feedback valuable to your knowledge maintenance processes.

Also, when posts are returned in the search results, customers can click the name of a post's author to display a list of that author's recent posts.



In addition to searching community content, Self Service for Facebook can display the contents of a specific **hive** in a separate tab and accept new posts for that hive. With Support Communities enabled, customers accessing the Ask a Question tab are given a choice between submitting a post publicly (to the support community) or privately (as an incident).

The following figure shows Self Service for Facebook connected to a support site with Innovation Communities enabled. Here, customers can review new product innovation ideas and submit their own.



Note Community support features are available in Self Service for Facebook only when a community is enabled on your site. To enable a community, contact your Oracle account manager.

Configuring Self Service for Facebook

Self Service for Facebook is a component of your Oracle Service Cloud application that can be embedded in a Facebook fan page. To enable it on your site, you must configure its settings in both Facebook and Oracle Service Cloud.

Because Facebook often revises the development environment used to manage applications, the procedures for configuring Self Service for Facebook are subject to frequent changes. For current procedures, refer to Answer ID 4193 on our support site.

When working with social media, it is important to consider potential security risks and take the appropriate precautions associated with third-party login information, customer data, and application code. Refer to Social Experience security.

To maintain the integrity and security of your Self Service for Facebook application, refer to Self Service for Facebook authentication.

Opportunity Tracking

The following sections are intended for administrators and staff members. They contain information and procedures for configuring and using areas that are specific to Oracle Right-Now Opportunity Tracking Cloud Service.

- Sales Process
- Quote Templates
- Opportunities
- Quotes

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Sales Process

You can customize Oracle RightNow Opportunity Tracking Cloud Service (Opportunity Tracking) to fit your organization's selling process. To track **opportunities**, you can define sales **strategies**, including the stages within each strategy and the **tasks** required to complete each stage. When you define **sales periods**, sales managers can monitor and measure goals for each sales representative throughout that time frame. Adding territories can help organize and assign opportunities to the appropriate **sales representatives**.

Adding and editing strategies

A strategy is a series of stages that an opportunity moves through in the sales pipeline on its way to becoming a final sale. Each stage of a strategy includes tasks that must be completed before the opportunity can move to the next stage.

You probably want different strategies for different kinds of opportunities. For example, you might have one strategy to sell a high volume of products to government organizations and a different one to sell single products to individual consumers.

When staff members select a strategy for an opportunity they are working on, the first stage of that strategy automatically populates the Stage field. All tasks associated with the strategy (including those associated with other stages) are also added to the opportunity.

To add or edit a strategy

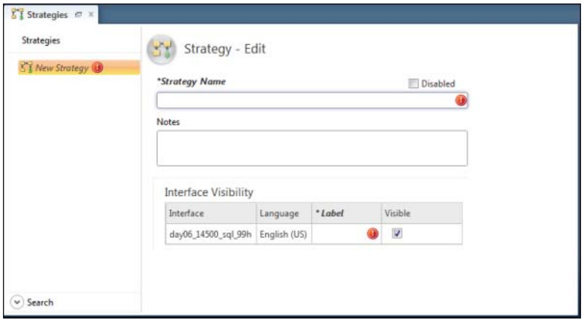
1 Click the Configuration button on the navigation pane.

2 Double-click Strategies under Opportunity Tracking. The Strategies tree displays on the content pane.

3 To add a strategy, click the New button on the ribbon. The editor displays on the content pane.

Or

To edit a strategy, click it in the tree.

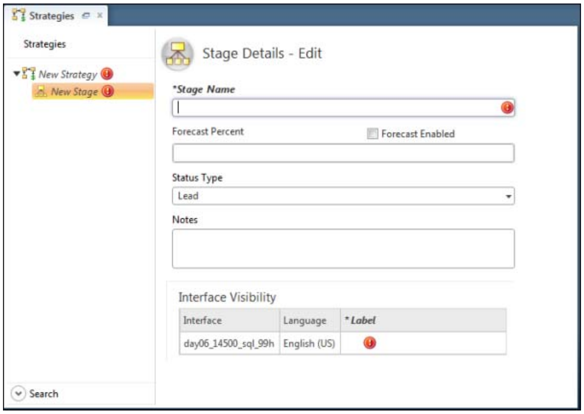


4 Enter the following field information.

Table 612: Strategies Editor Description

Field	Description
*Strategy Name	Type the name of the strategy. The item name in the Strategies tree on the left side of the content pane and the Label field in the Interface Visibility section are populated or revised as you type.
Disabled	Select this check box to prevent sales representatives from selecting or viewing the sales strategy.
Notes	Type any comments about the sales strategy.
Visible	Clear this check box if you do not want the strategy to be visible on the interface.

5 Because you cannot save the strategy without adding at least one stage to it, click the arrow on the New button and select Add a New Stage to the Selected Strategy. The Stage Details editor displays on the content pane.



6 Enter the following field information.

Table 613: Stage Details Editor Description

Field	Description
*Stage Name	Type the name of the stage. The stage details item name in the Strategies tree on the left side of the content pane and the Label field in the Interface Visibility section are populated or revised as you type.
Forecast Percent	To enable this field, first select the Forecast Enabled check box. The forecast percentage is an estimate of how far an opportunity has progressed in the sales strategy when it is at this stage. For example, you might be only 5% confident that an opportunity will close when it is in an Initial Contact stage, but 100% confident at a Sale Complete stage. Type a value in the field.
Forecast Enabled	Select this check box to enable **forecasts** for the stage. **Note:** You must select this check box to activate the Forecast Percent field.
Status Type	Select a status type from this drop-down menu to associate with the stage. Refer to Adding and editing opportunity statuses.
Notes	Type any comments about the stage.

7 To add another stage to the strategy, repeat steps 5 and 6.

8 Click the Save and Close button on the ribbon.

Adding tasks to stages

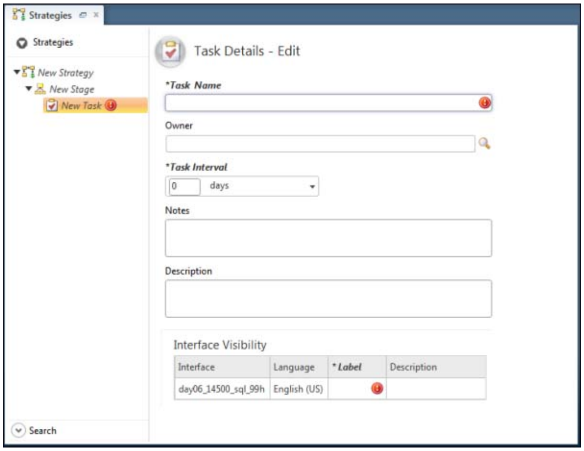
Just as strategies contain stages, each stage can contain multiple **tasks** that are required to complete each stage. After you have added a stage to a strategy, you can then add tasks to the stage. When staff members select strategies and stages for an opportunity, the opportunity's Tasks tab lists the tasks associated with the selected stage. Refer to Tasks overview to learn about tasks.

To add or edit a task

1. Click the Configuration button on the navigation pane.
2. Double-click Strategies under Opportunity Tracking. The Strategies tree displays on the content pane.
3. Locate the strategy you want and click the arrow to the left of the strategy to expand it, displaying the stages associated with the strategy.
4. Click the stage where you want to add or edit tasks. The Stage Details editor displays on the content pane.
5. To add a task, click the arrow on the New button and select Add a New Task to the Selected Stage. The Task Details editor displays on the content pane.

   Or

   To edit a task, click the arrow to the left of the stage to display the tasks associated with it, and click the task you want to edit.



6 Enter the following field information.

Table 614: Task Details Editor Description

Field	Description
*Task Name	Type the name of the task. The task details item name in the Strategies tree on the left side of the content pane and the Label field in the Interface Visibility section are populated or revised as you type.
Owner	Click the Search button in the field to display staff accounts grouped by manager. Select the task owner from the list and click the OK button to close the window and populate the field.
Task Interval	Enter the amount of time estimated to complete the task. Select days, hours, or minutes from the drop-down menu and then type a value in the field. **Note:** This value is used to calculate the task due date. When a strategy is selected for an opportunity, the associated tasks are added to the opportunity, and due dates are calculated by adding the task interval to the current date and time.
Notes	Type any comments about the task.
Description	Type a description of the task.

7 To add another task to the stage, repeat steps 4 through 6.

8 Click the Save and Close button on the ribbon.

Note When you delete a strategy, the strategy is removed from the Strategy field of all associated opportunities and replaced with No Value. However, tasks that were associated with the strategy (and therefore with opportunities that had the strategy assigned to them) remain associated with the opportunities.

Adding and editing sales periods

A sales quota is defined as a specific number of dollars in sales that staff must produce over a specific time frame, or sales period. Opportunity Tracking lets you define sales periods on an annual, semi-annual, quarterly, monthly, or weekly basis. You can define each period's start and end dates, the total revenue goal, head count, goal for the number of closed opportunities, and quotas for each sales representative. When you define quotas for each salesperson, you can review that information in reports throughout the sales period.

To add or edit a sales period

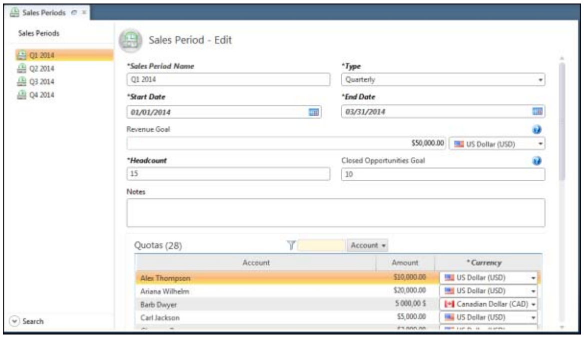
1 Click the Configuration button on the navigation pane.

2 Double-click Sales Periods under Opportunity Tracking. The Sales Periods tree displays on the content pane.

3 To add a sales period, click the New button on the ribbon to display the editor.

Or

To edit a sales period, click it in the tree.



4 Enter the following field information.

Table 615: Sales Periods Editor Description

Field	Description
***Sales Period Name**	Type the name of the sales period.
***Type**	Click this drop-down menu to select a sales period type. Your options include Annual, Monthly, Quarterly, Semi-Annual, and Weekly.
***Start Date**	Click the calendar and select the start date of the sales period. The default is today's date.
***End Date**	Click the calendar and select the end date of the sales period. The default is tomorrow's date.
Revenue Goal	Type the revenue goal for the sales period and, if necessary, select a different currency from the drop-down menu. This is the target level of revenue for the sales period displayed in the selected currency, regardless of the local currency of the transactions.
Headcount	Type the number of assigned staff persons for the sales period.
Closed Opportunities Goal	Type the goal number of closed opportunities for the sales period. This is the number of opportunities targeted to close during the sales period expressed as a positive whole number.
Notes	Type any comments about the sales period.
Quotas	Add sales quotas for each sales representative during the sales period. Refer to Adding sales quotas to sales periods.
Filter	Select Account, Amount, or Currency from the drop-down menu to filter the staff accounts that display in the Quotas section. Refer to Adding sales quotas to sales periods.

5 Click the Save and Close button on the ribbon.

Caution Deleting a sales period deletes all quotas associated with it.

You can add sales quotas when you add a sales period or at a later date. Refer to Adding sales quotas to sales periods.

Adding sales quotas to sales periods

When you define a sales period, you can also add a sales quota for each staff member. When you add sales quotas, managers can generate reports to track productivity for individual sales representatives or the entire sales team.

Note Sales managers must have Edit Sales Period permission in their profile to edit sales quotas. Refer to Opportunity Tracking permissions.

To add or edit a sales quota

1. Click the Configuration button on the navigation pane.
2. Double-click Sales Periods under Opportunity Tracking. The Sales Periods tree displays on the content pane.
3. Click the sales period where you want to add or edit sales quotas. The Quotas section of the editor displays all staff accounts with profiles that have the Appear in Menus permission selected on the Opportunity Tracking tab.
4. Click the Amount field for the account whose quota you want to add or edit, and type the value in the field. If necessary, select a different currency from the drop-down menu.
5. Repeat step 4 for each sales quota you want to add or edit.
6. Click the Save and Close button on the ribbon.

Adding and editing territories

Opportunity Tracking uses territories and sub-territories to define sales regions based on geography. Staff members can be assigned to a territory or sub-territory for reporting purposes.

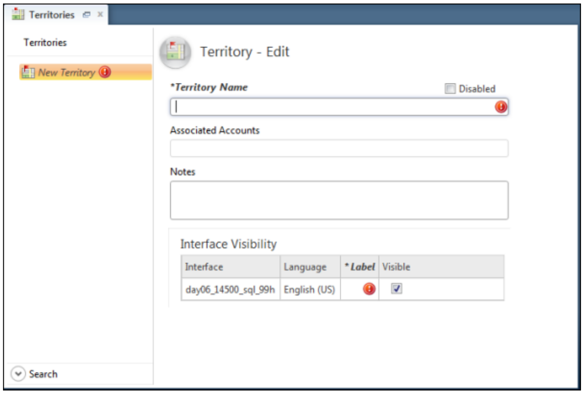
To add or edit a territory or sub-territory

1. Click the Configuration button on the navigation pane.
2. Double-click Territories under Opportunity Tracking. The Territories tree displays on the content pane.
3. To add a territory, click the New button on the ribbon.

Or

To edit a territory, click it in the tree.

Tip To add multiple parent territories in the same session, you must first press **Ctrl** and click the highlighted territory in the tree before clicking the New button.



4 Enter the following field information.

Table 616: Territories Editor Description

Field	Description
*Territory Name	Type the name of the territory. The item name in the Territories tree on the left side of the content pane and the Label field in the Interface Visibility section are populated or revised as you type.
Disabled	Select this check box to prevent sales representatives from selecting or viewing the territory when adding an opportunity.
Associated Accounts	This read-only field lists the staff members assigned to the territory in their staff account. **Note:** This field is blank if you are adding a territory.
Notes	Type any comments about the territory.

Table 616: Territories Editor Description (Continued)

Field	Description
Visible	Clear this check box if you do not want the territory to be visible on the interface. **Note:** If you clear a territory's visibility, you cannot move a visible territory to be subordinate to one that does not have visibility on the interface.

5 To add a sub-territory to a territory, click the territory in the Territories tree, click the New button on the ribbon, and complete the fields.

Or

To edit a sub-territory, click it in the tree and edit the fields.

6 Click the Save and Close button on the ribbon.

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Quote Templates

As sales representatives work to convert **opportunities** to sales, much of their time is spent generating and sending price **quotes** to prospective customers. You can save them time by creating quote templates that automate and standardize the quote generation process.

Because your organization may need several types of quotes, you can add as many quote templates as you want. For example, your quote template for government customers is probably different than the one used for commercial customers. When sales representatives prepare a quote, they simply select the template that is appropriate for their needs. Then they merge the information from the opportunity into the quote template to generate a quote for the customer.

Adding and editing quote templates

When you add or edit a quote template, you use Microsoft Word to format the document. In addition to using standard Word functions, you can insert merge fields into the quote template. The merge fields serve as variables for opportunity data. When a sales representative merges the opportunity data into the quote template, the appropriate fields are completed automatically. For example, an organization name merge field on the quote template populates the field on the quote. This simplifies the data entry required to generate the quote and ensures accuracy and consistency.

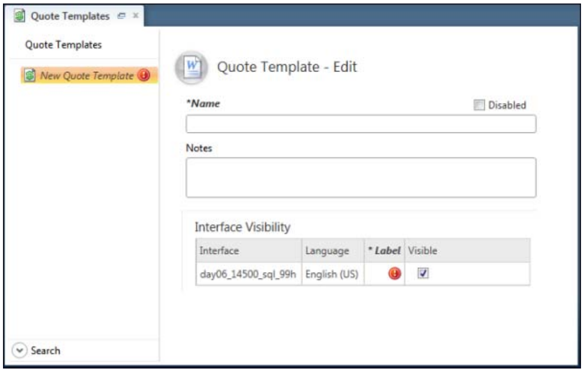
Note Before sales representatives can generate quotes using quote templates, you must add price schedules and sales products to Oracle Service Cloud. Refer to Adding and editing price schedules and Adding and editing sales products.

To add or edit a quote template

1 Click the Configuration button on the navigation pane.

2 Double-click Quote Templates under Opportunity Tracking. The Quote Templates tree displays on the content pane.

3 To add a quote template, click the New button on the ribbon to display the editor.
Or
To edit a quote template, click it in the tree.

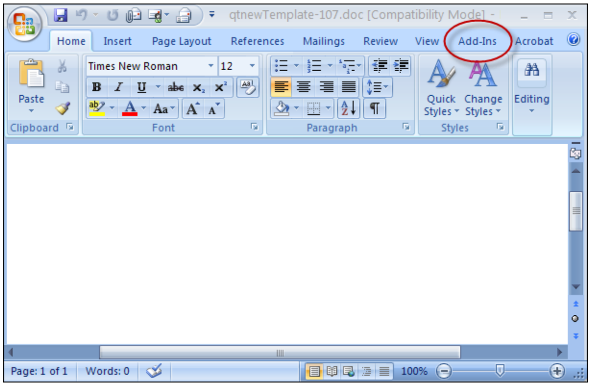


4 Enter the following field information.

Table 617: Quote Templates Editor Description

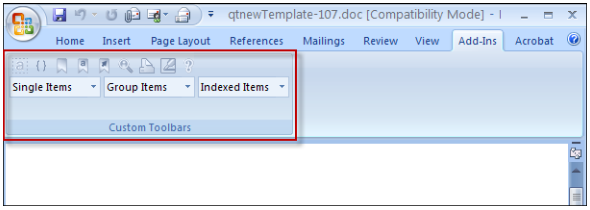
Field	Description
*Name	Type the name of the quote template. The item name in the Quotes Templates tree on the left side of the content pane and the Label field in the Interface Visibility section are populated or revised as you type. **Note:** Use a descriptive name that helps sales representatives select the appropriate quote template for generating a quote.
Disabled	Select this check box to prevent sales representatives from selecting or viewing the quote template.
Notes	Type any comments about the quote template.
Visible	Clear this check box if you do not want the quote template to be visible on this interface.

5 Click the Word Editor button on the ribbon. An instance of Microsoft Word opens in the Quote Templates editor with an Add-Ins tab for merge fields.



6 Click the Add-Ins tab to display the Quote Template ribbon.

Important Because the Add-Ins tab does not exist in Word 2003, the Quote Template toolbar is a standard toolbar instead of a ribbon.



7 Format the Word document based on your organizational policies and standards. If you have an existing Microsoft Word template, you can copy and paste it into the Word document.

8 To insert a merge field, place your cursor in the quote template document where you want to insert the field.

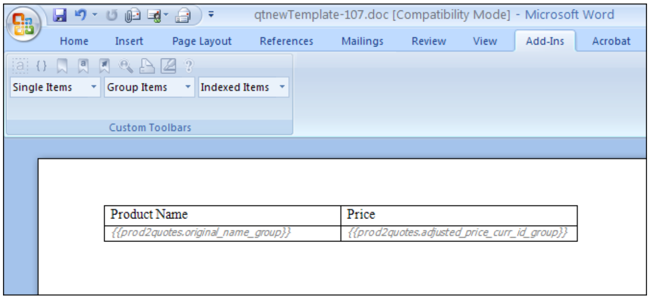
a Click one of the drop-down menus in the Custom Toolbars section on the Quote Template ribbon and select a merge field to add to the quote template.

Tip For a complete list of merge fields and their associated descriptions, double-click Data Dictionary under Database. Refer to Viewing the data dictionary.

The following table describes the drop-down menus on the Quote Template ribbon.

Table 618: Quote Template Ribbon Description

Drop-Down Menu	Description
Single Items	Click this drop-down menu to select merge fields that have a one-to-one relationship with opportunities. For example, because an opportunity can be associated with only one organization, organization fields are listed in the Single Items drop-down menu.
Group Items	Click this drop-down menu to select merge fields that have a many-to-one relationship with opportunities. For example, because a quote can be associated with many sales products, sales product fields are listed in the Group Items drop-down menu. **Note:** You must create a table with column headers before using merge fields from the Group Items drop-down menu. After the table is created with column headers, a merge field from the Group Items drop-down menu must be inserted into a single cell in the table. Word automatically adds rows to the table based on how many values are in the group. The font of the column headers determines the font of the merge fields in the table.
Indexed Items	Click this drop-down menu to select merge fields that have a many-to-one relationship with opportunities and are indexed in the database. For example, because an opportunity can be associated with many contacts, contact fields are listed in the Indexed Items drop-down menu. **Note:** You must replace the "N" with a numeric value. While using a field from the Group Items drop-down menu returns all of the contacts associated with an opportunity, using a field from the Indexed Items drop-down menu returns only the contact you specify according to "N" (the number one is always associated with the primary field in a database table). For example, to return the email address of the primary contact who is associated with an opportunity, *contacts.email1* should be added to the quote template.



b Repeat step a until you have added all merge fields to the quote template.

Caution If you close the instance of Microsoft Word by clicking X inside the Quote Template editor, the Oracle Service Cloud application closes and any unsaved changes are lost. To save your quote template without closing the application, you must click the Save and Close button on the ribbon.

9 Click the Save and Close button on the ribbon to save the quote template.

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Opportunities

An opportunity is a record in Oracle RightNow Opportunity Tracking Cloud Service (Opportunity Tracking) containing information about a specific sale or a pending deal. In essence, opportunities are the building blocks of your sales operation for collecting general sales information, following sales **strategies**, setting **forecasts**, and preparing and sending **quotes** to customers. The information that is collected during the sales cycle can be processed by Oracle RightNow Analytics Cloud Service (Analytics) to help managers identify trends and forecast sales periods and to help you meet or exceed your quota.

Opportunities overview

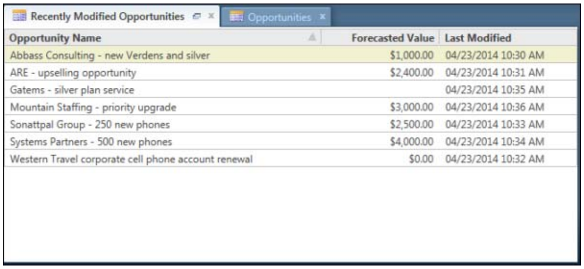
Before you start working on your assigned opportunities, you'll want to know how to access opportunities and how opportunity information is organized. The following sections explain the layout you'll be working with and show you where the details of each opportunity are located.

Opportunities reports

When you click the Opportunities button on the navigation pane, the **navigation list** displays all of the reports and items added to this button by your administrator. The Opportunities button, plus all the other buttons you have access to, are part of the **navigation set** defined in your profile.

Opportunities reports can also be placed in other navigation lists, not just the Opportunities list. And if you have permission to customize your navigation set, you can add other items, including any reports you have permission to access, to your Opportunities navigation list or any of your lists.

Double-clicking any opportunities report displays the list of opportunities in the report on the content pane. The following figure shows an example of the Recently Modified Opportunities report.



Opportunity Name	Forecasted Value	Last Modified
Abbass Consulting - new Verdens and silver	$1,000.00	04/23/2014 10:30 AM
ARE - upselling opportunity	$2,400.00	04/23/2014 10:31 AM
Gatems - silver plan service		04/23/2014 10:35 AM
Mountain Staffing - priority upgrade	$3,000.00	04/23/2014 10:36 AM
Sonattpal Group - 250 new phones	$2,500.00	04/23/2014 10:33 AM
Systems Partners - 500 new phones	$4,000.00	04/23/2014 10:34 AM
Western Travel corporate cell phone account renewal	$0.00	04/23/2014 10:32 AM

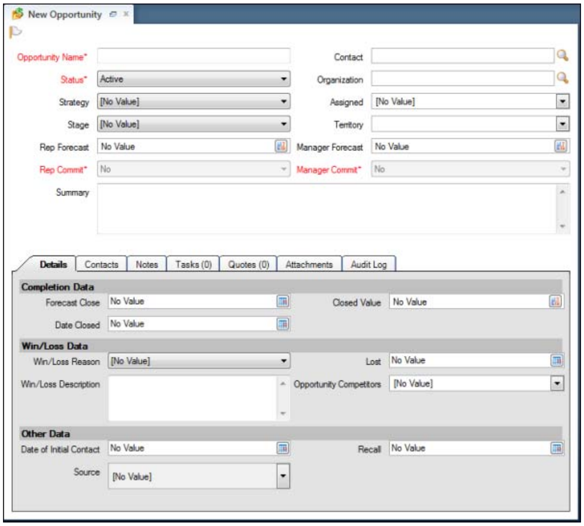
The information displayed on the content pane depends on the opportunities report you select and which fields were defined when the report was created. The Recently Modified Opportunities report, for example, displays the opportunity's name, forecasted value, and date it was last modified.

Using buttons on the ribbon, you can open, add, copy, delete, print, forward, assign, and reject opportunities and email the contact. You can also search for opportunities, refresh the report, and reset the search criteria from the ribbon. Right-clicking any opportunity displays the same functions as those on the ribbon.

Tip Besides searching for opportunities from a report, you can also use Quick Search to find a specific opportunity from anywhere in the product. Refer to Searching for records.

Standard workspace for opportunities

Your Oracle Service Cloud application contains a standard workspace for working with opportunities. The workspace defines which fields you see and how the information is organized on the content pane. The following figure is an example of the standard opportunity workspace.



Note Your organization may use the standard workspace, or your administrator may have created one or more customized workspaces. Your profile defines the workspace you see when you work with opportunities, whether it is the standard workspace or a customized workspace. For documentation purposes, we use the standard opportunity workspace to describe how to work with opportunities.

Ribbon

The following table describes the buttons on the ribbon of the standard opportunity workspace. For more information about the ribbon and Quick Access toolbar, refer to Working with the ribbon.

Table 619: Opportunity Ribbon Description

Group/Button	Description
Save	
Save	Click this button to save the opportunity you are currently editing or adding. The opportunity remains open. **Note:** When you save an opportunity, it is evaluated by the rules engine. If your administrator added opportunity rules and the opportunity matches one or more of those rules, it is possible that the opportunity can be modified by rule actions when you save it.
Save and Close	Click this button to save the opportunity you are currently editing or adding. The opportunity closes.
Actions **Note:** With the exception of the New button, the buttons in this group are not active until after you save the opportunity you are adding.	
New	Click this button to add an opportunity. See Adding opportunities.
Refresh	Click this button to refresh the opportunity.
Forward	Click this button to forward the opportunity.
Print	Click this button to print the opportunity.
Copy	Click this button to copy the opportunity.
Delete	Click this button to delete the opportunity. See Deleting opportunities.
Proofing	
Spell Check	Click this button to spell check the opportunity.

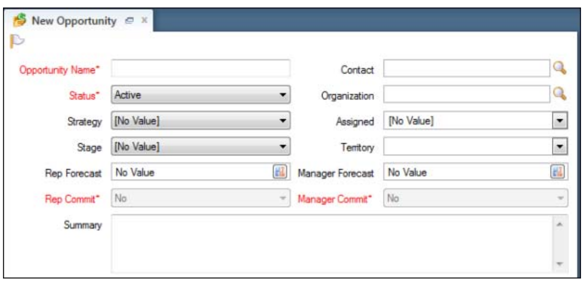
Table 619: Opportunity Ribbon Description (Continued)

Group/Button	Description
Related Activities	
Reject	Click this button to reject the lead. Refer to Accepting and rejecting leads.
Appointment	Click this button to create an appointment in Microsoft Outlook. Refer to Adding Outlook appointments.
Links and Info	
Links	Click this button to select a URL from the list of links added by your administrator.
Info	Click this button to see details about the opportunity, including its ID, when it was created and by whom, and the date it was last updated and by whom. If the opportunity is in a rules state or has an escalation level, that information also appears.

Key opportunity fields

When you open an opportunity, you see fields on the top of the content pane and record tabs on the bottom. The opportunity fields store the opportunity's name, status, strategy, stage, rep forecast, contact association, organization association, manager forecast, and other information that describes the properties of the opportunity.

Some of the opportunity fields are required by default, and your administrator may require that other fields also be completed. You must complete any field set in red text and marked with a red asterisk before you can save the opportunity.



Refer to Editing key opportunity fields.

Opportunity record tabs

The remaining information about the opportunity is organized in record tabs, which group similar details. For instance, all of the contacts associated with the opportunity are listed on the Contacts tab and all tasks associated with the opportunity appear on the Tasks tab.

Note If you make changes on any windows accessed from the opportunity record tabs, you must save the opportunity in order for your changes on the record tabs to take effect. If you close the record without saving changes, your changes are lost.

Opportunities include the following record tabs. Click a tab to see what information is listed and what your options are.

- **Details tab**—Contains fields related to opportunity competitor data, completion data, win/loss data, and other general data. Use the fields on this tab to collect additional information about an opportunity, which is beneficial for reporting purposes. Refer to Adding and editing Details tab information.
- **Contacts tab**—Lists the contacts associated with the opportunity, including the primary contact and all secondary contacts. From the Contacts tab, you can add a new or existing contact to the opportunity, open a contact for editing, copy a contact, print contact information, remove a contact, send email to the contact, or set the contact's role in the opportunity. The Contacts tab displays a number in parentheses to show how many contacts are associated with the opportunity. Refer to Adding and editing contact information.
- **Notes tab**—Stores internal information about the opportunity. Notes are never sent to customers. You can add, edit, or remove notes that originated by phone, fax, post, web form, or email for any opportunity based on the type of correspondence you had with a contact or organization. And you can view the notes by opportunity, contact, organization, or by any combination of the three. Refer to Adding and editing opportunity notes.
- **Tasks tab**—Lists all of the tasks associated with an opportunity. You can add, open, copy, delete, print, and forward tasks and mark tasks complete. Tasks can be assigned to an opportunity based on the opportunity's sales stage, or they can be manually assigned and associated with an opportunity by another staff member. The Tasks tab displays a number in parentheses to show how many tasks are associated with the opportunity. Refer to Adding and editing tasks.

- **Quotes tab**—Contains all quotes associated with the opportunity. From this tab you can open, create, copy, delete, print, and send quotes to prospective and current customers. (An opportunity can contain multiple quotes, but all of the quotes are directly associated with the opportunity you are currently editing.) The Quotes tab displays a number in parentheses to show how many quotes are associated with the opportunity. Refer to Adding quotes to opportunities.
- **Attachments tab**—Lists all files attached to the opportunity. For instance, if a customer forwards you a document that is associated with the opportunity, the Attachments tab provides a convenient location where you can store the document for retrieval. You can add, open, download, delete, and view the properties of file attachments from this tab. Refer to Attaching files to records.
- **Audit Log tab**—Contains a permanent list of all actions associated with an opportunity, including the date of the action, who performed the action, what the action was, and a description of the action. This information is valuable for tracking interactions with customers, especially if more than one staff member works on the same opportunity. Refer to Audit logs.

Working with opportunities

When staff members in your marketing, service, or sales department discover a potential buyer for your organization's products or services, they can generate a lead (a prequalified opportunity) and assign it to you. Most of the time, you work with these existing opportunities that have been created by someone else. For this reason, the structure of this section emphasizes working with existing opportunities rather than adding new opportunities.

ORACLE SERVICE CLOUD Watch Tutorial

At other times, however, you can add opportunities to the knowledge base. For instance, when an existing customer contacts you by phone, fax, or email, you may want to add an opportunity to create a record of the customer's inquiry. Refer to Adding opportunities.

Regardless of how opportunities are assigned to you or where they originate, there are benefits from understanding what certain field properties mean and how they can impact opportunities during the sales cycle. This knowledge can help you effectively move your opportunities toward a sale.

Opportunity statuses

Opportunity statuses represent the current state of your opportunities. The seven default opportunity statuses are Lead, Reject, Active, Inactive, Closed, Dead, and Lost. Your administrator can also define additional opportunity statuses to show a more complete representation of the opportunities in your knowledge base. The following table describes the default opportunity statuses in Opportunity Tracking.

Table 620: Default Opportunity Statuses

Opportunity Status	Description
Lead	A lead is a prequalified opportunity that has not been accepted.
Reject	A rejected lead is a prequalified opportunity that has been rejected.
Active	An opportunity with the Active status is no longer a lead and is advancing in the system toward a sale.
Closed	An opportunity with the Closed status resulted in a sale.
Lost	An opportunity with the Lost status has been lost, for example, to a competitor.
Inactive	An opportunity with the Inactive status is no longer being pursued but could be activated at a later date.
Dead	An opportunity with the Dead status is no longer being pursued.

Accepting and rejecting leads

Leads are opportunities that are prequalified by your marketing, service, or sales department and are assigned the Lead status. Since leads are prequalified versions of opportunities, they appear as opportunities on the content pane. You are assigned leads based on your organization’s processes, but you can also manually create leads and assign them to yourself.

Note A lead assigned to a status that is *not* Lead or Reject is considered to be an opportunity.

Many of the opportunity fields for leads are populated. For instance, when you receive a lead, it already has an organization or contact association and a description of the product or service the organization or contact is interested in purchasing.

To accept a lead

1 From an open opportunity, click the Status drop-down menu.

2 Select the Active status to convert the lead into an active opportunity.

3 Click the Save and Close button to save and close the opportunity.

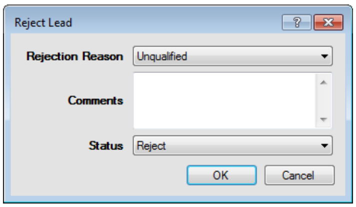
Tip To represent the movement of leads to opportunities and vice versa, all actions are recorded to the **audit log** and display on the Audit Log tab.

There may be times when a lead is assigned to you by mistake or when you are not interested in pursuing it. In these cases, you can reject the lead and document your reason for rejecting it.

To reject a lead

1 From an open opportunity, click the Reject button. The Reject Lead window opens.

Note If your profile does not allow you to reject leads, the Reject button is not active.



2 Click the Rejection Reason drop-down menu and select a rejection reason.

3 To provide additional information, type a comment in the Comments field.

4 Click the OK button to close the Reject Lead window.

5 Click the Save and Close button to reject the lead and save and close the opportunity.

Note Because rejected leads are associated with the Reject status, you must filter on the Reject status when searching for leads that have been rejected. You can convert a rejected lead into an active opportunity by changing its status to Active.

Strategies

Sales strategies are plans defined by your organization that include associated stages and tasks that should be completed as you work your opportunities. Your organization may have multiple sales strategies based on your business processes. Strategies ensure that best practices, policies, and procedures are followed during the sales cycle.

When you select a strategy while editing an opportunity, the Stage field populates with the first stage of the strategy. Any tasks associated with the strategy (including those associated with other stages) populate the Tasks tab.

Note If you change a sales strategy for an opportunity, all tasks associated with the previous strategy are deleted from the Tasks tab, and all tasks associated with the new strategy populate the Tasks tab.

Forecasting opportunities

A forecast is a projection of sales revenue for an opportunity that may close in a given sales period. Each opportunity contains fields for a manager forecast and a sales representative forecast. A manager forecast is a projection of sales revenue for an opportunity from a manager's point of view, whereas a sales representative forecast is a projection of sales revenue for an opportunity from a sales representative's point of view. Sales forecasts play an important role in helping management determine realistic sales projections for a sales period.

To forecast an opportunity

1 If you are a manager, click the Manager Forecast field.

  Or

  If you are a sales representative, click the Rep Forecast field.

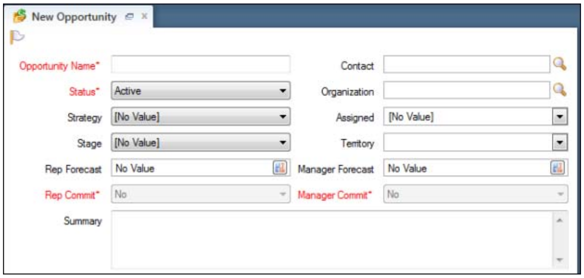
2 Enter the revenue amount that you forecast to be generated by the sale.

3 Click the Save and Close button to save and close the opportunity.

Note When a quote is associated with the opportunity and the Forecast check box is selected for the quote, the Rep Forecast field automatically reflects the amount specified in the quote. Refer to Adding quotes to opportunities.

Editing key opportunity fields

Now that you understand the role of statuses, strategies, and forecasts, you can complete the opportunity fields to update your opportunities. Required fields are labeled in red and have a red asterisk next to them. Remember that you can't save an opportunity without completing all of the required fields.



Note The fields you see when adding or editing an opportunity are defined in a workspace that is assigned to your profile by your administrator.

To edit key opportunity fields

From an open opportunity, enter field information described in the following table.

Table 621: Opportunity Fields Description

Field	Description
Flag	Click this button to add or change the priority notifications for the opportunity. Refer to Flagging records.
*Opportunity Name	Type the name of the opportunity in this field.
*Status	Click this drop-down menu and make a selection to change the opportunity's status. Refer to Opportunity statuses.
Strategy	Click this drop-down menu and make a selection to change the opportunity's strategy. Refer to Strategies.

Table 621: Opportunity Fields Description (Continued)

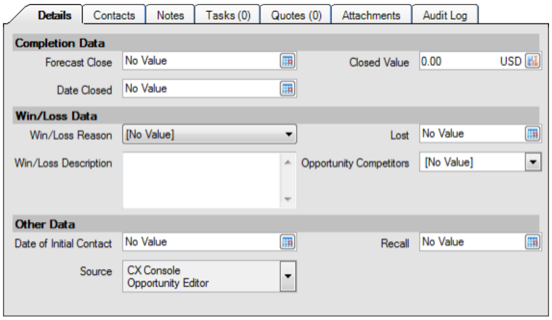
Field	Description
*Stage	Click this drop-down menu and make a selection to change the opportunity's stage. Refer to Strategies. **Note:** The options in this field depend on the strategy assigned to the opportunity.
Rep Forecast	Type a new value to change your monetary forecast for the opportunity. Refer to Forecasting opportunities. **Note:** The Rep Forecast field is associated with the Exchange Rates calendar. After you select a date within a specific exchange period, the calendar defaults to the start date of the specific exchange period after you close the calendar. The type of currency that appears in the Rep Forecast field depends on the default currency defined in your staff account. However, you can change the default from the Personal Settings option on the Oracle Service Cloud Options window. See Changing your personal settings.
*Rep Commit	Click this drop-down menu and select Yes to commit to closing the opportunity in the defined sales period. **Note:** This drop-down menu is not active until a value is entered in the Rep Forecast field.
Summary	Type a summary about the opportunity.
Contact	Click this button to add a primary contact to the opportunity. If a primary contact is not associated with an opportunity, an organization must be associated. Although many contacts can be associated with an opportunity, only one of them can be designated as the primary contact. Refer to Contacts overview. **Caution:** If you use the Search button on the Contact field to add a contact to the opportunity when a primary contact for the opportunity already exists, the existing primary contact is removed from the opportunity and replaced with the new primary contact.
Organization	Click this field to add an organization to the opportunity. If an organization is not associated with an opportunity, a primary contact must be associated. Refer to Organizations overview. **Note:** Only one organization can be associated with an opportunity.

Table 621: Opportunity Fields Description (Continued)

Field	Description
Assigned	Click this drop-down menu to re-assign the opportunity to another sales representative. The list of staff members that displays in the drop-down menu is the same list that displays in the Salesperson field of the contact record. Refer to To add or edit contact information. Also be aware that because of the account hierarchy in Opportunity Tracking, if a manager account is disabled, that manager's name continues to display as read-only in the Assigned drop-down menu of the opportunity workspace. This allows staff members who reported to that manager to display underneath the former manager until another manager is designated. Refer to Organizing staff accounts by manager. **Tip:** Use the Find field at the bottom of the Assigned drop-down menu to quickly locate staff members. Wildcards are supported when searching staff members. You can search strings that include a space by typing `%+Space+character`, which is helpful when searching last names. For example, typing `%+Space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so typing `b` in the Find field returns all items containing the letter b.
Territory	Click this drop-down menu to re-assign the opportunity to another territory.
Manager Forecast	Type a new value to change the manager forecast for the opportunity. Refer to Forecasting opportunities. **Note:** The Manager Forecast field is associated with the Exchange Rates calendar. After you select a date within a specific exchange period, the calendar defaults to the start date of the specific exchange period after you close the calendar. The type of currency that appears in the Manager Forecast field depends on the default currency defined in your staff account. However, you can change the default from the Personal Settings option on the Oracle Service Cloud Options window. See Changing your personal settings.
*Manager Commit	Click this drop-down menu and select Yes to commit to closing the opportunity in the defined sales period. **Note:** This drop-down menu won't be active until a value is entered in the Manager Forecast field.

Adding and editing Details tab information

By default, opportunities open with the Details tab active. Fields on this tab are used to collect additional completion and win/loss information for your opportunities and are useful for reporting purposes.



To edit Details tab information

1 From an open opportunity, enter field information described in the following table.

Table 622: Details Tab Description

Field	Description
Completion Data	This section contains fields for selecting forecast close information and completion dates for the opportunity.
Forecast Close	To change the date the opportunity is forecasted to close, type a date or click the calendar and select a new date from the calendar.
Date Closed	To change the date an opportunity closes, type a date or click the calendar and select a new date from the calendar.

Table 622: Details Tab Description (Continued)

Field	Description
Closed Value	To change the closed value for the opportunity, type a new value in this field. **Note:** The Closed Value field is associated with the Exchange Rates calendar. After you select a date within a specific exchange period, the calendar defaults to the start date of the specific exchange period after you close the calendar. The type of currency that appears in the Closed Value field depends on the default currency defined in your staff account. However, you can change the default from the Personal Settings option on the Oracle Service Cloud Options window. See Changing your personal settings.
Win/Loss Data	This section contains fields for selecting win/loss reasons for the opportunity.
Win/Loss Reason	To change the reason an opportunity was won or lost, click this drop-down menu and make a selection.
Win/Loss Description	This field lets you provide additional information about why an opportunity was won or lost. If you need to change it (for example, to make the description more specific), type your changes in this field.
Lost	To change the date that an opportunity was lost, type a date or click the calendar and select a new date from the calendar.
Opportunity Competitors	Click this drop-down menu and select the competitors that were also pursuing the opportunity. **Note:** A check box and a radio button appear next to each competitor in the drop-down menu. You can select multiple check boxes to show that multiple competitors are involved, but you can select only one radio button to designate the primary competitor.
Other Data	This section contains fields for entering miscellaneous data about the opportunity.
Date of Initial Contact	To change the date that initial contact was made with the customer, type a date or click the calendar and select a new date from the calendar.
Source	This field displays the source of the opportunity's creation in Oracle Service Cloud. **Note:** This is a read-only field.

Table 622: Details Tab Description (Continued)

Field	Description
Recall	To change the reminder date that you should contact the customer, type a date or click the calendar and select a new date from the calendar.

2 Click the Save and Close button to save and close the opportunity.

Adding and editing contact information

When an opportunity is assigned to you in the form of a lead, the contact information is often present. Sometimes, however, only an organization is associated with the opportunity, so you must add contact information. Refer to Contacts overview.

The Contacts tab contains a toolbar for working with the contacts associated with the opportunity.

The following table describes the Contacts tab toolbar buttons.

Table 623: Contacts Tab Toolbar Description

Button	Description
Add	Click this button and select one of the following options to add a new or existing contact to the opportunity.
Add New	Select this option to display the New Contact window. After creating and saving the new contact, the contact is added to the contact list for the opportunity.
Add Existing	Select this option to display the Contact Search window. After finding and selecting the existing contact, the contact is added to the contact list for the opportunity. **Note:** Your administrator can add a secondary report to the Contact Search window. This feature is especially useful for displaying all contacts associated with an organization when you add a contact to an organization's opportunities.
Open	Click this button to open the selected contact.
Print	Click this button to print the selected contact.
Copy	Click this button to copy the selected contact.

Table 623: Contacts Tab Toolbar Description (Continued)

Button	Description
Delete	Click this button to permanently delete the selected contact.
Remove	Click this button to remove the selected contact from the opportunity (without deleting the contact). **Note:** This does not delete the contact from the knowledge base. It just disassociates the contact from the opportunity.
Email	Click this button to send an email to the selected contact.
Set Contact Role	Click this button to open the Set Contact Role window. To add a contact role, follow these steps: 1. Click the Contact Role drop-down menu and select the role the contact has in this opportunity. 2. Click the OK button to close the Set Contact Role window. The contact role displays in the Contact Role column on the contact list. **Note:** Because contact roles are specific to Opportunity Tracking, you can add or edit a contact role only while adding or editing an opportunity.
Options	Click this drop-down menu to choose report options.

To add or edit contact information

1 From an open opportunity, click the Contacts tab.

2 Click the Add button on the Contacts tab toolbar and select Add New. The New Contact window opens.

Or

To edit a contact for the opportunity, right-click the contact and select Open. A window containing the contact's information opens. (The contact edit window contains the same fields as the New Contact window.)

3 Enter field information described in the following table.

Table 624: New Contact Window Description

Field	Description
Flag	Click this button to add or change the priority notifications for the opportunity. Refer to Flagging records.
*First Name	Type the contact's first name.
*Last Name	Type the contact's last name.
Email	Type the contact's primary email address. **Note:** If the contact has multiple email addresses, click the drop-down menu and select Email Alt1 or Email Alt2 and add the contact's alternative email addresses.
Office Phone	Type the contact's office phone number. **Note:** If the contact has multiple phone numbers, click the drop-down menu and select Mobile Phone, Fax Phone, Assistant Phone, or Home Phone and add the contact's other phone numbers.
Address	Click Edit to open a window for entering the contact's address. Type information in the Street, City, and Postal Code fields, and make selections from the Country and State/Prov. fields drop-down menus. When you select the country, the associated states or provinces appear in the States/Prov. menu. Close the window to display the address you entered.
Contact Type	Click this drop-down menu and select the type of contact you are working with.
*State	Click this drop-down menu and select one or more of the following check boxes: Service, Outreach, or Opportunities.
Organization	Click the Search button to open the Organization Search window and search for an organization to associate with the contact. If you need information about searching for an organization from the New Contact window, refer to Searching from open records.
Salesperson	Click this drop-down menu and select the salesperson who is associated with the contact. **Note:** This field defaults to the staff member who created the contact record.

Table 624: New Contact Window Description (Continued)

Field	Description
Title	Type the contact's job title in this field.
Login	Type a login for the customer to use when logging in to the customer portal. If the customer created an account on the customer portal, this field displays the login selected by the customer. **Note:** This field applies only to Oracle Service Cloud.
SLA	Click this field to add an SLA instance. For the steps to add an SLA instance, refer to Applying SLAs.
Global Opt-in	Click this drop-down menu and select Yes if the contact wants to receive Oracle Service Cloud mailings and surveys. Select No if the contact does not want to receive Oracle Service Cloud mailings and surveys.

4 Click the OK button to add the new contact record and associate it with the opportunity.

Adding and editing opportunity notes

From the Notes tab, you can add opportunity-related details to an opportunity. You can also choose the origin of the **note** you're adding (phone, fax, post, web form, or email) to accurately document the origin of the note information. And you can edit notes once you add them.

Note Notes are internal and are never sent to customers.

By default, the Notes tab opens with only opportunity notes displayed. If there's a contact or organization associated with the opportunity, and the Notes tab of the contact or organization record has notes associated with it, those notes can also be displayed.

To add or edit a note for an opportunity

1 From an open opportunity, click the Notes tab.

2 To add a note, click the Add button. An Opportunity Note header and a text area display.

Or

To edit a note, click Edit on the right side of the header bar.

3 Click the Opportunity Note drop-down menu and select one of the following channels where the opportunity note information originated:

- **No Channel**—The note information originated as something other than a phone call, fax, postal mail, web form, or email.
- **Phone**—The note information originated as a phone call.
- **Fax**—The note information originated as a fax.
- **Post**—The note information originated as postal mail.
- **CSS Web**—The note information originated from a web form.
- **Email**—The note information originated as email.

Note If Outlook integration is activated, Outlook email can be appended to opportunities, contacts, organizations, and incidents in the Email format. See Outlook Integration for complete details and procedures about integrating Microsoft Outlook with Oracle Service Cloud.

4 Click in the text area and type the note.

5 Click the Save and Close button to save your changes and close the opportunity.

To view contact and organization notes while editing an opportunity

Note To edit a contact or organization note, you must edit the contact or organization record.

1 From an open opportunity, click the Notes tab.

2 Click the View drop-down menu and select from the check boxes described in the following table.

Table 625: Notes View Description

Check Box	Description
Opportunity Notes	Select this check box to view all associated opportunity notes. **Note:** This check box is selected by default.
Contact Notes	Select this check box to view all associated contact notes. **Note:** A contact must be associated with the opportunity for the contact notes to display.

Table 625: Notes View Description (Continued)

Check Box	Description
Organization Notes	Select this check box to view all associated organization notes. **Note:** An organization must be associated with the opportunity for the organization notes to display.

Adding and editing tasks

You can view all **tasks** associated with an opportunity by clicking the opportunity's Tasks tab. Although you can manually add tasks, most tasks are added automatically to the Tasks tab when a sales strategy is selected for the opportunity. Refer to Tasks and Strategies.

The Tasks tab contains a toolbar for working with the tasks associated with the opportunity. The following table describes the Tasks tab toolbar buttons.

Table 626: Tasks Tab Toolbar Description

Button	Description
Add	Click this button and select one of the following options to add a new or existing task.
Add New	Select this option to add a new task to associate with the opportunity.
Add Existing	Select this option to search for an existing task to associate with the opportunity.
Open	Click this button to open the task for viewing or editing.
Print	Click this button to print the task.
Copy	Click this button to copy the task.
Delete	Click this button to permanently delete the task.
Remove	Click this button to remove the selected task from the opportunity (without deleting the task).
Complete	Click this button to complete the task.
Forward	Click this button to forward the task to the selected recipient.

Table 626: Tasks Tab Toolbar Description (Continued)

Button	Description
Options	Click this drop-down menu to choose report options. Refer to Changing output options.

To add or edit a task for an opportunity

1 From an open opportunity, click the Tasks tab.

2 Click the Add button and select Add New to open the New Task window.

Or

Right-click a task on the Tasks tab and select Open.

Note The New Task window opens with your name displaying in the Assigned field and the opportunity name displaying in the Opportunity field. The Task type field displays Opportunities because the task was created while editing an opportunity.

3 Enter field information described in the following table.

Table 627: Task Window Description

Field	Description
*Name	Type the name of the task.
Assigned	Click this drop-down menu and select a staff account. **Tip:** To quickly find and select a name in the list of staff members that displays in the drop-down menu, type the letters of the staff member's name in rapid succession until the name is highlighted, then press **Enter**. If you make an error in your typing, you can start over after waiting a few seconds.
*Status	Click this drop-down menu and select a status (Not Started, In Progress, Completed, Waiting, or Deferred).
Percent Complete	Type a value for the percentage of the task that is complete.
Priority	Click this drop-down menu and select a priority (Low, Normal, or High).

Table 627: Task Window Description (Continued)

Field	Description
Due Date	Click this calendar menu and select a due date.
Planned Completion	Click this calendar menu and select a planned completion date.
Date Completed	Click this calendar menu and select the task's actual completion date.
Task Type	This field contains Opportunities and is not active since the task type is determined by the type of record you add the task from. **Note:** If you were adding a standalone task, the field would be empty, and if you were adding a task from any other type of record, the field would contain that record type.
Notes	Type any notes about the task in this field. **Note:** You may need to scroll down to see this field.
*Opportunity	Click the Search button to open the Opportunity Search window, where you can associate an opportunity with the task.
Organization	Click the Search button to open the Organization Search window, where you can associate an organization with the task.
Contact	Click the Search button to open the Contact Search window, where you can associate a contact with the task.
Incident	Click the Search button to open the Incident Search window, where you can associate an incident with the task.
Answer	Click the Search button to open the Answer Search window, where you can associate an answer with the task.
Campaign	Click the Search button to open the Campaign Search window, where you can associate a campaign with the task.
Mailing	Click the Search button to open the Mailing Search window, where you can associate a mailing with the task.
Survey	Click the Survey button to open the Survey Search window, where you can associate a survey with the task.
Document	Click the Search button to open the Document Search window, where you can associate a document with the task.

4 After completing the required fields, click the OK button to associate the task with the opportunity.

Deleting opportunities

If your profile gives you permission to delete opportunities, the Delete button is available on the ribbon. When you delete an opportunity, you permanently remove it from the knowledge base.

To delete an opportunity

Caution Deleting an opportunity is permanent and cannot be undone.

1 With the opportunity open, click the Delete button. A message asks you to confirm the deletion.

2 Click the Yes button to delete the opportunity.

Adding opportunities

While most of your opportunities are assigned to you, undoubtedly there are times when you need to add an opportunity to create a record of a customer's inquiry. When adding an opportunity, all required fields must be filled in before you can save it, including any required fields configured by your administrator. The remaining fields on all tabs can be filled in at a later time.

To add an opportunity

1 Click File and select Opportunity.

2 Complete opportunity fields as described in To edit key opportunity fields.

3 To add detailed information to the opportunity, click the Details tab and complete the information as described in To edit Details tab information.

4 To add or edit **contact** information for the opportunity, click the Contacts tab and complete the information as described in To add or edit contact information.

5 To add or edit **note** information for the opportunity, click the Notes tab and complete the information as described in To add or edit a note for an opportunity.

6 To add or edit **task** information for the opportunity, click the Tasks tab and complete the information as described in To add or edit a task for an opportunity.

7 To add **quote** information to the opportunity, click the Quotes tab and complete the information as described in Adding quotes to opportunities.

8 To attach one or more files to the opportunity, click the Attachments tab and complete the information as described in Attaching files to records.

9 To view the **audit log** for the opportunity, click the Audit Log tab and refer to Audit logs.

10 Click the Save and Close button to save and close the opportunity.

Closing opportunities

Your ultimate goal with an opportunity is to close it, since an opportunity with a Closed status signifies an opportunity that has resulted in a sale.

To close an opportunity

1 From the opportunity, click the Quotes tab.

2 If a quote is associated with the opportunity, select the quote that resulted in a sale. If a quote is not associated with the opportunity, skip to step 4.

3 Select the Forecast check box under the Forecast column. The Rep Forecast field automatically updates to the value of the quote that was selected.

4 Click the Status drop-down menu and select Closed.

5 Click the Stage drop-down menu and select the appropriate stage.

6 If necessary, edit the Rep Forecast field so that it displays the correct value.

7 Click the Rep Commit field and select Yes.

8 Click the Tasks tab and make sure the appropriate tasks are completed.

9 Click the Details tab and complete the appropriate fields under Completion Data, Win/ Loss Data, and Other Data. Refer to Adding and editing Details tab information.

10 Click the Save and Close button to save and close the opportunity.

Note Upon changing the status from Active to Closed and saving the opportunity, the Date Closed field on the Details tab populates with the current date. The opportunity no longer appears in most of your reports unless you filter on the Closed status type when searching.

Other opportunity actions

Besides editing and adding opportunities, you may have other opportunity management duties as well. You might, for example, want to forward opportunities to others within or outside your organization, copy an opportunity, or make the same change to multiple opportunities.

- **Forwarding opportunities**—You can send a copy of an opportunity to other recipients. For instance, your manager may want to see all opportunities related to a particular inquiry, or you might want another sales representative to review your opportunity data before sending a quote to a customer. Refer to Forwarding records.
- **Copying opportunities**—There may be times when you need to create an opportunity that is similar to an existing one. Rather than entering all field information from scratch, just copy the existing opportunity and use it as a base for the new one. Refer to Copying records.
- **Updating multiple opportunities**—You can update, forward, and delete multiple opportunities at one time rather than performing the same action on each opportunity individually. This saves time when you have several opportunities that apply to the same sales product or service. Refer to Updating multiple records.

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Quotes

A big part of your role as a sales representative is preparing quotes for customers. Your administrator can create **quote templates**, which are then available for you to use to generate quotes. When you work on an **opportunity**, you complete quote information that defines products, quantities, and discounts. You select a quote template and merge it with the data you have entered into the opportunity to create a customized quote you can send to your customer.

Preparing quotes

Before you can send a quote to a customer, you must add the quote to the **opportunity**, add **sales products** to the quote, and merge the opportunity and quote information into a **quote template**. Only then can you send the quote.

Note A quote must always be associated with an opportunity. In order to create or edit a quote, you must first open the opportunity that is associated with the quote.

Quotes toolbar

The Quotes tab on an opportunity workspace contains a toolbar for working with quotes for the opportunity. The following table describes the default buttons on the Quotes toolbar.

Table 628: Quotes Toolbar Description

Button	Description
Add New	Click this button to add a quote to the opportunity. Refer to Adding quotes to opportunities.
Open	Click this button to open the selected quote. Refer to To edit a quote.

Table 628: Quotes Toolbar Description (Continued)

Button	Description
Print	Click this button to print the selected quote. Refer to To print a quote.
Copy	Click this button to copy the selected quote. Refer to To copy a quote.
Delete	Click this button to delete the selected quote. Refer to To delete a quote.
Send	Click this button to send the selected quote to the customer. Refer to Sending quotes.
Options	Click this drop-down menu to choose report options.

Adding quotes to opportunities

Adding a quote to an opportunity is the first step in preparing a quote. After you add a quote to an opportunity, you complete the quote fields, add **sales products** to the quote, and merge the quote data into a **quote template**.

To add a quote to an opportunity

1 While adding or editing an opportunity, click the Quotes tab.

2 Click the Add New button. The New Quote window opens.

3 Enter field information described in the following table.

Table 629: New Quote Window Description

Field	Description
***Name**	Type the name of the quote in this field.
Status	Click this drop-down menu to select the status of the quote. Default statuses are Unsent, Sent, Queued, Accepted, and Returned.
Unsent	Select this status for quotes that have been created but not yet sent. **Note:** This is the default status for new quotes.

Table 629: New Quote Window Description (Continued)

Field	Description
Sent	This status is automatically selected when a quote is sent to a customer. **Note:** If a quote has already been sent to a customer, you cannot edit the quote again unless your profile gives you permission.
Queued	Select this status if the quote is waiting to be reviewed.
Accepted	Select this status if the quote has been sent and the customer has accepted it.
Returned	Select this status if the quote has been returned because it needs to be renegotiated or because it was rejected by the customer.
Schedule	Click this drop-down menu to select a price schedule to associate with the quote. (Your administrator has added different price schedules based on your organization's needs.)
Product list	When you select a price schedule, all sales products that are associated with the schedule appear in the product list below the Schedule field. If the products are organized in folders, click the plus sign next to a folder to expand it and show the products within that folder. You can then double-click or drag and drop products to add them to the quote.
Sales product grid	After you select a schedule and add one or more sales products from the product list, the sales product grid displays details about the added sales products. Refer to Adding sales products to quotes. **Note:** Working with sales products in the grid modifies the products only for the quote you are editing and does not change the sales product in the product catalog. If, for example, you discount the product in the sales product grid for a particular quote, the original price is unchanged in the product catalog.
Adjusted Name	This column displays the product's name.
Original Price	This column displays the product's price as it is defined in the product catalog for the price schedule you selected.
Adjusted Price	This column displays the adjusted price of the product, which you can edit by selecting a product in the sales product grid and opening it.

Table 629: New Quote Window Description (Continued)

Field	Description
Quantity	This column displays the quantity of the product included in the quote.
Discount	This column displays the discount percentage applied to the sales product.
Total	This column displays the total adjusted price for the sales product, taking into account the quantity selected and the discount applied to that specific product.
Action	After a sales product has been added to the list, choose one of the following actions: • **Open**—Click Open to open the quote product editor and make changes to the product. • **Delete**—Click Delete to delete the sales product from the quote.
Quote Total	This read-only field displays the sum of product totals for all the products in the quote. It includes the discounts applied to the specific products in the quote, but it does not include the discount for the entire quote, which you can enter in the % Discount field.
% Discount	Type the percent discount to be applied to the entire quote, or use the arrows to increase or decrease the value.
Grand Total	This field displays the total price for the quote after the quote discount has been applied.
Offer Start Date	Click this calendar to select the start date for the quote from the current month's calendar. If necessary, use the arrows at the top of the calendar to move backward or forward by month.
Offer End Date	Click this calendar to select the end date for the quote.
Quote Document	If the quote information has not been merged into a quote template yet, Attach Quote is active. Click Attach Quote to merge the quote with a quote template. Refer to Merging opportunity and quote data into a quote template. **Note:** After quote information has been merged into a quote template, this section displays the name of the quote as well as options to edit and delete the quote.

Table 629: New Quote Window Description (Continued)

Field	Description
Notes	Type a description of the quote in this field.

4 Click the OK button on the ribbon to close the New Quote window and add the quote to the opportunity.

5 Click the Save button to save the quote you just added to the opportunity.

Adding sales products to quotes

When you add a quote to an opportunity, you must select a **price schedule** in the Schedule drop-down menu on the New Quote window. Your administrator added the price schedules, and each price schedule corresponds to a specific set of **sales products**. When you select a price schedule, the associated products appear in a product list below the Schedule field.

You use the product list to select the products you want to add to the quote. Once they appear in the sales product grid on the right, you can adjust quantities and specific discounts for each product for this quote.

Note Editing a product for this quote does not change its price in any other quote, nor does it change the price in the product catalog.

The following procedure assumes that you have already added a quote to an opportunity, but have not yet selected a price schedule or added sales products to the quote.

To add a sales product to a quote

1 While editing an opportunity, click the Quotes tab.

2 Right-click the quote you want to open and select Open. The quote editor opens.

3 Click the Schedule drop-down menu and select a price schedule for the quote.

Note When you select a price schedule, all sales products associated with the price schedule populate the product list below the Schedule field. You can click the plus sign next to folders to expand them. The sales product grid is located next to the product list.

4 Double-click a sales product in the product list to move the product to the sales product grid. Information about the sales product appears in the grid.

Or

Drag a sales product from the product list to the sales product grid.

Note To select multiple products before dragging, press **Ctrl** while making your selections.

5 To edit a selected sales product in the sales product grid, right-click the product and select Open. The quote product editor opens.

a Enter field information described in the following table.

Table 630: Quote Product Editor Description

Field	Description
Original ID	This read-only field displays the product ID.
Original Name	This read-only field displays the product name.
Original Price	This read-only field displays the price assigned to the product in the price schedule you selected for the quote.
Original Description	This read-only field displays the product's description.
Adjusted ID	Type a product ID in this field if you want to modify the original ID.
Adjusted Name	Type a product name in this field if you want to change the product's name in the quote.
Adjusted Price	Type a price in this field if you want to change the original price of the product for this quote. The value you enter appears in the Adjusted Price column on the sales product grid.
*Quantity	Type a quantity in this field if you want to change the default value of 1. **Note:** Changing this field affects the value of the Total column on the sales product grid.
*Discount	Type a percent discount in this field if you want to change the default value of 0. **Note:** Changing this field affects the value of the Total column on the sales product grid.

Table 630: Quote Product Editor Description (Continued)

Field	Description
Adjusted Description	Type a description in this field if you want a description other than the original description.
Notes	Type any notes about the product quote in this field.

b Click the OK button to save your changes, close the quote product editor, and return to the open quote.

6 Click the OK button to save your changes to the quote, close the quote, and return to the opportunity.

7 Click the Save button to save the opportunity with your changes to the quote.

Now you can merge opportunity and quote data into a quote template to generate a quote you can send to the customer.

Merging opportunity and quote data into a quote template

Now that you have added a quote to the opportunity and then added sales products to the quote, you have defined all the information necessary to generate the quote for the customer. Next, you can merge the opportunity and quote data with a **quote template**. When you select a quote template from the available options, Opportunity Tracking generates a quote you can save and send to the customer.

Note When you add a quote to an opportunity, Opportunity Tracking calculates the value of the quote based on the product quantities and the discounts you entered. As a result, you already have all the information you need to present the quote to the customer verbally. If, for some reason, you do not want to use Opportunity Tracking to send the quote to the customer, it is not necessary to merge the data into a quote template.

To merge opportunity and quote data into a quote template

1 While editing an opportunity, click the Quotes tab.

2 Right-click the quote you want to merge into a quote template and select Open. The quote editor opens.

3 Click Attach Quote on the bottom left of the quote editor. The Select Template window opens, providing a list of available quote templates that have been defined by your administrator.

Note If Attach Quote is not enabled, there are no available quote templates. Contact your administrator for help.

4 Select a quote template and click the OK button. The opportunity and quote data are merged into the quote template, and the Quote Viewer window opens with the quote displaying as a Word document.

5 To edit the document, make changes using Microsoft Word.

Note You can make any changes you need to customize the quote document, but your changes do not modify the quote template.

6 To merge the same opportunity data into a different quote template, click the Merge button and select a new template from the Select Template window.

7 Type a name for the quote in the Custom Document Name field to ensure that the name of the quote is unique for the customer receiving it.

8 Click the Save button to save the quote and return to the quote editor. The quote document name appears at the bottom left of the window.

9 Click the OK button to close the window and add your quote to the opportunity. A paper clip icon appears on the Quotes tab and in the first column of the quotes list.

10 If you want to forecast the quote to close within the specified sales period, select the Forecast check box in the Forecast column.

Note If you select the Forecast check box, the quote amount appears in the Rep Forecast field of the opportunity. Refer to Forecasting opportunities.

11 Click the Save button to save the quote to the opportunity.

After saving the opportunity, you can view the quote audit log, which contains all activities related to the quote. Refer to Viewing the quote audit log.

Sending quotes

After merging all necessary information about the opportunity into the quote template, you should print and review the quote to be sure all the information is correct. (Refer to To print a quote.) Then, when you are ready, send the quote to your customer.

To send a quote to a customer

1 From the Quotes tab of the opportunity, right-click the quote you want to send and select Send. The Send Quote window opens.

Note The Send button is not active unless all opportunity and quote data have been successfully merged into a quote template. Refer to Merging opportunity and quote data into a quote template.

2 Enter field information described in the following table.

Table 631: Send Quote Window Description

Field	Description
To	Type the email address of the contact or staff member you are sending the quote to, or click this button to open the Select Names window. Refer to Selecting recipients. **Note:** This field populates with the primary contact's email address from the Contacts tab.
Cc	Type an email address in the Cc field to send the quote to, or click this button to open the Select Names window. **Note:** All recipients can see the email addresses in the Cc field.
Bcc	Type an email address in the Bcc field to send the quote to, or click this button to open the Select Names window. **Note:** No other recipients can see the email addresses in the Bcc field.
Subject	Type the subject for the quote in this field.
Comment	Type any comments in this field.
Opportunity Files	Any files that are permanently attached to the opportunity are listed in this section. Select the check box next to any file attachments you want to send with the quote.

Table 631: Send Quote Window Description (Continued)

Field	Description
Temporary Files	Click the Add Files button to select a file to send with the quote. This action does not permanently attach the file to the opportunity.
Send as PDF	Select this check box if you want to send the quote as a PDF attachment instead of the default Word attachment. **Note:** If this check box does not appear, your administrator has not configured Opportunity Tracking to send quotes as PDF documents.

3 Click the Send button to send the quote to the recipients listed on the Send Quote window.

Note After a quote has been sent to a customer, the details of the quote (From, To, Cc, Bcc, Format, Attachments, Subject, and Comments) are recorded as a note to the opportunity the quote is associated with. In addition, the status of the quote is automatically set to Sent.

Managing quotes

In addition to adding and sending quotes, the toolbar on the Quotes tab lets you open a quote for editing as well as print, copy, and delete a quote. These options are also available when you right-click a quote. When a quote is open, you can view the audit log that lists all activities related to the quote.

Once a quote has been sent, you cannot edit it unless your profile gives you permission to do so. However, you can make a copy of the quote, edit the copy, and then send the copied quote to a customer.

To edit a quote

1 While editing an opportunity, click the Quotes tab.

2 Right-click the quote you want to edit and select Open. The quote editor opens.

Note You can edit only one quote at a time.

3 Modify fields as needed. Click here for field descriptions.

4 Click the OK button to save your changes to the quote.

5 Click the Save and Close button to save the quote and close the opportunity.

To copy a quote

1 While editing an opportunity, click the Quotes tab.

2 Right-click the quote you want to copy and select Copy. The copied quote appears in the quote list with a name of "Copy of <quote>" and its status is set to Unsent.

3 Right-click the copied quote and select Open to edit as necessary. Click here for field descriptions.

4 Click the OK button on the quote editor to save your changes to the copied quote.

5 Click the Save and Close button to save the copied quote and close the opportunity.

To delete a quote

1 While editing an opportunity, click the Quotes tab.

2 Right-click the quote you want to delete and select Delete. A confirmation message opens.

3 Click Yes to delete the quote from the opportunity.

4 Click the Save and Close button to save your changes on the Quotes tab and close the opportunity.

To print a quote

1 While editing an opportunity, click the Quotes tab.

2 Right-click the quote you want to print and select Print. The Print Dialog window opens.

3 Click File on the menu and select Print. The Print window opens.

4 Click the Print button to print the quote.

Viewing the quote audit log

All actions related to a quote are recorded to the quote audit log, which is located next to the Attachments tab on the quote editor. Information in the audit log includes when the quote was created and updated, by whom, and the actions taken.

Note Before you can see any recent actions in the audit log, you must save the opportunity the quote is associated with.

The following table describes the columns in the quote audit log.

Table 632: Quote Audit Log Columns Description

Column	Description
When	This column lists the date and time of the actions.
Who	This column lists the name of the sales rep who acted on the quote.
What	This column lists the actions related to the quote. • **Created**—The first time a quote is added to the opportunity and the opportunity is saved. • **Assigned—**The staff member the quote is assigned to. • **Edited**—The quote is edited and the opportunity is saved. • **Forecasted/Unforecasted**—The quote Forecast check box is selected or cleared and the opportunity is saved. • **Changed Status**—The quote status is changed and the opportunity is saved. • **Changed Price Schedule**—The quote price schedule is changed and the opportunity is saved. • **Quote Template Merged/Updated/Deleted**—The quote document is merged, edited, re-merged, or deleted and the opportunity is saved. • **Quote Sent**—The quote has been sent.
Description	This column displays more information about the action (for example, the editor used to save or edit the quote or the email address the quote was sent to).

Security Practices

The following sections are intended for administrators using Oracle Service Cloud. They contain information, benefits, and recommendations for securely implementing Oracle Service Cloud.

- Overview
- Developing a Security Plan
- Configuring the Administration Interface
- Email Security
- Abuse Detection Security
- Security-Related Configuration Settings
- Recommendations for Security-Related Configuration Settings

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Overview

Security is a changing landscape with new attack methods continuously developing, many of which are based on social engineering that takes advantage of user trust. An important constituent in product security is your diligence in configuring Oracle Service Cloud and your vigilance in its use. This document discusses important security issues and provides specific information about configuration settings that address product security.

Oracle Service Cloud security and compliance

The protection of our customers' assets is a high priority at Oracle. We strive to make your Oracle Service Cloud experience secure by holding ourselves to industry-standard security and privacy requirements in our software development practices and operational methods. For added protection, Oracle Service Cloud can be hosted within our community cloud environments that align with well-known regulatory control frameworks. Depending on the cloud environment you purchased, accreditations, attestations, and certifications may include:

- DIACAP—Department of Defense Information Assurance Certification and Accreditation Process
- DISA ATO—Defense Information Systems Agency–Authority to Operate
- FedRAMP pATO—Federal Risk and Authorization Management Program - Provisional Authority to Operate
- HIPAA—Health Insurance Portability and Accountability Act
- NIST 800-53—National Institute of Standards and Technology
- PCI-DSS—Payment Card Industry Security Standards Council
- SSAE 16 Type II
- SOC2 Type II

Network and hosting infrastructure

Oracle uses "defense in depth" with multiple levels of security crafted to protect everything in the hosted environment from the network infrastructure to the software.

Oracle Service Cloud sites are hosted in security-hardened pods where each is protected by redundant firewalls and a demilitarized zone architecture. All major services, which include web, database, and mail services, are separately hosted and load balanced. The pods are audited daily, both internally and externally, and every quarterly software release is subjected to a third-party audit. In addition, a dedicated security staff monitors all systems for events that could jeopardize system reliability or data integrity.

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Developing a Security Plan

When configuring your Oracle Service Cloud site, your goal is to obtain the maximum effectiveness for your staff and your customers, while ensuring that your site is safe from threats. Although Oracle Service Cloud is designed and implemented with the highest levels of security, we recognize that our customers' needs vary. Therefore, we offer configuration options that let you accept various levels of risk. Your sensitivity to those risks should dictate the configuration and management options you use in your site.

Important Never assume that your security system is foolproof. New attacks are designed every day, so you should expect that any weakness will eventually be exploited. Ongoing vigilance and process improvement are required to minimize risk.

Common security threats

Risks to using a web-facing software product like Oracle Service Cloud to collect and store data include but are not limited to:

- Data leaks to unauthorized persons.
- Attacks to subvert security measures.
- Vandalism of the host site.
- Attacks against site users.

Security considerations

To start developing your security plan, we've compiled a list of questions and considerations that relate to the use of Oracle Service Cloud. Your answers should help determine the content of your security plan.

The following list is a minimal set of considerations that relate to the use of Oracle Service Cloud.

- What type of data will you collect and store?

- ▷ Is personal information such as name, address, telephone number, and email address collected?
- ▷ Is medical or financial information collected and stored?
- ▷ Are there required data security standards or certifications, such as HIPAA or PCI?

- What methods will be used to obtain the data?
  - ▷ Does information come over the Internet or a private intranet?
  - ▷ Does information come from a voice-based system?
- What is the access method for the data?
  - ▷ Are users required to provide credentials, such as a user name and password, or is data openly available?
- What are the risks associated with compromised data?
  - ▷ What is the monetary cost?
  - ▷ What is the non-monetary cost, such as loss of reputation?
  - ▷ Are there legal ramifications?
- Who are your user groups?
- What authentication methods are available and which should be used for each type of user?
- For each type of data, which types of users should have access and how should the authorization be accomplished?
- What communication methods will be used and what efforts should be made to protect communication from being compromised?

While there are many resources available that can help you develop security policies and procedures, keep in mind that you should rely only on those resources that you find reliable and trustworthy. The following is a list of suggested reading on security topics.

- *Writing Information Security Policies* by Scott Barman
- *Information Security Policies and Procedures* by Thomas Peltier
- SANS Institute for information about security training and security certification
- OWASP—A nonprofit organization focused on improving software security

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Configuring the Administration Interface

Properly configuring the **administration interface** is critical to your site security because staff members can be granted permission to view and modify virtually everything in an Oracle Service Cloud site, including your site controls and data. Oracle Service Cloud uses role-based access control through profile permissions, navigation sets, and workspaces that you define. All staff members are assigned a profile that is associated with a navigation set and one or more workspaces.

- **Navigation sets**—A navigation set is a combination of navigation buttons and their associated navigation lists. Each navigation list contains unique reports and items based on staff member responsibilities, and every profile must include a navigation set that all staff members with that profile use when working in Oracle Service Cloud. By carefully examining staff member responsibilities before you create navigation sets, you can grant access to functionality to only those individuals who require it.
- **Workspaces**—Workspaces define the appearance of the agent desktop when staff members add, view, and edit records in Oracle Service Cloud. Each profile has one or more workspaces that can be designed to provide only the functionality that is needed by the staff member. Along with navigation sets, workspaces provide macro-level control over access rights.
- **Profile permissions**—Profiles let you control what areas of Oracle Service Cloud your staff members can access and what specific actions they can perform in those areas.

Note You must create navigation sets before profiles in order for staff members to have access to reports and other components. In addition, if you use custom workspaces, we recommend creating them before creating profiles so you can assign the workspaces to specific profiles.

Using role access to define permissions

Setting permissions carefully and thoughtfully greatly enhances the security of your site. This is particularly true regarding administrator permissions, which typically let staff members edit **configuration settings** and administrative controls.

One method for determining the permissions you grant is to use a role-access method. The following table is not a complete list of all the permissions available, but an abbreviated set representing those permissions with direct security ramifications. While no contrived set of roles will represent any organization perfectly, the four job types used here demonstrate a general scenario of how permissions might be set up.

- **Administrator**—Staff member with access to all functionality.
- **Supervisor**—Staff member with supervisory responsibilities but no responsibility for configuring your site.
- **Staff member**—Staff member with access to data but no administrative controls.
- **Developer**—Staff member with access to development and integration interfaces.

Note Communities in Oracle RightNow Social Experience have their own set of user types that are different from those listed in the scenario described here.

Table 633: Role-Access Scenario

Setting	Functionality	Roles
Administration		
Administration	Create and edit the following items: • Custom Fields • Messages • Mailboxes • Currencies and Exchange Rates • Service Level Agreements • Response Requirements • Chat Hours • Quote Templates • Territories • Promotions • Strategies • Sales Periods • External Suppression List • Thread Type Correction	Administrator
Groups/Accounts/Distribution Lists	Access staff accounts and distribution lists.	Administrator Supervisor
System Error Log	Access log files under Site Configuration.	Administrator Supervisor
Workspace Designer	Access Workspaces and Workflows explorers and designers.	Administrator Supervisor
Scripting	Create and edit agent scripts.	Administrator Developer
Object Designer	Create custom objects.	Administrator Developer
Message Templates	Customize administrator notifications, administrator emails, and contact emails.	Administrator
CP Promote	Promote customer portal pages from the staging area to the production area.	Administrator Developer
CP Stage	Copy customer portal development files to the staging area.	Administrator Developer

Table 633: Role-Access Scenario (Continued)

Setting	Functionality	Roles
CP Edit	Access the Customer Portal Administration site and edit customer portal pages in the development area using WebDAV.	Administrator Developer
Rules View	View business rules.	Administrator Supervisor Staff member
Data Import	Import data, including answers, contacts, incidents, organizations, and custom objects.	Administrator Supervisor
Process Designer	Create custom processes.	Administrator Developer Supervisor Staff member
Virtual Assistant Edit	Access to configuration of the virtual assistant.	Administrator
Broadcast Notifications	Send messages to other staff members.	Administrator Supervisor
Configuration	Access to the following areas and functionality: • Password Configuration • Configuration Settings • Configuration Wizard • Message Bases • File Manager • Interfaces • Add-In Manager • Email Address Sharing	Administrator

Table 633: Role-Access Scenario (Continued)

Setting	Functionality	Roles
Business Process Settings	Define interface appearance and functionality, including: • Navigation Sets • Customizable Menus • Countries • Products/Categories/Dispositions • Standard Text • Variables • Holidays • Product Catalog • Price Schedules • Tracked Link Categories	Administrator Supervisor
Rules Edit	Edit business rules.	Administrator Supervisor
Profiles	Add and edit profiles.	Administrator
SSO Login (SAML 2.0)	Allows login only through an identity provider, that is, using a single sign-on process. **Note:** Oracle Service Cloud uses the SAML 2.0 protocol for single sign-on.	Administrator
Skill Edit	Access to configuration of advanced routing.	Administrator Supervisor
Agent Browser User Interface	Access to the Oracle Service Cloud using the Agent Browser UI through account authentication.	Administrator Supervisor Staff member
Public SOAP API	Access the public SOAP API through account or session authentication.	Administrator Developer
Public Knowledge Foundation API	Access the public Knowledge Foundation API through account or session authentication.	Administrator Developer Supervisor Staff member
Mobile Agent App	Access Oracle Service Cloud on a mobile device through account authentication.	Administrator Supervisor Staff member

Table 633: Role-Access Scenario (Continued)

Setting	Functionality	Roles
Organizations		
	Add, edit, delete, and view organizations.	Administrator
	Edit and view organizations.	Supervisor
	View organizations.	Staff member
Contacts		
	Add, edit, delete, view, and move contacts.	Administrator
	Add, email, edit, delete, and view contacts.	Supervisor
	Email, edit, and view contacts.	Staff member
Service		
Incidents	Add, edit, view, and delete incidents; propose incidents as answers; respond to incidents.	Administrator Supervisor
	Add, edit, and respond to incidents.	Staff member
Answers	Add, edit, and delete answers; set answers to public status.	Administrator Supervisor
	Add and edit answers.	Staff member
Asset	Add, edit, delete, and view assets.	Administrator Supervisor
	View and edit assets.	Staff member
Opportunities		
	Create, edit, delete, view, respond to leads, and send quotes.	Administrator
	Create, edit, and view leads, and send quotes.	Supervisor
	View leads and send quotes.	Staff member

Table 633: Role-Access Scenario (Continued)

Setting	Functionality	Roles
Outreach		
	Create, edit, delete, and view mailings, campaigns, documents, templates, snippets, file attachments, tracked links, segments, and contact lists.	Administrator
	Edit and view mailings, campaigns, documents, templates, snippets, file attachments, tracked links, segments, and contact lists.	Supervisor
	View mailings, campaigns, documents, templates, snippets, file attachments, tracked links, segments, and contact lists.	Staff member
Feedback		
	Create, edit, delete, and view surveys, questions, documents, templates, snippets, file attachments, tracked links, segments, and contact lists.	Administrator
	Edit and view surveys, questions, documents, templates, snippets, file attachments, tracked links, segments, and contact lists.	Supervisor
	View surveys, questions, documents, templates, snippets, file attachments, tracked links, segments, and contact lists.	Staff member
Tasks		
	Create, edit, delete, and view tasks.	Administrator
	Edit, view, and delete tasks.	Supervisor
	View tasks.	Staff member
Analytics		
	Create, edit, view, customize, print, export, and forward reports.	Administrator

Table 633: Role-Access Scenario (Continued)

Setting	Functionality	Roles
	Edit, view, customize, print, export, and forward reports.	Supervisor
	View, edit, print, export, and forward reports.	Staff member

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Email Security

Most email sent over networks is not encrypted. However, we recommend encrypting all data that you deem sensitive. Oracle Service Cloud is designed to prevent the inadvertent release of information, but there are also a number of configuration settings related to email that you can use to increase your protection.

Certificates

Secure sockets layer (SSL) protocol provides encryption services for client-server communication security. To accomplish this, digital **certificates** are used to convey identification information and encryption keys. Since all agent desktop communication is over SSL, your site already uses a certificate issued by Oracle. This certificate can be used for other secure communication links, including staff member and customer access and email.

For a discussion about the configuration settings you can use to protect your site and improve your security, see Customer Portal Settings for Site Protection.

Emailing links to answers

You can email links to answers from the **customer portal** or the **administration interface**. If a login is required for customers to access an answer, a user name and password will be required.

Answer visibility depends on who is trying to access the answer—a customer or a staff member—and where they are accessing it from—the customer portal or the administration interface. From the customer portal, visibility is controlled by a number of fields, including the Status field, which is defined on the administration interface. For example, if an answer status has been set to Private, then that answer is not visible to customers. For customers accessing answers from the customer portal, each answer link is protected by a security token with a limited lifetime that is defined in the configuration setting SEC_EU_EMAIL_LINK_EXPIRE. The default value is eight hours, meaning that a customer has eight hours to click the link and read the information published in the answer. We recommend using this security token to limit the time answers are available to customers. Because attackers need time to build phishing sites (for luring a user into clicking a link), the smaller the window of time you allow for access to your answers, the more secure your site will be.

For example, if an email with an answer link is copied by an attacker, access to the security token and the link has been compromised. If your site requires customers to log in to see an answer, the answer itself is safe, but the attacker can create a phishing scenario using a modified link that takes customers to an external site where their login credentials are stolen. It takes time to accomplish this, so the shorter the window of opportunity, the lower the likelihood of success. Setting the security token expiration in SEC_EU_EMAIL_LINK_EXPIRE helps discourage attackers. See Customer Portal Settings for Passwords.

From the administration interface, **profile** permissions control staff members' access to answers. Permissions of the staff member who sends an email link to an answer do not transfer to the receiver, so data security is maintained.

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Abuse Detection Security

A potential threat to any website is a "denial of service" (DoS) attack where the attacker issues a large number of requests for service. Perpetrators of DoS attacks typically target sites or services hosted on high-profile web servers such as banks and credit card payment gateways. These attacks can slow the response time to legitimate visitors, overwhelm the database server, and generate excessive emails that interfere with normal operation.

To prevent these attacks, Oracle Service Cloud provides web form and survey security through CAPTCHA, which automatically requires human validation when abuse is suspected. CAPTCHA validation is typically triggered only if there appears to be active abuse of a website. However, you can customize CAPTCHA requirements from the **customer portal**.

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Security-Related Configuration Settings

Certain configuration settings have a direct effect on security. Some affect the administration side of Oracle Service Cloud and others affect the customer portal or an external website. By making a conscious decision to determine the appropriate level of security that fits your business, you can define configuration settings to reflect a suitable security level.

This section lists configuration settings that specifically impact security. Paths to each setting in the Configuration Settings editor, descriptions, and default values are also listed. Configuration settings in this section are grouped into the following categories.

- Site protection
- Session data
- Password protection
- File attachments
- Chat
- Social Experience

For a complete list of security-related configuration settings by security level and significance, see Recommendations for Security-Related Configuration Settings.

Note Depending on your site's configuration, some settings may be hidden. If you cannot find a certain configuration setting, contact your Oracle account manager.

Site protection

One of the most important steps you can take to protect your site is to limit access to the greatest extent possible while still meeting the requirements of your staff members and customers. By restricting access to your site or certain functionality within your site, you can reduce opportunities for unwanted visitors with malicious intent to gain access to your assets. Configuration setting descriptions that affect your site's protection are listed in the following two tables.

Table 634: Administration Interface Settings for Site Protection

Configuration Setting	Description	Default Value
Common > General > Security		
SEC_VALID_ADMIN_HOSTS	Defines which hosts can access the administration interface.	Blank
SEC_VALID_INTEG_HOSTS	Defines which hosts can access the integration interface. Only staff members who log in from the listed IP addresses, including network groups, can access the API interface.	Blank
RightNow User Interface > General > Security		
CLIENT_SESSION_EXP	Requires staff members to log in again after a specified period of inactivity on the **Service Console**. To reduce the risk of a misappropriated agent session, we recommend keeping the default value of 15. **Note:** This setting is not used strictly for security. It is also used in the desktop usage administration feature.	15
RightNow User Interface > Tool Bar > General		
LOGIN_SECURITY_MSG	Defines a message to display after staff members click the Login button on the Login window. **Tip:** You can use this setting to issue a security statement, distribute terms of a use agreement, or any login message you want staff members to agree to before the Service Console opens.	Blank

Table 635: Customer Portal Settings for Site Protection

Configuration Setting	Description	Default Value
Common > General > Security		
CP_REDIRECT_HOSTS	Defines which hosts are allowed as redirect targets from the customer portal. The default setting (blank) prevents all redirects outside of your interface domain. If you have more than one interface that you need to redirect to, each interface domain name must be specified in CP_REDIRECT_HOSTS. • Blank = Prevents all redirects outside of your interface domain. • * = Allows all redirects, including redirects to external sites. (Not recommended.) **Important:** Redirects within your interface domain, as well as hosts specified in related configuration settings are implicitly allowed. Therefore, those domains do not need to be listed in the CP_REDIRECT_HOSTS setting.	Blank
SEC_VALID_ENDUSER_ HOSTS	**Important:** This setting applies only to PHP pages. It does **not** block access to static assets such as URLs, images, JavaScript, folders, or files. For more information, contact your Oracle account manager. Defines which hosts can access the customer portal. Only customers coming from a host in the valid list are allowed access to the customer portal. **Tip:** The valid list is practical only if the set of allowed hosts is confined to 10 or fewer domains.	Blank

Table 635: Customer Portal Settings for Site Protection (Continued)

Configuration Setting	Description	Default Value
SEC_INVALID_ENDUSER_HOSTS	Defines which hosts are not allowed access to the customer portal. The invalid list is used to prevent spiders from known locations.	Blank
RightNow User Interface > General > Security		
SUBMIT_TOKEN_EXP	Defines the amount of time, in minutes, that the submit token used for token verification is valid.	30

Clickjacking protection

Clickjacking is an attack on browser security that can mislead your customers into clicking a concealed link. On a clickjacked page, attackers load another page in a transparent layer over your original page. Users think they are clicking visible buttons, while they are actually performing actions on the hidden page. The hidden page may even be an authentic one, such as a page from a well-known, reputable business. This makes it possible for attackers to trick your customers into performing unintended actions.

A common defense against clickjacking is to attempt to block the site you are trying to protect from being loaded into a frame.

Customer Portal

The ClickjackPrevention widget, included by default in the standard, mobile, and basic templates, ensures that your customer portal cannot be viewed inside a frame or iFrame.

Note If your site must run in frames, you will need to remove the ClickjackPrevention widget from the template.

If you do not use frames, you can edit the *standard.php* file of your template file to minimize the risk of clickjacking.

Community

If Community is enabled on your site, X-Frame-Options can be used to implement restrictions for both public and private pages. These settings restrict the Community pages that can appear in frames.

The X-Frame-Options setting is set, by default, to DENY for both public and private pages. The DENY setting prevents any domain from framing your content. This setting can be accessed on the community's General Settings page.

For more information on clickjacking, including definitions for X-Frame-Options setting values, search for the Clickjacking Defense Cheat Sheet on the OWASP website.

Cross-site request forgery

Cross-site request forgery (CSRF) causes a user's browser to load pages (including forms) that typically require authentication in an attempt to perform actions on behalf of the user. If the user has a valid authenticated session for the site the attacker is causing to load into the browser, those requests will succeed. If proper protections are not in place, this may let the attacker perform unintended actions on behalf of the user.

Submit tokens ensure that the contact who opened the page is the only contact who can submit the form. The SUBMIT_TOKEN_EXP configuration setting lets you define the amount of time the submit token is valid and is set, by default, to expire 30 minutes from the time the token was sent. After 30 minutes, the contact will receive a new token. The expiration process is invisible to the contact making for a seamless user experience.

For more information about CSRF vulnerabilities, search for the CSRF Prevention Cheat Sheet on the OWASP website.

Specifying valid redirect domains

Linking from one page to another is also a security risk you should consider. For example, to redirect users to different locations within your site, you may have placed a link in your URL. Typically, these are links to other files on your site but they can also be links to another interface, either on your site or on an external site.

Attackers can take advantage of redirects by creating URL links containing a redirect to a page that exploits users in some way. Those links could be placed in the following locations:

- Questions on your page
- Uploaded files
- Emails

In each of these scenarios, an attacker bets that users will click the link they create and be redirected to an external site where data can be maliciously harvested.

To protect your site from this type of attack, you can set the value of CP_REDIRECT_HOSTS to a list of interface domains that are legitimate redirect targets. The default value is blank, which limits redirects to pages only within your interface domain. Keep in mind that redirects to domains specified in related configuration settings are implicitly allowed.

Table 636: Sample Values for CP_REDIRECT_HOSTS

Value	Meaning
Blank	Prevents all redirects outside of your interface. (Default)
*	Allows all redirects. (Not recommended.)
*.example.com	Allows redirects to all sites in the example.com domain.
one.example.com, two.example.com	Allows redirects to sites one and two in the example.com domain.
example.custhelp.com, *.test.com	Allows redirects to example.custhelp.com and any interface in the test.com domain.

For information about securely publishing answer links on your site, see Emailing links to answers.

Session data

To maintain state information about staff members and customers, we use session data that is passed between the staff member's or customer's system and the web server. When an individual is logged in, data from the session can provide the necessary authentication for accessing your data that would not otherwise be available.

Session data security prevents attacks that stem from the trust the system has in authenticated users. Without session data security, attackers may be able to capture session data and reuse it. These are commonly referred to as "replay" attacks or "man-in-the-middle" attacks.

The SESSION_HARD_TIMEOUT configuration setting helps reduce session exploitation by forcing staff members to reauthenticate after a specified period of time. Set to twelve hours by default, this setting creates a new session while destroying the previous session each time the staff member reauthenticates.

The CP_FORCE_PASSWORDS_OVER_HTTPS configuration setting is enabled by default and helps protect staff members and customers from malicious activity such as password theft. This setting requires that all login operations, such as login name and password, be performed over HTTPS. Therefore, logged-in users interact entirely on HTTPS.

Note Pages that use passwords within standard widgets are automatically redirected to HTTPS.

If your site is password protected, you should require customers to log in to the customer portal. Even if only your answer pages are password protected, we recommend requiring that customers log in. The CP_CONTACT_LOGIN_REQUIRED configuration setting enables customer access to your pages and controls on the customer portal. Oracle Service Cloud offers different session management schemes for the administration interface and the customer portal. However, for both interfaces, we perform the following actions:

- Encrypt session data stored in cookies.
- Set the Secure flag and the HTTP Only flag on cookies.
- Make session data difficult to use from a different computer system.
- Require staff members to reauthenticate after twelve hours. See the SESSION_HARD_TIMEOUT setting description in the following table.
- Require staff members to reauthenticate after a specified period of inactivity. See the CLIENT_SESSION_EXP setting description in the following table.
- Require all login operations to be performed over HTTPS. See the CP_FORCE_PASSWORDS_OVER_HTTPS setting description in Customer Portal Settings for Session Data.

Table 637: Administration Interface Settings for Session Data

Configuration Setting	Description	Default Value
RightNow User Interface > General > Security		
CLIENT_SESSION_EXP	Requires staff members to reauthenticate after a specified period of inactivity on the Service Console. **Note:** This setting is not used strictly for security. It is also used in the desktop usage administration feature.	15 minutes

Table 637: Administration Interface Settings for Session Data (Continued)

Configuration Setting	Description	Default Value
SESSION_HARD_TIMEOUT	Requires staff members to reauthenticate after a specified period of time. **Note:** This setting creates a new session each time the staff member reauthenticates. The previous session is destroyed.	12 hours

Table 638: Customer Portal Settings for Session Data

Configuration Setting	Description	Default Value
RightNow User Interface > General > Security		
CP_LOGIN_MAX_TIME	Defines the time (in minutes) a customer can be logged in without needing to log in again. If a session goes past the defined setting, the customer is required to log in again. **Note:** The default is 0, which means that the time is set by CP_LOGIN_COOKIE_EXP.	0
RightNow User Interface > Customer Portal > Login		
CP_CONTACT_LOGIN_REQUIRED	Defines whether the customer portal requires a customer to be logged in when accessing most pages or controls. **Note:** This setting does not apply to the login, password recovery, and account creation pages, or pass-through authentication (PTA). PTA is described in the *Pass-Through Authentication Guide*. If you do not have this guide, contact your Oracle account manager.	No
CP_COOKIES_ENABLED	Defines whether the customer portal tries to set cookies on a visitor's browser.	Yes

Table 638: Customer Portal Settings for Session Data (Continued)

Configuration Setting	Description	Default Value
CP_FORCE_PASSWORDS_OVER_HTTPS	Requires all login operations to be performed over HTTPS. **Note:** Pages that use passwords within standard widgets are automatically redirected to HTTPS.	Yes
CP_LOGIN_COOKIE_EXP	The time (in minutes) before the customer portal login cookie expires. Set the value to -1 if you want the cookie to expire when the browser is closed. Set the value to 0 if you never want the cookie to expire.	60
CP_MAX_LOGINS	Defines the total number of concurrent users that can be logged in to your support site at any given time. **Important:** A value of 0 means there is no limit. If you set a value for this setting, you must also set a non-zero value for CP_LOGIN_MAX_TIME.	0
CP_MAX_LOGINS_PER_CONTACT	Defines the total number of active, concurrent logins a single user can be logged in with. A value of 0 means there is no limit. **Important:** If you set a value for this setting, you must also set a non-zero value for CP_LOGIN_MAX_TIME.	0

Password protection

If the data protected by a password is not critical or subject to privacy legislation, the default values in Oracle Service Cloud may be acceptable. The most compromising dangers to passwords include:

- Password cracking by brute-force attack or an exhaustive key search.
- Nefarious activities, such as phishing and other social engineering attacks.

- Inadvertent release by users (staff members or customers) who write down their passwords, send them in emails, or expose them to the public in other ways.

The choice of password controls depends on your security situation. For example, if users do not log in often, setting password expiration parameters can result in unnecessary locked accounts and frustrated users. While locking accounts can prevent some brute-force and denial-of-service attacks, it can also increase administrative overhead.

If you require your users to change their passwords regularly, you need to save history data to prevent reuse (at least five previous passwords). It is common for users to make a minor change to their password and eventually cycle back to the original, so it is difficult to assess the value of this strategy.

If you are concerned that passwords could be compromised by poor user-handling (writing passwords down) or by some form of attack, consider requiring regular changes. However, mandating frequent password changes in an environment where they are strong and are not shared does not enhance security and may actually hamper it by creating an environment that causes people to store passwords in electronic or written media.

No matter your security situation, you have considerable flexibility in setting up passwords for your staff and your customers. The following sections describe your configuration options and identify some tips for configuring secure passwords throughout your system.

Staff member passwords

You configure passwords for your staff from the configuration list on the navigation pane (Configuration > Staff Management > Password Configuration).

You can strengthen passwords by defining requirements such as minimum password length, maximum number of character repetitions and occurrences, and the minimum number of upper and lowercase characters, numbers, and special characters allowed.

The options available to you in setting up password requirements can enhance security on your site as well as help protect your customers' information.

Table 639: Password Security Benefits

Password Configuration	Security Benefit
Number of Invalid Logins	Locking accounts after a designated number of consecutive login failures makes it more difficult, but not impossible, for attackers to use brute-force password cracking. If an attacker is able to obtain an encrypted password, they can guess the algorithm used to encrypt it and simply run different strings looking for a match. While time-consuming, current computing technology makes it possible to guess up to - million passwords per second (and this number increases by 10 percent per year). **Note:** In Oracle Service Cloud, the default is 5 invalid login attempts before the account is locked.
Expiration Interval	The password expiration interval helps mitigate risk for accounts that have been compromised or accounts that have not been used for long periods of time. By setting a conservative value for the number of days a password stays in effect, you can help lower the risk of attack. (Default = 90.) **Important:** PCI-compliance requires expiration interval to be 90 days or less.
Password Length	While it is helpful to use case changes and special characters to enlarge the character set, enforcing longer passwords is an easy way to improve password strength. (Default = 8.) For example, if 76 characters are used randomly, it takes no more than 12 hours to crack a 6-character password. Cracking time increases to 6 years for an 8-character password, and it would take 230 million years to crack a 12-character password. Of course, password cracking typically takes advantage of the tendency to use common words in passwords so dictionary attacks can break passwords more quickly. For maximum security, even longer passwords (no less than 10 characters) are necessary. For example, a 12-character password composed of 3 words from a 100,000 word dictionary could take more than 7 years to crack. Add a small amount of randomness to the password, and the cracking time rapidly increases to 230 million years.

Table 639: Password Security Benefits (Continued)

Password Configuration	Security Benefit
Numbers and Special Characters	Requiring numbers and characters can add to the random factor of a password. They also make it easier for a user to come up with a password that is easy to remember, but still unique. For example, MaryhaddaL1tlelam. (Default = 0.)
Uppercase and Lowercase Characters	Requiring a mix of upper and lowercase characters can add to the random factor of a password. They also make it easier for a user to come up with a password that is easy to remember, but still unique. For example, 2BeOrNot2Bee?.(Defaults = 1.)
Number of Previous Passwords	Password history prevents the repetition of passwords when a staff member changes a password that is set to expire. Enforcing password expiration without setting the number of previous passwords allowed makes password expiration less effective. We recommend allowing 6 to 10 previous passwords. (Default = 10.)

Customer passwords

You have two ways to configure customer passwords in Oracle Service Cloud.

Configuration settings

The configuration setting EU_CUST_PASSWD_ENABLED controls the visibility of the Password field on the customer portal Log In page. This setting is enabled by default because it offers significant protection for your organization and your customers. However, if your organization does not require customer passwords, you can remove the Password field from the Log In page by disabling this setting.

Table 640: Customer Portal Settings for Passwords

Configuration Setting	Description	Default Value
Common > General > Security		
SEC_EU_EMAIL_LINK_EXPIRE	Defines the duration in hours that a temporary link to reset a customer's password is valid. This setting also defines the length of time a customer has access to answers on your site. See Emailing links to answers.	8

Table 640: Customer Portal Settings for Passwords (Continued)

Configuration Setting	Description	Default Value
RightNow User Interface > General > End-User		
EU_CUST_PASSWD_ENABLED	Displays the password field on the customer portal page.	Yes

Password requirements

As with staff member passwords, you can define requirements to strengthen passwords on your customer portal. The editor for configuring customer passwords contains the same fields as those for staff passwords (see Staff member passwords). The only differences between the two editors are the default values.

Forgotten passwords

There's no way around it—user names and passwords can be forgotten. For administrators, there is no way to recover forgotten credentials other than to contact their Oracle account manager. Other staff members can recover both their user name and password by using the Oracle Service Cloud account self-service feature. You can also use this functionality as a tool to maintain the integrity of your organization's login policies for all staff members.

The account self-service feature, accessed by clicking Login Help on the Login window, can be set up to open the login procedure in online help or send staff an email if they have forgotten their user name or password. This functionality is also available if your site has single sign-on (SSO) enabled. See the configuration settings descriptions in the following table for your options.

Table 641: Account Self-Service Settings for Passwords

Configuration Setting	Description	Default Value
RightNow User Interface > Tool Bar > General		
ACCT_RECOVER_STATUS	Specifies the functionality of the Login Help link on the Login window. See • 0 = Opens the login procedure in online help. • 1 = Sends an email containing user name or a link to the Password Reset page for entering a new password (default). • 2 = Changes the email message staff members receive when they click Login Help. The alternate message is defined in ACCT_RECOVER_ALT.	1
ACCT_RECOVER_ALT	Specifies the alternate email message to send when the configuration setting ACCT_RECOVER_STATUS is set to 2.	Blank

Customers can also recover user names and passwords from the Log In page on the customer portal. In both cases, if the password is forgotten, the correct user name must be entered, and then a link to the Password Reset page is emailed to the address associated with that user name. The password is reset when the link is sent and login is not allowed until the process is completed. Customers must do this within the time frame contained in SEC_EU_EMAIL_LINK_EXPIRE. See Customer Portal Settings for Passwords and Emailing links to answers.

Secure password recommendations

After assessing your specific security situation, you may want to consider enforcing the following password requirements.

- Lock staff accounts after three to five invalid login attempts. (The default is 5 in Oracle Service Cloud.)
- Set password length to a minimum of 10 characters.
- Require special characters and numbers.
- Require both uppercase and lowercase characters.
- Avoid using words or phrases that can be identified with a person, such as their name, address, telephone number, job title, type of car, and so on.
- Encourage users to choose passwords that are easy to remember and to type. For example, common words, song lyrics, poems and so on, with slightly misspelled words, go a long way toward security.
  - ▷ 2BeOrNot2Bee?
  - ▷ MaryhadaL1ttlelam
  - ▷ JollyBARN+be4Cow
- Stress the importance of keeping passwords secure by memorizing them and keeping them secret.

File attachment security

Oracle Service Cloud allows for attachments to incidents and answers as well as documents, templates, and snippets that are used in mailings and surveys. Attachments are a security concern because they can contain malicious code (malware) or data that is part of an attack on your site. All incoming attachments are scanned for malware, but you should always consider the possibility that attackers could evade detection.

Uploaded files containing HTML are a particular problem because they can provide links to sites that can harvest private data from unsuspecting people. For example, an attacker could upload a file that appears to be a link to an incident, but is actually a link to the attacker's site, which prompts the receiver to enter user name and password credentials. Staff members should never follow a link unless they are confident that it is safe, and no data should ever be entered to a linked site. If it is necessary to access a referenced site, instead of clicking a link, look at the web address and verify that it goes where you think it should. Then type the correct web address into your browser.

The other problem with HTML files is that they may contain executable code in the form of JavaScript or ActiveX controls that potentially can have a significant impact on your system. If browser security works properly, this should not happen. However, browsers are one of the least secure types of software. You can disable some of this functionality, but you may need it for many complex sites or applications, including Oracle Service Cloud. Therefore, be careful when working with data from untrusted sources and educate your users about the risks associated with improper handling of uploaded files.

As an additional precaution, you can prevent attachment viewing by requiring that users download file attachments in order to be viewed. This protects the Oracle Service Cloud application as well as the associated data, and it also allows additional levels of scanning to be applied. The configuration setting FATTACH_OPEN_ENABLED lets staff members view attachments on the **agent desktop**. As a preventative measure, this setting is disabled. Disabling FATTACH_OPEN_ENABLED does not change the display of attachments for customers, so attachments from external sources can be verified as safe before they are placed in answers.

Even so, it is possible for a malicious user to create incidents with very large attachments that could be used to attack site. To prevent this, the configuration setting FATTACH_MAX_-SIZE controls the maximum allowable attachment. The default (and the maximum allowable limit) is approximately twenty megabytes per attachment.

Important Regardless of the file attachment limits you define, file upload will fail if the upload takes more than five minutes.

Table 642: Settings for File Attachments

Configuration Setting	Description	Default Value
RightNow User Interface > General > File Attach		
FATTACH_MAX_SIZE	Defines the maximum file size in bytes that can be uploaded to the server as an attachment. File upload will fail if the upload takes more than five minutes. **Tip:** Too much available disk space can make your site vulnerable to DoS attacks. Consider the types of attachments that will be uploaded to your site, and then set this value to as small as practical for your needs. As far as security goes, the more disk space you can fill, the better.	20971520 (20 MB) **Note:** The maximum allowable limit is 20 MB.
FATTACH_OPEN_ENABLED	Lets staff members open file attachments on the agent desktop.	No

Chat security

Oracle RightNow Chat Cloud Service (Chat) lets customers experience interactive, real-time conversations with agents. There are a number of configuration options that protect these exchanges of information and the underlying services that make them possible.

Table 643: Settings for Chat

Configuration Setting	Description	Default Value
CHAT_WS_API_IP_HOST	Defines the list of IP addresses and subnet masks to make requests to the Chat API. If this setting is enabled and left blank, all hosts are allowed. **Important:** To enable this hidden setting and define your allowed IP addresses and subnet masks, submit an incident to our support site.	Blank
Common > General > Security		
SEC_VALID_CHAT_API_HOSTS	Defines which hosts and subnet masks of hosts are allowed to access the Chat SOAP interface from any chat-related request coming from a customer to the server. **Important:** If this setting is left blank, the server accepts requests from all hosts.	Blank
Chat > General > Server		
CHAT_CORS_WHITELIST	Defines the list of origins allowed to make cross-origin requests through the Chat server. **Important:** If this setting is left blank, the server accepts requests from all origins.	Blank
Chat > General > Create Incident		
INC_PRIVATE_TRANSCRIPT_ONLY	Allows chat transcripts to be added to incidents as private notes. **Note:** If enabled, customers cannot see past chats.	No

Server protection

The Chat SOAP interface can be protected from potential threats by restricting access to valid chat servers. The configuration setting SEC_VALID_CHAT_API_HOSTS defines the list of IP addresses and subnet masks specifying the legal chat servers that are allowed to access the Chat SOAP interface. If this setting is left blank, all hosts are allowed.

Additionally, users can be protected from cross-origin resource sharing (CORS) attacks by defining the origins allowed to make CORS requests in CHAT_CORS_WHITELIST.

Chat API

The Oracle Service Cloud supports a Chat API that must be enabled by Oracle. When enabled, the API is protected by a configuration setting that specifies the IP addresses and subnet masks to make requests to the Chat API. If this setting is enabled and left blank, all hosts are allowed.

Important Access to the Chat API is defined by the hidden configuration setting CHAT_WS_API_IP_HOST. To enable this setting and specify the IP addresses and subnet masks you want to allow, submit an incident to our support site.

User protection

By enabling INC_PRIVATE_TRANSCRIPT_ONLY, you can change the privacy of the information in a Chat exchange. Instead of being added to an incident as public information, it is added as a private note, which restricts access to the data. If there is a chance that staff members will enter sensitive information during a chat session, this setting should be enabled.

It is also possible to configure Chat to allow off-the-record chats in which the exchanged data is not recorded and can be seen only in real time by the agent.

Cross-origin resource sharing protection

Cross-origin resource sharing (CORS) lets client-side code make requests from one origin to another origin. This functionality can be abused by an attacker to retrieve information from your site or to perform actions as a valid user. You can protect your site from potential threats by restricting access to valid requests. The CHAT_CORS_WHITELIST configuration setting defines the list of hosts or IP addresses allowed to make cross-origin domain requests. If this setting is left blank, all origins are allowed.

Important Keep in mind that restricting cross-origin resource sharing does not prevent cross-site request forgery (CSRF). For information about CSRF protection, see Cross-site request forgery and Social Experience security.

For more information about testing for CORS vulnerabilities, search "Test cross origin resource sharing" on the OWASP website.

External queues

External chat queues allow sites outside of Oracle Service Cloud that use the Chat API to access Oracle Service Cloud chat data. Since external queues may be subject to more risk, we recommend allowing only those external queues that are operationally necessary. To prevent potential misuse, you must add the chat queues that you deem acceptable from the Chat Session Queue editor on the Customizable Menus page. Then, you must designate those queues for use with third-party-initiated chat requests as external. Chat requests pre-routed to the external queues you define will be routed to agent desktops by an external routing system. The chat server and the external routing system exchange data through the third-party queue API.

Social Experience security

Oracle RightNow Social Experience (Social Experience) is your organization's gateway to the social cloud and includes the following features.

- **Communities**
- **Channels**
- **Social Monitor**
- **Self Service for Facebook**

When providing service through social media, it is essential to maintain the security and confidentiality of your organization's social account logins. For this reason, Oracle Service Cloud lets you define channel accounts, which are shared credentials that allow designated agents to perform service functions through your social media accounts by securely storing the account logins and passing authentication parameters on behalf of your agents. If you are currently providing service through social media channels directly through the web, we strongly recommend considering the security benefits of managing those efforts within Oracle Service Cloud instead.

When monitoring certain **channel types**, Oracle Service Cloud can store your customers' social media user names in their contact records. By tracking this identifying information, Oracle Service Cloud can associate incoming social monitor incidents with contacts based on their social media accounts. However, unlike channel accounts, channel types do not store passwords—they are used only to track the social identities of your customers across different services.You may also want to consider **SSL** encryption options for social media services. Then traffic between Oracle Service Cloud and the social media site is encrypted. See Certificates.

Important Social Experience includes several APIs so you can access major social features from custom code. APIs offer tremendous flexibility, but it is important to recognize that accessing any part of Oracle Service Cloud through an API moves a significant part of the security responsibility to the external code.

Communities and Social Monitor

There are also opportunities to access external data and code from within Social Experience, such as Oracle RightNow Social Experience communities (communities) and Oracle RightNow Social Monitor Cloud Service (Social Monitor). Consequently, these features may not have the same level of security as Oracle Service Cloud and the exchange of data may not be secure. Configuring your site in a high-security environment requires special care when implementing social features. Private and public keys are used to encrypt data between Oracle Service Cloud and the communities. For COMMUNITY_PRIVATE_KEY and COMMUNITY_PUBLIC_KEY setting descriptions, see Settings for Social Experience.

Community administration settings are used to configure all aspects of the community, including its members, hives, and content. Several of these settings can be used to reduce the vulnerability of your site.

Token verification

Token verification is enabled on your community pages to protect your site from cross-site request forgery (CSRF). Cross-site request forgery causes a user's browser to load pages that typically require authentication in an attempt to perform actions on behalf of the user. If the user has a valid, authenticated session for the site the attacker is causing to load into the browser, those requests will succeed. If proper protections are not in place, this may let the attacker perform unintended actions on behalf of the user, such as changing an email address, home address, password, or making a purchase. For more information about CSRF vulnerabilities, search for the CSRF Prevention Cheat Sheet on the OWASP website.

Cross-site scripting

Another community administration setting worth noting can be used to mitigate the risk of malicious code introduced by a community administrator, such as a cross-site scripting attack. While administrators are trusted users and administrator-initiated attacks are rare, we recommend selecting the Prevent Client-Side Scripts as Inputs for Admin Settings check box. To help prevent reflected cross-site scripting, select the Prevent Client-Side Scripts as Query String Parameter Value check box. Both of these check boxes are accessed on the community's General Settings page.

Cross-site flashing

In a cross-site flashing attack, a malicious user causes code to be executed within other users' browsers by linking to an off-site Flash application. (It is considered "off-site" because the URL that calls the Flash application can live on an unrelated server in the cloud.) This allows malicious users to control the content other users see and, potentially, to steal user data such as session cookies, user names, and passwords.

Community administrators can create post and comment types, user profile fields, and page panels that allow users to link to off-site Flash files through the community Flash File field in the post or comment type. If a user submits a post or comment that links to a Flash file through such a field or panel, the Flash file executes in the browser of any user that views the post. If the Flash file is malicious, a cross-site flashing attack can result.

Cross-site flashing can be prevented by not including a Flash File field in a comment or post type, a user profile field, or a panel. Because of potential misuse by malicious users, we recommend Flash field types be used with caution or not at all.

Self Service for Facebook authentication

Oracle RightNow Self Service for Facebook Cloud Service (Self Service for Facebook) lets you embed a set of Oracle Service Cloud service and community features directly on your organization's Facebook page. After you create a Facebook page, you must enable Facebook on the Configuration Settings editor (FACEBOOK_ENABLED).

When the Self Service for Facebook application is installed on your Facebook page, it provides two values—your application ID and your secret key. You must assign these values to their respective configuration settings (FACEBOOK_APPLICATION_ID and FACE-

BOOK_APPLICATION_SECRET) in order to authenticate the link between Facebook and Oracle Service Cloud. To ensure the integrity and security of your connection, you should keep these values confidential.

In addition, incidents can be created from your Facebook page. This functionality is enabled by default (FACEBOOK_INCIDENTS_ENABLED) so your customers can submit questions without leaving Facebook. If you do not want incidents to be created from your Facebook page, then you must disable this setting. See Settings for Social Experience.

Twitter security

When you add Twitter **channel accounts**, designated agents can respond to Twitter messages publicly or privately from the agent desktop. Due to Twitter's unique functional design, we recommend that you encourage your customers to communicate privately when resolving support issues through the Twitter channel. Because your organization's tweets can be read, reposted, and replied to by any other Twitter user, using public tweets to resolve sensitive service issues can be risky. For this reason, it is vital that your agents follow the best practices for using Twitter's private messaging feature.

If you prefer that all Twitter searches be done securely over an **SSL** channel, contact your Oracle account manager.

Open login credentials for social accounts

Oracle Service Cloud supports two open login standards, OAuth and OpenID. Both allow easy integration of sites that support either one of those open login standards from the **customer portal**.

When your Facebook page or your Twitter account is created, they provide two values—your application ID and your secret key. To allow single sign-on, these values must be assigned to their respective configuration settings in Oracle Service Cloud:

- FACEBOOK_OAUTH_APP_ID and FACEBOOK_OAUTH_APP_SECRET

- TWITTER_OAUTH_APP_ID and TWITTER_OAUTH_APP_SECRET

Table 644: Settings for Social Experience

Configuration Setting	Description	Default Value
RightNow Common > RightNow Social		
COMMUNITY_PRIVATE_KEY	Defines the private key to be used to encrypt data between Oracle Service Cloud and communities in Social Experience.	Blank
COMMUNITY_PUBLIC_KEY	Defines the public key to be used to encrypt data between Oracle Service Cloud and the communities in Social Experience.	Blank
RightNow Common > 3rd-Party Applications > Facebook		
FACEBOOK_APPLICATION_ID	Specifies the Facebook application ID used to host Facebook for Oracle Service Cloud.	Blank
FACEBOOK_APPLICATION_SECRET	Specifies the Facebook application secret key used to host Facebook for Oracle Service Cloud. This setting is also used to authenticate staff members and customers who use Self Service for Facebook.	Blank
FACEBOOK_INCIDENTS_ENABLED	Lets customers and staff members create private incidents from your Facebook page.	Yes
RightNow User Interface > Open Login > OAuth Apps		
FACEBOOK_OAUTH_APP_ID	Specifies the Facebook application ID used to request the customer's or staff member's credentials for open login with Self Service for Facebook.	Blank
FACEBOOK_OAUTH_APP_SECRET	Specifies the Facebook secret key used to request the user's credentials for open login with Self Service for Facebook.	Blank

Table 644: Settings for Social Experience (Continued)

Configuration Setting	Description	Default Value
TWITTER_OAUTH_APP_ID	Specifies the Twitter application ID used to request the customer's or staff member's credentials for open login with the Oracle Service Cloud channel, Twitter.	Blank
TWITTER_OAUTH_APP_SECRET	Specifies the Twitter secret key used to request the customer's or staff member's credentials for open login with the Oracle Service Cloud channel, Twitter.	Blank

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Recommendations for Security-Related Configuration Settings

The tables in this section can help you look at configuration settings in a logical way as they pertain to security. The settings are categorized by security levels—high, medium, and low. Once you've evaluated your security requirements, you can use these recommendations to achieve the level of security that fits your organization's needs.

Important To make an accurate determination of your organization's security needs, you must have a comprehensive knowledge of your site and its use.

Security level

The following list represents configuration settings that you should consider using or setting to achieve your designated level of security—high, medium, or low. To make the settings easy to find, the list is ordered alphabetically with each setting's respective path on the Configuration Settings editor.

Table 645: Recommended Security-Related Settings

Path/Configuration Setting	For high-security environment	For medium-security environment	For low-security environment
CHAT_WS_API_IP_HOST	Set to allowed IP addresses and subnet masks. **Important:** To enable this hidden setting and define your allowed IP addresses and subnet masks, submit an incident to our support site.		

Table 645: Recommended Security-Related Settings (Continued)

Path/Configuration Setting	For high-security environment	For medium-security environment	For low-security environment
Chat > General > Server			
CHAT_CORS_WHITELIST	Set to allowed origins.	Set to allowed origins.	Blank (default)
RightNow User Interface > General > Security			
CLIENT_SESSION_EXP **Note:** This setting is also used in the desktop usage administration feature.	15 (default)	16 to 45	0
RightNow User Interface > Customer Portal > Login			
CP_CONTACT_LOGIN_REQUIRED	Yes	Yes	No (default)
CP_COOKIES_ENABLED	Yes (default) for all security environments.		
CP_FORCE_PASSWORDS_OVER_HTTPS	Yes (default)	Yes	Yes
CP_LOGIN_COOKIE_EXP	5 to 30	31 to 60 (default = 60)	-1
RightNow User Interface > General > Security			
CP_LOGIN_MAX_TIME	As needed for all security environments (default = 0).		
RightNow User Interface > Customer Portal > Login			
CP_MAX_LOGINS **Important:** If you set a value for this setting, you must also set a non-zero value for CP_LOGIN_MAX_TIME.	As needed for all security environments (default = 0).		
CP_MAX_LOGINS_PER_CONTACT **Important:** If you set a value for this setting, you must also set a non-zero value for CP_LOGIN_MAX_TIME.	0 (default)	0	0

Table 645: Recommended Security-Related Settings (Continued)

Path/Configuration Setting	For high-security environment	For medium-security environment	For low-security environment
Common > General > Security			
CP_REDIRECT_HOSTS	As needed for all security environments (default = blank).		
RightNow User Interface > General > End-User			
EU_CUST_PASSWD_ENABLED	Yes (default)	Yes (default)	No
RightNow Common > Service Modules > Oracle Email			
EGW_PASSWD_CREATE	Yes (default)	Yes (default)	No
EGW_SECURE_UPDATE_ENABLED	Yes (default)	Yes (default)	No
RightNow Common > 3rd-Party Applications > Facebook			
FACEBOOK_INCIDENTS_ENABLED	No (default = Yes)	As needed.	As needed.
RightNow User Interface > Open Login > Oauth Apps			
FACEBOOK_OAUTH_APP_ID	Facebook application ID for all security environments (if Facebook is enabled).		
FACEBOOK_OAUTH _APP_SECRET	Facebook secret key for all security environments (if Facebook is enabled).		
RightNow User Interface > General > File Attach			
FATTACH_MAX_SIZE **Tip:** Consider the types of attachments that will be uploaded to your site, and then set this value to allow the minimum disk space that you need. As far as security goes, the more disk space you can fill, the better.	As small as practical for your needs. Applies to all security environments (default and maximum allowable limit = 20 MB). **Note:** File upload fails if the upload takes more than 5 minutes.		
FATTACH_OPEN_ENABLED	No (default)	No	As needed.

Table 645: Recommended Security-Related Settings (Continued)

Path/Configuration Setting	For high-security environment	For medium-security environment	For low-security environment
Chat > General > Create Incident			
INC_PRIVATE_TRANSCRIPT_ONLY	Yes	Yes	No (default)
RightNow User Interface > Tool Bar > General			
LOGIN_SECURITY_MSG	As needed for all security environments (default = blank).		
RightNow User Interface > Contact Services > Security			
MYSEC_AUTO_CUST_CREATE	No (default = Yes)	No	As needed.
Common > General > Security			
SEC_BROWSER_USER_AGENT	Set to allowed user agent strings.	Blank (default)	Blank (default)
SEC_EU_EMAIL_LINK_EXPIRE	8 (default)	12	24
SEC_INVALID_ENDUSER_HOSTS	Set to allowed IP addresses.	Blank (default)	Blank (default)
SEC_INVALID_USER_AGENT	Set to user agent strings that are **not** allowed.	Blank (default)	Blank (default)
SEC_SPIDER_USER_AGENT	Set to list of known web spider user agent strings.	Blank (default)	Blank (default)
SEC_VALID_ADMIN_HOSTS	Set to allowed IP addresses.	Set to allowed IP addresses.	Blank (default)
SEC_VALID_CHAT_API_HOSTS	Set to allowed hosts and subnet masks for all security environments (default = blank).		
SEC_VALID_ENDUSER_HOSTS	Set to allowed IP addresses.	Set to allowed IP addresses.	Blank (default)

Table 645: Recommended Security-Related Settings (Continued)

Path/Configuration Setting	For high-security environment	For medium-security environment	For low-security environment
SEC_VALID_INTEG_HOSTS	Set to allowed IP addresses.	Blank (default)	Blank (default)
SESSION_HARD_TIMEOUT	12 (default)	12-24	As needed.
RightNow User Interface > General > Security			
SUBMIT_TOKEN_EXP	30 to 60 (default = 30)	30 to 300	30 to 1000
RightNow User Interface > Open Login > Oauth Apps			
TWITTER_OAUTH_APP_ID	Twitter application ID for all security environments (if Twitter is enabled).		
TWITTER_OAUTH_APP_SECRET	Twitter secret key for all security environments (if Twitter is enabled).		
Outreach and Feedback > General > Campaigns			
WEBFORM_ID_BY_COOKIE_ DEFAULT	As needed for all security environments (default = No).		
WEBFORM_ID_BY_LOGIN_ DEFAULT	As needed for all security environments (default = No).		
WEBFORM_ID_BY_LOGIN_ REQUIRED_DEFAULT	As needed for all security environments (default = No).		
WEBFORM_ID_BY_URL_PARAM_ DEFAULT	As needed.	As needed.	No (default)
WEBFORM_SET_COOKIE_DEFAULT	As needed.	As needed.	No (default)
RightNow User Interface > Customer Portal > Syndicated Widgets			
WIDGET_INSTALLATION_HOSTS	As needed.	As needed.	Blank (default)

Security significance

In the following list, the configuration settings are grouped by high, medium, and low in security significance.

Table 646: Recommended Security-Related Settings By Significance

Significance	Configuration Setting	Recommended Setting
High	CHAT_WS_API_IP_HOST	Set to allowed IP addresses and subnet masks. **Important:** To enable this hidden setting and define your allowed IP addresses and subnet masks, submit an incident to our support site.
	CLIENT_SESSION_EXP	15 **Note:** This setting is also used in the desktop usage administration feature.
	CP_FORCE_PASSWORDS_OVER_HTTPS	Yes
	CP_LOGIN_COOKIE_EXP	As needed.
	CP_REDIRECT_HOSTS	Set to allowed hosts or leave default setting (blank) to prevent all redirects outside of the interface domain, including external sites.
	EU_CUST_PASSWD_ENABLED	Yes
	SEC_VALID_ADMIN_HOSTS	Set to allowed IP addresses.
	SEC_VALID_CHAT_API_HOSTS	Set to allowed hosts and subnet masks.
	SESSION_HARD_TIMEOUT	12

Table 646: Recommended Security-Related Settings By Significance (Continued)

Significance	Configuration Setting	Recommended Setting
Medium	CHAT_CORS_WHITELIST	Set to allowed origins.
	CP_CONTACT_LOGIN_REQUIRED	As needed.
	CP_LOGIN_MAX_TIME	As needed.
	EGW_PASSWD_CREATE	Yes
	EGW_SECURE_UPDATE_ENABLED	Yes
	FACEBOOK_INCIDENTS_ENABLED	Yes
	FATTACH_OPEN_ENABLED	Yes
	INC_PRIVATE_TRANSCRIPT_ONLY	Yes
	SEC_EU_EMAIL_LINK_EXPIRE	8
	SUBMIT_TOKEN_EXP	30
	WEBFORM_ID_BY_COOKIE_ DEFAULT	As needed.
	WEBFORM_ID_BY_LOGIN_ DEFAULT	As needed.
	WEBFORM_ID_BY_LOGIN_ REQUIRED_DEFAULT	As needed.
	WEBFORM_ID_BY_URL_PARAM_ DEFAULT	As needed.
	WEBFORM_SET_COOKIE_DEFAULT	As needed.
	WIDGET_INSTALLATION_HOSTS	Set to allowed domain names.

Table 646: Recommended Security-Related Settings By Significance (Continued)

Significance	Configuration Setting	Recommended Setting
Low	CP_COOKIES_ENABLED	As needed.
	CP_MAX_LOGINS	As needed.
	CP_MAX_LOGINS_PER_CONTACT	As needed. **Important:** If you set a value for this setting, you must also set a non-zero value for CP_LOGIN_MAX_TIME.
	FACEBOOK_OAUTH_APP_ID	As needed.
	FACEBOOK_OAUTH _APP_SECRET	As needed.
	FATTACH_MAX_SIZE	As small as practical for your needs. **Note:** Regardless of the file attachment limits you define, file upload will fail if the upload takes more than 5 minutes.
	LOGIN_SECURITY_MSG	As needed.
	MYSEC_AUTO_CUST_CREATE	As needed.
	SEC_BROWSER_USER_AGENT	As needed.
	SEC_INVALID_ENDUSER_HOSTS	As needed.
	SEC_INVALID_USER_AGENT	As needed.
	SEC_SPIDER_USER_AGENT	As needed.
	SEC_VALID_ENDUSER_HOSTS	As needed.
	SEC_VALID_INTEG_HOSTS	As needed.
	TWITTER_OAUTH_APP_ID	As needed.
	TWITTER_OAUTH_APP_SECRET	As needed.

Glossary

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A

Absolute time—An exact date and time defined in an escalation action for business rules or a comparison period for custom reports. In standard reports, absolute time is the amount of time passed based on a 24-hour clock.
See also Relative time.

Access level conditional section—A method of controlling the visibility of a portion of an answer. Only those customers with permission to view the access level assigned to the answer section can view it.

Accessibility—The characteristics of a website that allow all users, regardless of disability, to have complete access to the information and features of the site.

Accessibility interface—A non-graphical interface in Oracle Service Cloud that allows staff members to add and edit incidents, answers, contacts, and organizations. The interface is accessible to blind and limited-sight staff members through keystroke functionality, screen magnification, and the ability to be read aloud by screen-reading software.

Account self-service—A feature for staff members to get help when logging in to the administration interface. If staff members forget their login information, they can request their user name or password by clicking Login Help on the Login window. Account self-service can also be set up to open the login procedure in online help or to convey an alternate message.

Action—The part of a business rule that defines what happens when an object (answer, contact, incident, chat session, opportunity, organization, target, or task) meets the rule's conditions. Actions are also a part of script and workspace rules, and a component of campaigns that can perform one of several functions.

Action arrow—An arrow on a workspace field or control that displays available editing options.

Activate—A process that is manually run after making changes to a state, function, or rule in a rule base to check for errors, archive the current rule base, and convert the edited rule base to the active rule base.
See also Business rules *and* Rule base.

Active—One of the default opportunity statuses and status types. An opportunity with the Active status is currently advancing in the system toward a sale.

Add-in—A custom .NET component that is loaded and activated by Oracle Service Cloud to add new features and integration capabilities.

Add-In Manager—A utility for adding, updating, and deleting add-ins in Oracle Service Cloud. The Add-In Manager is also used to set add-in permissions for each interface.
See also Add-in.

Administration interface—The graphical user interface that staff members use to configure and manage Oracle Service Cloud.
See also Agent desktop *and* Service Console.

Administrator—A staff member who configures, customizes, and maintains an Oracle Service Cloud application.

Administrator login—The default login used by the administrator to download Oracle Service Cloud and log in the first time. This special login is not a defined staff account and has no navigation set or profile associated with it. Using this login, the administrator must create a navigation set, profile, and staff account in order to access all functionality.
See also Navigation set, Profile, *and* Staff account.

Administration site—*See* Customer Portal Administration site.

Advanced mode—A survey editing mode for creating detailed questionnaires using an extended feature set that includes survey branching and automation elements.

Agedatabase—A scheduled utility that operates on the knowledge base data to maintain dynamic answers and make searching more efficient for staff members and customers.

Agent—A staff member who may be assigned incidents and chats with customers, and who may also maintain contact and organization records.

Agent desktop—The graphical user interface that staff members use when working with records, mailings, surveys, campaigns, and standard and custom reports. Agent desktop also refers to a set of complementary features in Oracle Service Cloud, including workspaces, workspace rules, guides, agent scripts, script rules, workflows, and add-ins, each representing a different, powerful way of interacting with records in the knowledge base. While each component serves a distinct purpose, they can be used together to create a highly adaptive work environment.
See also Administration interface, Service Console, *and* Workspace.

Agent scripting—A feature that helps guide staff members as they enter information into records on workspaces.
See also Script.

Aging—An automatic process that reduces an answer's solved count as the frequency with which the answer is viewed by customers declines. As the solved count is lowered, the answer will move down the list of answers and be less visible to customers.

Alias—A word that represents another word or phrase. Aliases and the words or phrases they represent can be added to the synonym list to enhance customer searching.
See also Wordlist file.

Anchor—A node on an action or decision in a campaign used to create a path. Actions and decisions have anchors for incoming and outgoing paths. Anchor also refers to a destination for hyperlinks placed at locations within documents for use in mailings and questionnaires for surveys and in answers when linking to other answers.

Answer—Any knowledge base information that provides solutions to common customer support questions.

Answer access level—A method of controlling what information is visible to customers. The default answer access levels are Help and Everyone, and custom access levels can be added.

Answer custom field—A field for gathering and displaying additional information about answers. Answer custom fields appear when adding or editing an answer and on the Answers and answer details pages.

Answer relationship—The relationship between two or more related answers. Answer relationship types include sibling, manually related, and learned link. Sibling and manually related answer relationships are defined by staff members. Learned link answers are automatically defined through customer activity.
See also Learned link, Manually related answer, *and* Sibling answer.

Answer status—A method of controlling the visibility of an answer. The default answer statuses are Public, Private, Proposed, and Review, and custom answer statuses can be added.

Answer status type—The status of an answer that determines whether it can be viewed by customers. The default answer status types are Public and Private.

Answer type—The format in which answers are displayed to customers. Answer types include HTML, URL, and file attachment.
See also File attachment answer, HTML answer, *and* URL answer.

Answer update notification—A way for customers to sign up to be notified whenever a particular answer is updated. Customers can also sign up for notification whenever any answer associated with a specific product or category is updated.

Answers page—A page on the customer portal where customers can view answers and search the knowledge base. Customers can view individual answers or search the knowledge base using selection criteria to narrow their search. If additional elements are enabled, customers can also search documents, websites, and communities.
See also Web Indexer *and* Oracle RightNow Social Experience communities.

API (application program interface)—An interface that enables programmers to communicate with the Oracle database. The API includes functionality to create, update, delete, and retrieve answers, contacts, hierarchical menus, incidents, opportunities, organizations, quotes, SLA instances, staff accounts, and tasks.

Ask a Question—A page on the customer portal where customers can submit a question when they cannot find an answer in the knowledge base.

Asset—Any product or service associated with an organization's customers. Assets can require serial numbers or not and can be registered by customers on the customer portal or by agents on the agent desktop.

Asset product—Any product or service sold or provided by an organization that can be tracked in Oracle Service Cloud. Asset products are configured using the product catalog.

Asset record—Information about a specific product or service provided to a specific customer that is tracked and maintained in Oracle Service Cloud.

Audience—All of the contacts belonging to the lists and segments associated with a mailing or survey.
See also Contact list *and* Segment.

Audit log—A list of all the actions performed on a report, record, or item in the knowledge base, including who performed the action, what the action was, and the date and time of the action.

Auto filter—A control added to report columns for filtering report data by values in the columns.

Automatic logout—A way of managing desktop user sessions by automatically logging out inactive sessions after a specified time of inactivity. Automatic logout is part of desktop usage administration, which assists organizations in lowering seat usage for licensing compliance.
See also Desktop usage administration *and* Manual logout.

B

Backup directory—The directory that contains all the backup files created by the File Manager.

Backup file—A file that is automatically saved each time a file is edited through the File Manager. Before the file is overwritten, the backup file is saved. The restore function can be used to revert to the backup file.

Basic page set—The template and set of customer portal pages that have been optimized for display on browsers with limited or no JavaScript capabilities.

Billable task—A way of classifying and recording the amount of time agents spend working on incidents. The default billable task is Miscellaneous, and custom billable tasks can be added.

Block—A section of widget code that can be customized to extend the view of a standard widget. Widget code that is not within a block cannot be modified.
See also Extend.

Block quotes—A symbol or HTML tag that designates a section of text that is not part of the most current email reply, such as previous entries in the email conversation.
See also Checksum *and* Techmail.

Boolean searching—A knowledge base search that allows customers to connect multiple keywords using & (AND) and |(OR) operators.

Bounced email—Email that is undeliverable. Emails can be bounced when email accounts are not functioning properly or are full at the time the mailing is sent. Outreach and Feedback track bounced emails.
See also Email management.

Broadcast mailing—A mailing sent to one or more contact lists or segments. Broadcast mailings can be sent at a scheduled time and can also be used in campaigns.
See also Contact list *and* Segment.

Broadcast survey—A survey sent as a broadcast mailing in which the message, audience, and mailing options are defined in the survey.

Builder—A community member whose primary role is to create hives and groups for a community. Access to builder functions is provided by the Builder–Custom and Builder–Template user types.
See also User type.

Bulkdel—A utility for deleting several incidents at once.

Business objects—The page of the Customer Portal Administration site that defines the set of answer, contact, and incident fields that can be used to define input and output fields on the customer portal.

Business rules—A component for defining processes to automate workflow, notification, and escalation. Business rules can automatically route incidents, opportunities, and chat sessions; send email and Outreach messages; escalate answers, incidents, opportunities, and tasks; update records; assigns SLAs; and create Offer Advisor targets.
See also Script rules, Target rules, *and* Workspace rules.

C

Cached data—Report data that has been temporarily stored in the database for quicker report generation. This data is cached nightly by the Agedatabase utility and can be purged regularly. Cached data also refers to local cache files stored on a staff member's workstation. This includes all option lists data (any data accessed from a drop-down menu or menu list such as customizable menu items) plus additional data such as report and workspace definitions, questions, documents, and standard text.

Campaign—A multiple-step marketing process based on business logic. Campaigns can contain any number of actions and decisions and move contacts through a series of steps when specified criteria have been met.

Canceled—A mailing and survey status that indicates a mailing or survey has been manually canceled before being completed.

Case section—A logical group of conditional sections where one, and only one, conditional section displays to the customer. As soon as the first conditional section is matched, the content for that conditional section is added, and no other conditional sections within the case section are evaluated. Case sections make content more relevant and targeted to a specific audience than independent conditional statements.
See also Condition *and* Conditional section.

Case statement—A type of conditional element used for multiple-choice decisions that allows more diverse branching capabilities to be added to campaigns and surveys based on conditions defined in the workflow. Case statements are unique because they have an outgoing path for every condition. As soon as the first choice (condition) is matched, the path for that choice is followed, and no other conditions within the case statement are evaluated.

Category—An option for grouping answers and incidents that allows more precise organization in the knowledge base. Staff members can classify answers and incidents by category and up to five additional levels of sub-categories, allowing more refined searching by customers and staff members.
See also Product.

Category page—A custom page that serves as a landing page for grouping and accessing custom content pages in a community.
See also Content page *and* Custom page.

Certificate—A digital piece of information for email and Internet security that includes the name of the certification authority, the holder of the certificate, the certificate holder's public key, the dates the certificate is valid, the serial number, and the digital signature of the certification authority. Certificates are also called *public certificates* and *public key certificates*.

Certificate revocation list—A list of certificates that have been suspended or revoked before they have expired. The certification authority maintains, updates, and publishes the certificate revocation list at regular intervals.

Certification authority—A third party authorized to issue certificates and authenticate the identity of the holder of the certificate.

Channel—The source of an incoming incident or outgoing response. Channels are grouped as standard email channels (Service Email, Outreach Email, Phone, Fax, Post, Service Web, Outreach Web, Chat, and Email) and social channels (Community, Twitter, YouTube, RSS feeds, and Facebook). Channels are also used to indicate the source of information for incident notes on the accessibility interface and contact, opportunity, and organization notes.

Channel account—A shared credential that permits one or more designated staff accounts to pass through a social media site when login and password authentication is required. Channel accounts can be created for communities, Facebook, and Twitter.

Channel type—The social channels tracked in contact records when storing social account user names and associating social monitor incidents to contacts. Channel types include Facebook, Twitter, and YouTube.

Chart style—A collection of display settings that can quickly be applied to charts used in reports. Chart styles control most of the graphical configuration of charts.

Chat agent status—A method of tracking an agent's availability to chat. The default chat agent statuses are Unrestricted, Unqualified, Unspecified, In Meeting, and On Break, and custom statuses can be added.

Chat agent status type—The status of an agent's availability to chat. Default chat agent status types are Available, Unavailable, and Logged Out.

Chat session—A real-time, two-way dialog between a customer and one or more chat agents.
See also Oracle RightNow Chat Cloud Service.

Chat session queue—A sequence of unassigned requests for chat sessions. The default chat session queue is Default Chat Queue, and custom queues can be added. Requests are added to chat session queues automatically by business rules.

Chat session routing—A process of routing customer requests for a chat to a specific queue based on rules in the Chat rule base.
See also Chat session queue.

Checksum—A calculated value that represents the content of a block of quoted text. This value is sent within the block quote tags of the email message and is used to determine if text has been added to the original message.
See also Block quotes *and* Techmail.

Choice question—A question type that allows customers to choose their answer from a menu, radio button, check box, or list.

Click-Once installer—A utility used to install the Oracle Service Cloud Smart Client on staff members' workstations.
See also Oracle Service Cloud Smart Client.

Client—The interface that displays on a customer's computer when submitting a request to chat with an agent.

Clone—To create an exact copy of an existing site or interface.

Closed—One of the default opportunity statuses and status types. An opportunity with the Closed status has resulted in a sale.

Cloud search—A search of social networking sites in order to track customer reaction to an organization's products, services, and overall reputation. In addition to searching the social cloud, staff members can schedule cloud searches, ignore or respond to posts, and create incidents from posts.

Clustering—An automatic process that groups the knowledge base into clusters of related answers and labels each cluster group with keywords that define those answers.
See also Data mining *and* Topic browsing.

Co-browse—A feature in Chat that enables agents to guide customers through web pages using their mouse or other pointing device to demonstrate actions. Co-browsing may also be available on incident workspaces to let customers share their desktop with agents when they are on the phone.
See also Oracle RightNow Chat Cloud Service.

Code Assistant—A Customer Portal tool to aid migration of custom code from earlier framework versions to a newer version. The tool offers code suggestions for migrating widgets, converting to a new YUI version, and removing features that are no longer supported.

Color scheme—A collection of colors that can be applied to chart styles. Multiple colors can be defined and combined into one color scheme. Charts that use the same scheme use the same set of colors.

Comment—A form of content created by members when responding to posts in a community.
See also Post.

Community—A social web solution consisting of customizable hives, members, groups, and custom pages.
See also Hive.

Community privacy level—The level of privacy that determines whether a login is required to access community content.

Comparison period—A reporting parameter used to compare a report's time period to an identical length of time in the past. Comparison periods are defined when creating or editing a custom report and can be included in standard reports.

Compatibility set—A set of Customer Portal widgets designed to be used together. Best practice recommends using widgets from the same compatibility set on any given customer portal page rather than combining them from different compatibility sets.

Competitor—An option for identifying other parties pursuing the same opportunity.

Compile—A process that runs the compiler engine to check states, functions, and rules within a rule base to ensure there are no errors.
See also Rule base *and* Activate.

Completed—A mailing and survey status that indicates a broadcast mailing or broadcast survey has been sent. The system automatically sets the status to Completed from the Sending status.

Complex expression—A search technique that enables customers and staff to search for a broader set of content. This technique allows wildcard searching using an asterisk (*) at the end of a word or partial word and a tilde (~) before a word to perform a similar phrases search on that word only. Word stemming and logical operators are also supported. This technique is available on the administration interface and the customer portal.
See also Logical operators *and* Word stemming.

Computed field—A column whose value is derived from calculations performed on database fields. Computed fields can be added to output levels in custom reports.

Condition—The part of a business rule that determines whether an answer, contact, incident, chat session, opportunity, organization, target, or task matches a business rule. Rules can contain multiple conditions. Conditions are also a part of script and workspace rules.

Conditional formatting—A method of highlighting specific information in report columns that does not require creating data exceptions.

Conditional section—A section of text in a document that appears only to those contacts meeting certain criteria. Conditional sections can also be placed in answers and tagged with specific answer access levels. In message templates, conditional sections can be used to filter content by contact, profile, runtime variable, or record type.
See also Access level conditional section *and* Document.

Conference—A feature in Chat that enables an agent to conference another agent into a chat session with a customer.

Configuration button—The button in a staff member's navigation set containing a list of all the configuration items necessary to configure and customize an organization's application. Items can be added to or removed from this button from the Navigation Sets editor or, with the Customize Navigation Sets profile permission, the Customize List window.
See also Configuration list.

Configuration Settings editor—The interface element used to customize the functionality and features of the administration interface and the customer portal.

Configuration list—All of the configuration items associated with the Configuration button in a staff member's navigation set. The configuration list is organized in a tree on the navigation pane.
See also Configuration button.

Configuration settings—All of the settings accessed from the Configuration Settings editor to configure and customize the administration interface and the customer portal in Oracle Service Cloud.

Configuration Wizard—An interactive utility for configuring web indexing on the customer portal. Web indexing allows customers to search the knowledge base along with web pages and other web-accessible documents within a specified domain.
See also Web Indexer.

Connect Object Explorer—A ROQL query interface that helps Customer Portal developers become familiar with the Connect for PHP API and explore Connect objects and metadata.

Contact—Any individual with a contact record in the knowledge base. Contact records can be added by staff members on the Service Console and by customers on the customer portal. Contact records are also added automatically when a customer without a record submits a question on the Ask a Question page of the customer portal.
See also Primary contact.

Contact custom field—A field for gathering and displaying additional information about contacts. Contact custom fields appear when adding or editing a contact record and on the Your Account page of the customer portal.

Contact list—A static or fixed group of contacts that is used to choose the contacts who receive a broadcast mailing or survey. Contacts can be added to lists.

Contact role—An option for classifying contacts by their roles in opportunities.

Contact type—An option for classifying contacts by types, such as job positions or decision-making roles.

Content Library—A component for creating content that can be used in mailings, web pages, and surveys. Content includes documents, tracked links, files, templates, and snippets.

Content page—A type of custom page to which community content and functions can be added using panels.
See also Category page, Custom page, *and* Panel.

Content pane—The area on the console where staff members work with items selected from the navigation pane or the file menu.

Content pane tabs—An interface element for switching between the items currently open on the Service Console. Content pane tabs display at the top of the content pane by default. Staff members can click a tab to return to a report or item or right-click a tab and select from a number of options.

Context-sensitive answers—A subset of SmartAssistant that allows organizations to construct special Related Answer links from any web page to provide additional information to their customers.
See also Help access level.

Control—A tool for placing titles, spacers, reports, and other advanced features on a workspace.

Cross tab—A method of displaying report data in a table format.

CSV (comma-separated value)—A file format with commas separating one column value from the next. Each row is delineated by a hard return. Also called *comma-delimited.*

Cultures—A predefined set of attributes, such as decimal symbols and display formats, used to populate fields on the Currencies editor. Cultures are comparable to regions in Microsoft Windows.
See also Currency.

Currency—A monetary denotation based on country of origin. Currencies can be defined for each country or province in which an organization does business.
See also Exchange rate.

Custom field—A field for gathering and displaying additional information about answers, contacts, incidents, opportunities, organizations, quotes, sales products, staff accounts, and tasks. Custom fields appear when adding and editing records. Depending on the type and visibility, they may also appear on the customer portal.

Custom object—Any custom table created or managed from the object designer. Custom objects can be added to Oracle Service Cloud to integrate organization-specific data with the database. Although custom objects are not native to Oracle Service Cloud, they can be tied to standard objects and added to workspaces, workflows, custom reports, and navigation sets.
See also Object *and* Oracle Service Cloud standard object.

Custom page—A category or content page that can be fully customized to extend areas of a community in need of additional resources or exposition.
See also Category page *and* Content page.

Custom report—A report that is created by copying and editing one of the standard reports in Oracle Service Cloud and saving it as a new report, or by combining data from selected tables in the database to create a new report. Custom reports can include customized output, data computation, and scheduling.
See also Standard reports.

Customer—A contact or organization that has a service or purchase history in the knowledge base.

Customer account—Information consisting of a user ID and password that allows customers to access certain functions on the customer portal, such as the Account Overview page. Customers can create an account by clicking the Sign Up link or the Your Account tab on the customer portal. Customer accounts are also automatically created when a customer without an account submits a question, which adds a contact record to the knowledge base.

Customer Portal Administration site—The site where administrative tasks, such as selecting the page set, viewing widget definitions and logs, and defining page set mapping, are performed.

D

Dashboard—Any combination of individual reports shown together in one report. Using dashboards, staff members can search for and view a wide range of data from different reports without opening each report individually. The customer portal also includes a dashboard on the Customer Portal Administration site.

Data dictionary—A list of all the tables in the Oracle database that can be accessed from the Service Console. Data dictionary also refers to the list of available tables and fields that can be used in custom reports and is accessed from the report design center. Functions, output variables, and computed fields can also be selected from the data dictionary when working with a custom report.

Data import template—A saved format used by the Data Import Wizard to map columns in a CSV file to columns in the database.
See also Data Import Wizard.

Data Import Wizard—An interactive utility used for importing records into the database.

Data mining—The exploration and analysis of large quantities of data to discover meaningful patterns and rules. Data mining enables organizations to turn raw data into information they can use to gain a marketplace advantage.

Data set—The database tables and table joins that determine what data can be returned in a report. Data set also consists of the database columns a segment (dynamic list in Outreach and Feedback) will have access to and what filters will be used to determine the final data set.

Data type—A set of data having predefined characteristics such as strings, integers, or dates. Each column in a database table is assigned a data type. Data type also refers to the type of custom field specified when adding answer, contact, incident, opportunity, organization, quote, sales product, staff account, and task custom fields. Data types for custom fields consist of menu, radio, integer, date, date/time, text field, and text area fields.

Database—The tables that store information that is retrieved, edited, and added in an Oracle Service Cloud application.
See also Data dictionary.

Dbaudit—A utility that builds and populates the schema and performs the database portion of the Oracle Service Cloud upgrade. Dbaudit can also be used to view the database schema.

Dbstatus—A scheduled utility that escalates incidents, answers, tasks, and opportunities based on business rules. Dbstatus also sends emails to those customers who have requested to be notified when a particular answer has been updated, and processes private Twitter messages for the social monitor.
See also Answer update notification, Business rules, *and* Social monitor.

Dead—One of the default opportunity statuses and status types. An opportunity with the Dead status is no longer being pursued by a sales representative.

Decision—A component of a campaign. Decisions filter contacts by specified criteria and can have Yes and No paths.

Decryption—The process of converting encrypted text into readable text using private keys assigned to authorized persons.

Default directory—The directory containing original default copies of all the files customizable through the File Manager. During an upgrade, any files that have changed will also be updated in the default directory. Using the restore function, a file can be restored to the original configuration.
See also File Manager.

Deliverability—The degree to which an email message aligns with industry-accepted practices to ensure delivery to an intended recipient. Emails with low deliverability are often blocked by ISPs and spam filters.

Dependency—A relationship or association between items in the database in which the use of one item impacts the functionality of the other item. When a dependent item is deleted, such as deleting a contact list used in a mailing, all items that use the dependent item become invalid and must be manually updated.

Deploy—To stage customer portal pages from the development folder and then promote the staged files into production.
See also Stage *and* Promote.

Deployment log—The record of actions taken on customer portal files, including staging, promoting, rolling back, and updating through upgrades and service packs.

Deprecated—A condition that indicates a feature or widget has been replaced with different functionality or a newer widget.

Design space—The section of the workspace designer where fields and controls are added, edited, moved, and removed to create a workspace.

Desktop usage administration—Functionality for managing desktop user sessions to help organizations lower seat usage for licensing compliance and reduce costs. The administrator can manage both active and inactive sessions using manual and automatic logout options.
See also Automatic logout, Manual logout, *and* Session hard timeout.

Desktop workflow—A sequence of workspaces, scripts, decisions, and actions presented to staff members as a dynamic interface to support complex business processes.

Development area—The set of customer portal files that can be edited and viewed without being available to customers. Designers and developers can work on these files and test their changes until they are satisfied that the files can be made publicly available to their customers, at which point the development files are staged and promoted to the production area.
See also Production area.

Display position—The position where a new answer appears on the Answers page. Options include Historical Usefulness; Place at Top, Middle, or Bottom; Fix at Top, Middle, or Bottom. The display position is selected from the answer's Display Position drop-down menu.

Disposition—An option for classifying and recording how incidents are ultimately resolved. Up to six levels of dispositions are available.

Distribution list—A mailing list of non-staff member email addresses used for scheduling reports or any mailing event.

Docked filter—A run-time selectable filter or output variable that is added to the top of a report. Docked filters let report users select different run-time filter values and output variables in the report, bypassing the Search window.

Document—The material used in a survey or mailing, or served as a web page that can contain text, snippets, conditional sections based on contact filters, merge fields, links, and web forms.

DomainKeys (DK)—A form of email authentication that uses a cryptographic signature to verify that an email message originated from a specific organization. DomainKeys differs from DKIM authentication primarily by the email headers used to generate the signature.

DomainKeys Identified Mail (DKIM)—A form of email authentication that uses a cryptographic signature to verify that an email message originated from a specific organization. DKIM differs from DomainKeys authentication primarily by the email headers used to generate the signature.

Dormant incident—An incident that is not returned when performing word- or phrase-based searches. After remaining in the Solved status for a specified time, incidents become dormant to ensure that the knowledge base is populated with the most useful and timely information.

Draft—The preliminary status of a mailing or survey. When a mailing or survey is created, it is set to the Draft status. The status will also return to Draft if the mailing or survey's schedule is canceled.

Drill down—To start at a top or general level and become more specific at each lower level. The drill-down feature enables access to additional output levels in reports.

Drill-down filter—The fields in an output level used to filter the data returned when drilling down to another output level. This impacts what data is returned in the drill-down level.

Drill-down link—The field in an output level that is used as a link to drill down to the next output level.

Dynamic form—A form that hides or displays fields based on a customer's response to other fields on the form.

E

Editor—A layout format on the content pane when working with records and configuration items. Editors contain the fields for adding and editing records and items.

Else clause—The clause that follows the Then clause of a business rule. If the conditions of a rule are met, the actions in the Then clause are invoked. If the rule's conditions are not met, the actions in the Else clause are invoked.

Email address sharing—Functionality that allows a single email address to be shared by multiple contacts, such as members of a family or team. When enabled, a contact-matching process is used to associate records and transactions initiated by a shared email address.

Email answer—A feature that enables customers to email answers they are viewing to a specific email address.

Email management—Functionality that sends and receives email messages, processes bounced messages, intelligently routes incoming inquiries based on business rules, and automatically suggests answers to inquiries.

Email message—An email that is automatically sent to customers or staff members. The process of sending email messages is triggered by events in Oracle Service Cloud. For instance, when a customer submits a question, the Question Receipt message will be sent to the customer's email address. Using the Message Templates editor, staff members can customize each message and standardize their design to give them all the same look and feel.
See also Global template *and* Message templates.

Encryption—The process of translating a text message into unreadable text to ensure security. Encrypted messages may be read only by authorized persons with access to a private key that allows them to convert the message back into readable text.

Escalation—A means of tracking answers, incidents, opportunities, and tasks using business rules. When a rule's conditions are met, the rules engine schedules escalation to the new level. When the scheduled time (based on absolute or relative time) arrives, the rules engine sets the escalation level and takes the action specified by the rule, such as sending an email, notifying a manager, or following up with a customer.
See also Business rules.

Even split mode—A market testing option that sends test messages to equal portions of an audience for broadcast mailings and surveys.
See also Market testing.

Event (Named/Exit/Finish)—An action defined in a script rule or workspace rule that can be used to trigger other rules or workflow connectors. Events are defined by adding event fire actions, such as the Fire a Named Event action.

Everyone access level—An access level designed to allow answers to be visible to all customers depending on the answer status.

Exception—A method of highlighting report data that meets certain criteria. Data exceptions also allow email alerts to be sent when data in a scheduled report meets the exception criteria.

Exchange rate—A scale of monetary conversion from one currency to another.
See also Currency.

Explorer—A layout format on the content pane that displays a tree on the left, containing folders and other items, and a detailed list of the selected folder's contents (subfolders and files) on the right. Explorers are available for certain configuration items and components in Oracle Service Cloud.

Expression—A component of fixed and run-time selectable filters that defines a function, database column, value, or any combination of the three.

Extend—Using the widget builder to create a new widget by modifying the behavior and attributes of an existing widget.

External event—A program or script that runs as the result of an event occurring in Oracle Service Cloud, an action specified in a business rule, or an action in a marketing campaign.

External suppression list—An email delivery filter used to exclude an explicit set of email addresses from all mailings and surveys. When a mailing or survey is launched, contacts with email addresses in the list are filtered from the audience by default.

F

FCRR (first contact resolution rate)—A statistic that reports how often staff members or groups solve incidents with only one response. This number is displayed as the percentage of incidents solved with only one staff response.

File—A file that is uploaded to Outreach for attaching as a link in a document or snippet. From the Content Library, files can be uploaded and their characteristics can be defined.

File attachment—A file that is attached to an answer, contact, incident, opportunity, organization, or task, or sent with an incident response or quote. Files that are permanently attached to an incident or answer can be viewed by customers who view the record. Files that are sent with an incident response can be opened with the customer's email client and are not permanently attached to the record.

File attachment answer—A type of answer that appears as a file attachment.

File link—A clickable link to a file attachment that is inserted in a snippet or a document.

File Manager—The interface used to modify files for Oracle Service Cloud products. Administrators can modify files used to customize a site's Chat images, custom scripts, wordlist files, dictionary files, and certificate directories.

File menu—An interface element containing a list of options for working in Oracle Service Cloud, including access to other areas of the product and shortcuts for adding records and items to the knowledge base. The records and items available to staff are added to the File Menu component in navigation sets. This menu also contains options for changing personal settings and password and customizing the content pane and navigation pane display. Staff members can also exit the application from this menu.
See also File tab.

File tab—The interface element used to access the file menu. The File tab is located to the left of the Home tab on the ribbon.
See also File menu.

Final message—A mailing format used to send the mailing as final. In broadcast mailings and surveys, final messages are sent to all audience members who have not yet received a test message.

First due—A queuing pull policy that uses the incident due date or longest wait to determine which incidents or chats to retrieve from the queue.

Fixed filter—A component of Analytics and Outreach and Feedback segments used to define the data set available in the report or segment. Fixed filters are statements constructed from expressions, functions, and operators, and cannot be altered when using a segment or when running a report.
See also Custom report and Segment.

Flag—A method for defining the priority of a record. A flag displays at the top of records and staff members can add text to the flag and change the flag importance (red=high, blue=medium, green=low, white=no importance).

Flow diagram—A graphical representation of a campaign, survey, or desktop workflow. Flow diagrams allow staff members to diagram the events and decisions of a campaign, survey, or business process. When a campaign or survey is launched, contacts are automatically moved through the flow based on the specified criteria. When a desktop workflow is associated with a record editor in a profile, staff members with that profile will move through the flow when opening a record of the corresponding type.
See also Desktop workflow.

Forecast—A projection of revenue for an opportunity that may close in a given sales period.

Foreign key—A column or columns that contain values found in a primary key of another table. Foreign keys are used to ensure relational integrity and are rarely primary keys.
See also Primary key.

Forward to Friend link—A link that enables contacts to forward the message to another email address. This type of link can be added to documents, templates, and snippets for use in mailings, surveys, or web pages.

Framework—The underlying code structure of the Customer Portal, which offers a standard reference implementation as well as the ability to customize code for particular applications.

Function—A mathematical operator that can be applied to data from database fields to modify the data that is returned in an output column. Function also refers to a container for business rules. Functions are used anywhere in a business process that dictates doing the same thing in more than one place. Functions reduce the number of rules needed by allowing the same rules to be evaluated from multiple states.
See also Business rules *and* Rule state.

G

Give Feedback—A link on the sidebar on the Customer Portal template that customers can click to submit feedback about an organization's website, customer service, or product satisfaction.

Global template—An element of message templates functionality containing the content that frames the message-specific content in each system-generated notification and email message. The global template is used to standardize the design of outgoing messages to give them the same look and feel.
See also Message templates.

Group—A way to organize staff accounts in Oracle Service Cloud. In communities, group refers to a collection of members based on a common interest, cause, or organization.

Group type—A classification used to organize groups in a community and expand searching of related members and content.

Grouping—A method for grouping data in a segment. Filters can be used when grouping and are applied to the data after the grouping is completed.

Guest—Any community visitor who is not logged in with a community account.

Guide—A collection of branching questions, responses, answers, and text explanations used in guided assistance. Guide also refers to information about a promotion generated by a marketing staff member. This information appears on the Offer Advisor window to help agents present the promotion to customers.
See also Guided assistance *and* Offer Advisor.

Guided assistance—A component that helps agents quickly locate answers and text explanations using branching questions to guide them to the answers they need. The answers and explanations agents find can be sent to customers in incident responses or relayed to customers over the phone. Guides can also be made available to customers on the customer portal to help them find their own answers to questions.

H

Hash—A ten-digit alphanumeric string used to identify a specific hive, page, group, or member for certain community functions.

Help access level—An answer access level for context-sensitive answers. Help answers are not visible to customers except through special hyperlinks.
See also Context-sensitive answers.

Hive—A resource entity, such as a blog or message board, used by community members to communicate about a central topic, theme, or goal. Hives are sometimes referred to as resources.

Hive permissions—The set of permissions that allow members to perform specific actions in the hive, such as adding members, posting content, or commenting on posts.

Hive privacy level—The hive access status determined by the community privacy level and hive permissions.
See also Community privacy level *and* Hive permissions.

Hive template—A hive that is set to the Template status, making it accessible as a design template but not editable or searchable by the community.
See also Hive.

Hive type—A classification used to organize hives and expand searching of related content.

HTML answer—A type of answer that appears to customers as standard HTML on the customer portal.

HTML editor—A WYSIWYG (what you see is what you get) editor for formatting and editing answers, mailings, campaigns, documents, questionnaires, invitation messages, and message templates in HTML without previous HTML experience.

I

Identity provider—A third party that authenticates user information and sends verification to a service provider, such as Oracle Service Cloud, allowing single sign-on for the user.
See also SAML 2.0 open login.

IMP (import) file—A data file with an extension of *.imp* that is used by the Kimport utility to map values in the CSV file to columns in the database.

In Meeting—One of the default chat agent statuses. This status indicates that the agent is in a meeting and is unavailable to chat. The In Meeting chat agent status has an Unavailable status type.

Inactive—One of the default opportunity statuses and status types. An opportunity with the Inactive status is no longer being pursued but could be activated at a later date.

Inbox—An agent's personal queue consisting of all the incidents that have been assigned to the agent.

Inbox limit—The maximum number of incidents in an agent's inbox that cannot be exceeded when pulling from a queue. The inbox limit is set in the profile to which the agent is assigned.

Incident—Any question or request for help submitted by a customer through the Ask a Question page, email, a chat session, site or answer feedback, or from an external source using the API. Incidents can also be added by agents when they work with customers by phone, fax, or mail, and when responding to a private Twitter message.

Incident archiving—A process that permanently removes incidents from the database. Archived incidents are then stored in searchable data files. Staff members can access archived incidents once the Archived Incidents component has been added to their navigation set.

Incident custom field—A field for gathering and displaying additional information about incidents. Incident custom fields appear when adding or editing an incident and on the Ask a Question and Support History pages on the customer portal.

Incident thread masking—A method of protecting sensitive customer information, such as social security and credit card numbers, from displaying in incident threads. Three default system masks are available and custom masks can be created.

Incident queue—A sequence of unassigned, unresolved incidents. When an incident queue is added, it can be defined as the default queue. Incidents are added to queues automatically by business rules or manually by re-queuing and are handled in a first-in, first-out manner.

Incident severity—An option for classifying and recording an incident's importance and urgency.

Incident status—A method of tracking an incident's state. The default incident statuses are Solved, Unresolved, Updated, and Waiting, and custom statuses can be added.

Incident status type—The status of an incident as it moves through the system. Default incident status types are Solved, Unresolved, and Waiting.

Incident thread—The list of all activity on an incident, including the original question, agent responses and updates, customer updates, records of conversations, and internal notes about the incident (which are not visible to customers). The incident thread lists activity in chronological order and can be filtered by thread type.

Index—A database item that can be added to a database field to speed up searches for information in the field. Adding an index to a field increases the amount of time it takes to write information to the field, and indexing a large number of fields decreases the overall responsiveness of the database. Generally, only fields containing a large amount of information that are regularly searched on should be indexed. In Oracle Service Cloud, indices can be added to most custom fields and custom objects.
See also Custom field *and* Custom object.

Indexing—A process in which the text of an answer or incident is stemmed and indexed into keywords and phrases. These keywords and phrases are used to build the answer and incident phrases tables that are used during text searching. When an answer is added or updated, the Keywords, Summary, Question, and Answer fields are stemmed and indexed to create one-, two-, and three-word phrases. When an incident is added or edited, the Subject field and incident thread are stemmed and indexed to create one-word phrases.

Industry type—An option for classifying organizations by type of industry.

Information gaps—A report that clusters incidents and compares the topics to answer clusters, allowing organizations to pinpoint those areas (or gaps) in the knowledge base needing additional answers.

Initial state—A required state in every rule base. The rules engine evaluates a new or updated object using all rules in the initial state. Unless one or more rules in the initial state transition the object to a function or different state, the rules engine stops after all the rules in the initial state have been processed.
See also Rule state.

Inline—A method of displaying output definitions and filter definitions as lines of text in the report.
See also Output definition.

Inline editing—A feature for editing values directly on a report without having to open each record to make changes. Staff members can edit individual values in one record or select several rows to change values in multiple records. Staff members must have permission in their profile to edit the specific record type, and inline editing must be enabled in the report.

Inner join—A relational database operation that selects rows from two tables on the condition that the value in the specified column of the primary table is equal to the value in the specified column of the secondary table.
See also Outer join.

Interface—The console, windows, and pages used by staff members and customers to access an Oracle Service Cloud application and interact with a single knowledge base. The interface name determines the URL for the website, the name of the executable, and the *.cfg* directory name.
See also Administration interface *and* Agent desktop.

Interface Manager—A utility for managing multiple interfaces using one knowledge base.

Invitation method—A way of distributing a broadcast survey, transactional survey, or website link survey.

K

Kexport—A utility for exporting either single tables or an entire database from an Oracle Service Cloud application.

Keywordindexer—A utility that creates an index of the keywords found in incidents, answers, file attachments, and documents indexed by the Web Indexer. The keyword indexes are used when searching incidents, answers, file attachments, and other indexed documents.
See also Web Indexer.

Kimport—A utility for importing data, either single tables or an entire external database, into the database.

Knowledge base—All information (such as answers, assets, incidents, contacts, organizations, opportunities, products, staff accounts, tasks, mailings, and campaigns) maintained and presented by Oracle Service Cloud in a meaningful way. Knowledge base also refers to the interrelationships among the pieces of information.

Knowledge engineer—The staff member responsible for populating and maintaining the answers in the knowledge base. Responsibilities may include identifying when answers should be added, editing proposed answers, and reviewing existing answers to keep them current.

L

Langcvt—A utility for changing the language pack in Oracle Service Cloud from English to an alternative language pack. This utility converts the message bases and prepopulated knowledge base to the new language.

Language—The language for a specific interface that determines, in part, what answers are visible for viewing by customers.

Launched—A mailing and survey status that indicates a transactional mailing or transactional survey has been launched and can be included in a rule or campaign.

Layout—A predefined format that can be used in custom reports to apply fonts, colors, and other display options. Layouts can also be used in dashboards to apply a predefined structure for inserting reports.

Lead—A potential opportunity. A lead is a contact discovered through a marketing campaign and forwarded to a sales representative through Opportunity Tracking.
See also Opportunity *and* Oracle RightNow Opportunity Tracking Cloud Service.

Lead rejection type—An option for classifying and recording the reasons for rejecting a lead.

Leaf level—A level of product, category, or disposition that does not contain any sub-levels.
See also Product linking.

Learned link—Related answers that have a learned relationship as a result of customer activity.

Live Chat—A link on the sidebar on the Customer Portal template that customers can click to submit a request to chat with a chat agent.

Live Media bar—The toolbar that displays when Chat is enabled. The Live Media bar allows agents to log in, log out, set their status, and manage chats.
See also Oracle RightNow Chat Cloud Service.

Local settings—Customizations made by staff members to dialog and tool window sizes and locations, as well as content pane and navigation pane settings, console color and tint, toast notifications, and report appearance, including display and data settings and column formatting. Changes made by staff members to customize these settings affect only their workstation. In addition, staff members can return to the system defaults at anytime.

Logical expression—An expression that defines the relationship between report filters or business rule conditions. The components of a logical expression are joined using Boolean logic and can be grouped and joined with AND, OR, and NOT operators.

Logical operators—The symbols, (+) and (–), that can be used in most search techniques in Service to explicitly find answers that have a word (+) or that do not have a word (–).

Login window—A dialog box for entering user name, password (if required), and site information to access the administration interface of an Oracle Service Cloud application.

Lookup field—A field in a custom object designated to store values that are used as the names of the object's records. These names display on editor tabs and the navigation pane's Recent Items list. For instance, the Recent Items list displays incident reference numbers since the Reference # field is designated as the lookup field for incidents. Values in lookup fields are also displayed in reports instead of the ID values from fields in other tables that link to the lookup field's table. For instance, while the *incidents* table's Assigned Account field stores account ID numbers, the values displayed for this field in reports are from the *accounts* table's Full Name field.

Lost—One of the default opportunity statuses and status types. An opportunity with the Lost status has been lost, for example, to a competitor.

M

Mailbox—An email box specified in Oracle Service Cloud and dedicated to collecting email inquiries sent by customers, responses to mailings, and bounced messages. Incoming emails are processed by the Techmail utility.
See also Oracle-managed Service mailbox *and* Techmail.

Mailer daemon (rnmd)—A utility that monitors Outreach and Feedback, listening for requests from other components to start the email process. The mailer daemon is installed during the initial installation and can be configured to send messages in the most efficient manner for an organization.

Mailing—A collection of one or more messages sent to one or more contacts. A mailing can contain multiple messages for testing purposes.

Mailing status—A method of tracking the state of a mailing. The default mailing statuses include Draft, Launched, Scheduled, Preparing to Send, Sending, Suspended, Suspended by Error, Canceled, and Completed.

Manual logout—A way of managing desktop user sessions by manually logging out staff accounts who are currently logged in. Manual logout is part of desktop usage administration, which assists organizations in lowering seat usage for licensing compliance.
See also Automatic logout *and* Desktop usage administration.

Manual policy—A pull policy that enables agents to manually pull incidents into their inbox from any queue designated in their profile.

Manually related answer—A relationship between two or more answers manually defined by a staff member.

Market testing—A method for testing different message formats in mailings and surveys on a percentage of the audience before launching a final email. Market testing is available in even split and random sampling modes.
See also Even split mode *and* Random sampling mode.

Mask—A defined pattern that determines the format of information that can be typed in a field.

Master template—The settings that define a community's navigation elements, footer content, and fine print text.

Matrix question—A question type for displaying a series of survey questions in a table. Matrix questions are useful when a group of questions can be responded to with the same set of answer choices.

Member—A community user who has a login and can be associated with one or more groups in the community.

Member type—A classification for community group members that defines their role and provides access to certain group functions.

Merge field—A variable field that looks up account, contact, incident, opportunity, organization, or tracked link information and inserts it in the text of a document, snippet, document template, message template, quote template, or the message content and mail attributes of mailings and surveys.

Merge report—A report that can be included in marketing and survey content that dynamically limits the data returned so that customers see only their own information. For instance, if the report lists contacts and their open incidents, customers see only their own open incidents.

Message—An email consisting of a collection of HTML, text, and images in a particular format.

Message base—An editable text string that allows international language support and customization of headings, labels, buttons, and other text on the administration interface and customer portal and in email messages and notifications.

Message Bases editor—The interface element used to customize the message bases, including all the headings, labels, buttons, and other text, on the administration interface and customer portal.

Message templates—A component for customizing and standardizing the content of administrator notifications, administrator emails, and contact emails. Message templates consist of a global template, which is used to standardize the design of outgoing messages, and a set of system-generated messages.
See also Global template.

Migration—The process of moving from one version of the Customer Portal framework to a newer one. Migration can occur independently of upgrading to a newer version of Oracle Service Cloud.
See also Upgrading.

Mobile agent app—Functionality for managing incidents, tasks, and contacts using an Apple iPad or iPhone device, the Oracle Tap application, and Oracle Service Cloud credentials.

Mobile customer portal—The template and set of customer portal pages that have been optimized for display on mobile devices such as iPhones, Androids, and Palms.
See also Reference implementation *and* Template.

Model question—The associated question and answer that reside in the Virtual Assistant database. Model questions are linked to answers in the knowledge base and are displayed as similar questions on the Answers page of the customer portal. *See also* Oracle RightNow Virtual Assistant Cloud Service.

Monitor—A feature in Chat that allows a supervising agent to monitor the chat sessions of other agents and to intervene when necessary.

Msgtool—A utility for creating a configuration report for an Oracle Service Cloud site, or for changing configuration settings when an error has been made in one of the settings that subsequently locks staff members out of the Configuration Settings editor.

Multi-select—A feature for updating more than one record at a time.

Multiline—A method of displaying report data grouped under headings based on common values in report columns.

N

Natural language—Any approach that accepts and correctly handles human language. For example, English, French, and Japanese are natural languages, while computer languages, such as FORTRAN and C, are not. The knowledge base can be searched using natural language technology.

Navigation buttons—The buttons on the navigation pane associated with record types and components. Clicking a button displays that record type or component's navigation list.

Navigation list—All the reports, folders, and items associated with a specific record type or component in Oracle Service Cloud. Navigation lists are organized in a tree on the navigation pane.

Navigation pane—The area on the left and right side of the console where staff members work with navigation lists, select items to open on the content pane, and search the knowledge base. In the default configuration, the left navigation pane contains Recent Items and Navigation tool windows; the right navigation pane contains the Quick Search tool window. What appears on the navigation pane depends on the navigation set assigned in each staff member's profile and the permissions assigned in the profile. Each navigation pane can also be customized by staff members.
See also Configuration button, Navigation buttons, *and* Tool window.

Navigation set—Any combination of navigation buttons and their associated navigation lists. The Configuration button can also be added to navigation sets. Staff members are assigned a default navigation set in their profile.

Normalized URL—A URL that has been reformatted to ensure that documents that are referred to by multiple URLs will be indexed only once. Normalization may include reformatting domain names (for example, removing capital letters) or removing query parameters.

Note—Information that can be added to campaigns, contacts, documents, mailings, opportunities, organizations, and surveys for internal reference. Notes can also be added to incidents in the incident thread.

Notification—A message that notifies appropriate staff members about incidents, answers, mailings, campaigns, opportunities, and system errors. *See also* Answer update notification.

O

Object—Any standard or custom table in the Oracle database. Object also refers to the specific answer, contact, incident, chat session, opportunity, organization, target, or task that is evaluated by the rules in the object's rule base.
See also Custom object, Oracle Service Cloud standard object, *and* Rule base.

Object event handler—A PHP script with an integrated test harness (automated test script) that executes as the result of an event occurring on a standard or custom object in Oracle Service Cloud. *See also* Custom object, Oracle Service Cloud standard object, *and* Process model.

Offer—A promotion developed by marketing personnel or a product suggestion generated automatically by Offer Advisor that is presented to a customer by an agent.

Offer Advisor—Functionality for creating and presenting promotions to customers and for making automatic recommendations based on customer attributes and purchase history.

On Break—One of the default chat agent statuses. This status indicates that the agent is on break and is not available to chat. The On Break chat agent status has an Unavailable status type.

Open login—The ability to log in to the customer portal using an already established external account, such as Facebook, Twitter, or Google. When the external site validates the customer and the customer approves the transfer of information to Oracle Service Cloud, a contact record is created using the email address and the customer is automatically logged in to the customer portal.

Operating system—The program that, after being initially loaded onto the computer by a bootstrap program, manages all other programs in a computer. UNIX, Windows, VMS, OS/2, and AIX are all examples of operating systems.

Operational database—The database that contains the live data that is viewed, retrieved, and edited in an Oracle Service Cloud application. While reports that are run on the operational database can access real-time data, the reports cannot process as much information as reports that are run on the report database.
See also Report database.

Operator—A symbol or word that represents a mathematical or logical action that can be applied to a condition or value.

Opportunity—Information about a specific sale or a pending deal that is tracked and maintained in the knowledge base.

Opportunity custom field—A field for gathering and displaying additional information about opportunities. Opportunity custom fields appear when adding or editing an opportunity.

Opportunity status—A method of tracking an opportunity's state. The default opportunity statuses are Lead, Reject, Active, Closed, Lost, Inactive, and Dead. Custom statuses can also be added.

Opt-in—The explicit granting of permission by a contact to receive email communications from an organization. Opt-ins can be specific to certain mailing lists or applied globally across all mailing lists.

Opt-out—An explicit request by a contact to be removed from a specific mailing list or from all lists, most often communicated by email or web form. Also called *Unsubscribe*.

Oracle-managed Service mailbox—The recommended type of Service mailbox created by Oracle. Oracle configures the initial mailbox setup, including enabling incoming email and defining the Pop Server, POP Account, and Password fields. Administrators can also create general Service and Outreach mailboxes for their application.

Oracle RightNow Analytics Cloud Service (Analytics)—A business reporting solution that enables organizations to capture, organize, present, and disseminate real-time actionable knowledge with speed and ease. Using Analytics, organizations can increase insights by identifying customers based on previous interactions across all channels.

Oracle RightNow Chat Cloud Service (Chat)—A component that provides customers with access to chat agents for questions and issues that require human interaction.

Oracle RightNow Connect Desktop Integration (JavaScript API)—A public API that enables customers and partners to integrate data contained on a workspace with a web page that is contained on the workspace. If external information is presented about the current record in a web page, this API can be used to update or read workspace data from the web page.
See also Workspace.

Oracle RightNow Connect PHP API Cloud Service (Connect PHP API)—A backward-compatible, public API that enables customers and partners to integrate with the Oracle Service Cloud platform using PHP scripts. Connect PHP API is primarily used to integrate with the customer portal, but it can also be accessed through the File Manager, process designer, and analytics. Connect PHP API leverages the Connect Common Object Model, which is also leveraged by Connect Web Services.
See also Oracle RightNow Connect Web Services for SOAP.

Oracle RightNow Connect Web Services for SOAP (Connect Web Services)—A backward compatible, public API that enables customers and partners to integrate with the Oracle Service Cloud platform using industry leading standards such as WSDL 1.1 and SOAP 1.1. It provides broad support for a wide variety of languages, platforms, and tools. Connect Web Services leverages the Connect Common Object Model, which is also leveraged by Connect PHP API.
See also Oracle RightNow Connect PHP API Cloud Service.

Oracle RightNow Customer Portal Cloud Service (Customer Portal)—The website interface that customers access for customer support. The customer portal is integrated with Service so customers can query the knowledge base for answers, ask questions, provide feedback, manage their customer account, and request chat sessions. It consists of a standard set of files that can be customized, uploaded, staged, and promoted to make the site available to customers.
See also Mobile customer portal.

Oracle RightNow Cloud Service (Service)—A customer service and support solution that intelligently assists both customers and agents with inquiry resolution across standard and social channels. Service assists customer service and support organizations that need to easily capture, respond to, manage, and track all service interactions in one consolidated application.

Oracle RightNow Desktop Add-Ins Cloud Service (desktop add-ins)—An add-in framework for the Oracle Service Cloud platform that enables customers and partners to build custom .NET components, controls, and applications for the agent desktop.
See also Agent desktop.

Oracle RightNow Feedback Cloud Service (Feedback)—A customer survey tool for gathering information about customers' experiences with an organization. With a wide range of customization and formatting options, questions types, and full analytics for efficient reporting, surveys provide organizations with a flexible method of tracking customer satisfaction.

Oracle RightNow Opportunity Tracking Cloud Service (Opportunity Tracking)—A sales automation solution that enables staff members to easily manage all opportunity, organization, and contact information and track all quote interactions in one consolidated application.

Oracle RightNow Outreach Cloud Service (Outreach)—An email and campaign solution for delivering personalized, richly formatted email communications to targeted segments of customers and prospects and for launching full-scale marketing campaigns.

Oracle RightNow Professional Services—Services provided by Oracle, including training, support, and consulting.

Oracle RightNow Self Service for Facebook Cloud Service (Self Service for Facebook)—A Facebook application that provides access to customer-facing features of Oracle Service Cloud, such as Find Answers and Ask a Question, directly from Facebook's web and mobile interfaces.

Oracle RightNow Social Experience (Social Experience)—A set of complementary components, including Communities, Channels, Social Monitor, and Self Service for Facebook, each representing a different, powerful way of interacting with customers using social media. While each component serves a distinct purpose, they can be used together to create a wide-ranging social web presence.

Oracle RightNow Social Experience communities—A comprehensive social web solution consisting of Oracle RightNow Support Community Cloud Service and Oracle RightNow Innovation Community Cloud Service that lets customers connect, discuss, and contribute through forum discussions, question-and-answer sessions, resource libraries, and suggestions for service improvements.

Oracle RightNow Social Monitor Cloud Service (Social Monitor)—A monitoring tool for gathering and acting on information about an organization and its products that appears on social networking services such as Twitter and YouTube.

Oracle RightNow Virtual Assistant Cloud Service (Virtual Assistant)—A solution for identifying the intention behind a customer's question using semantic search technology and linguistic dictionaries to return highly relevant search results and provide virtual assistant chats.

Oracle RightNow Wireless—The interface for accessing Service from a wireless phone or any device with a WAP (wireless application protocol) browser, such as a PDA (personal digital assistant).

Oracle Service Cloud—A customer experience suite combining web, social, and contact center experiences for a unified, cross-channel service solution in the cloud.

Oracle Service Cloud Smart Client—The web-based software that allows local applications to interact with the server-based applications. The smart client can be installed on staff workstations using the Click-Once installer.
See also Click-Once installer.

Oracle Service Cloud standard object—Any standard table that is native to Oracle Service Cloud. Standard objects store data, including record types such as answer, contact, incident, opportunity, organization, and task. Other standard objects include accounts (staff accounts), assets, quotes, and sales products.
See also Custom object *and* Object.

Organization—Any company, business unit of a large company, or government agency that has an organization record in the knowledge base.

Organization address type—A way of storing multiple addresses for a single organization. The default organization address types are Billing and Shipping, and custom address types can be added.

Organization association—A feature for associating a contact with a specific organization. Organization association links the incident and opportunity history of the contact and organization.

Organization custom field—A field for gathering and displaying additional information about organizations. Organization custom fields appear when adding or editing an organization.

Organization hierarchy—A feature for creating or changing the hierarchy of organizations. A hierarchy can be created by making one or more organizations subordinate to another organization. Twelve hierarchy levels can be used.

Outer join—A relational database operation that selects rows from two tables regardless of whether the specified columns contain corresponding values. An outer join will return all rows from the primary table and any rows from the secondary table where the value in the specified column of the primary table is equal to the value in the specified column of the secondary table.
See also Inner join.

Output definition—A description of a report that can be viewed when generating a report or when hovering over the report title and columns. Output definitions are predefined for all standard reports and can be defined when creating a custom report.

Output level—A distinct section of a report that outputs report data. Reports can have multiple output levels, each of which can have their own filters, groupings, data exceptions, headers, footers, and descriptions. Output levels in a report are related through drill-down links and drill-down filters.

Owner—The member who holds complete authority over a community group or hive. A member who creates a group or hive is designated as its owner unless ownership is transferred.

P

Page—A web page or a customer portal page in an Oracle Service Cloud application.

Page set mapping—The customer portal functionality that allows a specific page set to be mapped to a specific user agent. Customers are then directed to the most appropriate page set as determined by the browser or user agent accessing the customer portal.

Panel—A customizable object used to display dynamic content on community pages. Panels can be added to custom pages and some standard pages.
See also Custom page.

Path—The connector between items in a campaign flow diagram. A path can be one of four types (Standard, Submit, Yes, or No) and can connect two actions or an action and a decision in campaigns.
See also Action *and* Decision.

Personal settings—An application option that lets staff members override settings in their staff account and customize settings that apply to the interface defaults in Oracle Service Cloud. Settings defined in staff accounts that can be changed include default currency, default country, time zone, and email notifications. The staff account settings changed from the Personal Settings option will also be made to the corresponding settings in the staff account.

Pipeline—Calculated revenue that has not yet been acquired but is forecasted to close in a specified time period.

Polling survey—A survey that displays as a single question on a customer portal page or any page external to the customer portal. After customers submit their response, they see a poll results chart or a thank-you message.
See also Oracle RightNow Customer Portal Cloud Service.

Post—Content added by users of a social media site, such as a Facebook status update or a text entry in Social Experience communities.
See also Oracle RightNow Social Experience communities.

Post type—The structure of a post as defined by the sequence of fields and controls used to create its content.

Preliminary screen pop—The toast notification that displays when an incoming chat request is received. The preliminary screen pop displays as a two-column table, and agents can view information about the chat request before accepting or declining the request.

Preparing to Send—A mailing and survey status that indicates a broadcast mailing or broadcast survey is about to be sent.

Price schedule—An option for creating various pricing levels that can be assigned to sales products. Price schedules allow the same product to have different prices, such as wholesale and retail prices.

Primary contact—The main individual associated with an incident or opportunity. All primary contacts have an associated contact record in the knowledge base. In Service, a primary contact must be associated with an incident for agent responses. In Opportunity Tracking, either a primary contact or an organization must be associated with an opportunity to serve as a point of contact for sales representatives during the sales process.
See also Contact.

Primary key—A database table column that is indexed to enforce a unique constraint, meaning that a given value cannot appear more than once in the column. This column is used to uniquely identify each record in the table. Primary keys are often the target of a foreign key in a different table.
See also Foreign key.

Priority—A ranking that defines the order in which incidents are pulled from multiple queues. The priority ranking also identifies which queues agents can retrieve incidents from.

Private—One of two default answer status types. Answers marked Private are never visible to customers.
See also Answer status type.

Private key—A password-protected key used by the holder to create digital email signatures and decrypt messages that were encrypted using the holder's associated public key.

Privileged access answers—Answers that are assigned a custom access level for viewing by certain contacts and organizations assigned to the appropriate service level agreement (SLA).
See also SLA.

Process model—The virtual container that encompasses all event handlers (standard and custom) in Oracle Service Cloud. Using the process designer, a process model can be exported, imported, deployed, and rolled back.
See also Custom object, Object event handler, *and* Oracle Service Cloud standard object.

Product—An option for grouping answers and incidents that allows more precise organization in the knowledge base. Staff members can classify answers and incidents by product and up to five additional levels of sub-products, allowing more refined searching by customers and staff members.
See also Category.

Product catalog—The list for organizing sales and asset products.
See also Asset product *and* Sales product.

Product linking—An option for linking products to categories and products to dispositions so that category and disposition choices are narrowed to only those associated with the selected product for staff members working with incidents and customers searching on the customer portal.

Production area—The set of publicly available customer portal files and pages. The production area is updated when files in the development folder are staged and promoted.
See also Development area.

Profile—A mechanism for controlling access to administration functions and for assigning staff members specific permissions, default workspaces, a default navigation set, and report access.

Promote—To copy all customer portal pages from the staging area into the production folder, where they become publicly available on an organization's website.

Promotion—A specific message (for example, a discount, renewal notice, or announcement) delivered to a specific group of customers using Offer Advisor. Promotions are generally created by marketing staff members and presented to customers by agents.
See also Offer Advisor.

Proof—A way to review the content of a mailing or survey to ensure the message is approved by the necessary contacts and staff members and as a final check for any mistakes. Proofs can be sent to a proof list or group of staff members who, in turn, can accept or reject the proof. Proof messages can also be sent to staff members when changes have been made to message templates.
See also Message templates.

Proof list—A contact list that is available to receive proof messages, enabling its contacts to review mailings and surveys before they are finalized.

Propose answer—A function for proposing that an incident's solution be added to the answers available to customers. The proposed answer is reviewed by the knowledge engineer, who determines if it should be made public and, if so, its access level, status, language, and visibility.

Proposed—One of the default answer statuses. This answer status indicates that the answer has been proposed by a staff member from an incident. Answers with a Proposed status are not visible to customers.
See also Answer status.

Public—One of the default answer statuses and status types. Answers marked Public may be visible to customers depending on their access level and language.
See also Answer status *and* Answer status type.

Public certificate—*See* Certificate.

Public key—Public information that may be attached to email messages to allow those who reply to the message to encrypt their response. The public key also verifies that the digital signature was created with the associated private key, thereby ensuring the integrity and authenticity of the message. Public keys are often referred to as public certificates, although certificates hold additional information besides the public key.

Public key certificate—*See* Certificate.

Publish report—A method of preserving a report's graphical and tabular output as a snapshot. Once a report is published, it cannot be modified and the report data will remain unchanged even as the knowledge base is updated.

Pull policy—The method for determining which queues agents can retrieve incidents or receive chat requests from and in what order. Pull policies include Strict Priority, Manual, and First Due.

Pull quantity—The specified number of incidents to be retrieved from the queue at one time when an agent pulls incidents.

Q

Question—The main element in a survey. Text, choice, and matrix question types can be created. Questions can be used in multiple surveys, mixing and matching as necessary.
See also Choice question, Matrix question, *and* Text question.

Questionnaire—The complete set of questions and all the pages in a survey. Using the HTML editor, staff members can create dynamic surveys using a graphical interface to add questions and create survey branches based on how customers answer. A questionnaire must be created for each survey.

Queue—*See* Chat session queue *and* Incident queue.

Queued report—A report that has been manually or automatically scheduled to run in the background after entering the report's search criteria. When a queued report has been generated, a toast notification displays with a link to open the report.

Quick Access toolbar (QAT)—One or more buttons used as shortcuts to commands on the ribbon. The initial set of buttons on the Quick Access toolbar is specified by what is displayed on the content pane, but staff members can customize the toolbar to add frequently used buttons. By default, the Quick Access toolbar appears above the ribbon.

Quick Search—A component used to search for records and files when only limited information is known. Quick Search can be used to search the knowledge base no matter what navigation list is displayed or what is open on the content pane. Oracle Service Cloud contains a number of default Quick Search reports, and other reports can be added to the Quick Search button in navigation sets.

Quota—The revenue goal assigned to a sales representative during a specified time period, such as month or quarter.

Quote—A formal price assigned to a sales product for a particular customer during a sales period. Quotes also include any discounts applied as well as the valid dates for the quote.

Quote custom field—A field for gathering and displaying additional information about quotes. Quotes custom fields appear when sending a quote with an opportunity.

Quote template—A template defined for a specific type of quote. Quote templates are used when generating a quote for an opportunity.
See also Quote.

R

Random sampling mode—A market testing option that sends test messages to a specified percentage of the audience. After determining the most effective message, a final message can be sent to any audience members who did not receive a test message.
See also Market testing.

Record—Any individual answer, asset, contact, incident, opportunity, organization, or task in the knowledge base. Records can also be created for custom objects, which can be added to Oracle Service Cloud to integrate organization-specific data with the Oracle database.
See also Custom object, Oracle Service Cloud standard object, *and* Record type.

Record type—A database table that stores all records of the same type, such as answers and incidents.
See also Record.

Record pool—The memory space used to temporarily store all records loaded in a single desktop workflow session.
See also Desktop workflow.

Record tabs—The layout of information contained in a record. Each tab contains specific fields and options related to the record that can be viewed and updated as necessary.

Recurrence—A scheduling method used to send or initiate the same report, mailing, survey invitation, campaign, or cloud search on a regular daily, weekly, monthly, or annual basis.

Reference implementation—The standard set of files used to create the default customer portal as it exists without customization.

Regular expression—A combination of operators and character strings used to define a search field or a condition statement in a business rule.

Reject—One of the default opportunity statuses and status types. A lead with the Reject status has been rejected by a staff member.

Related answers—A feature that assists customers in finding answers to questions related to the current web visit. Related answers appear on the answer details page and are sorted by relatedness—those answers that appear at the top of the list are most related to the answer being viewed.

Relationship item—A control used to create workspaces. Relationship items can include lists of records as well as other information such as audit logs and file attachments.

Relative time—The number of hours from a specific event or time, such as two hours from the time an incident was created. Relative time is used in business rules and custom reports. In standard reports, relative time is the amount of time passed based on an organization's work hours.
See also Absolute time.

Relative value—A field value set by a workflow, script rule, or workspace rule that adds or subtracts, or appends or prepends, a value to the field's previous value (for instance, increasing the value of an integer field by 1).

Report—Any standard report, custom report, or list of records accessed from a navigation list on the navigation pane. Standard and custom reports can also be accessed from the Reports explorer. Reports are also used to display lists of answers or a customer's incidents on the customer portal.

Report database—A copy of the operational database that is used for reporting purposes. Reports that are run on the report database can process more information than reports run on the operational database. The data in the report database is copied from the operational database at scheduled intervals and therefore may not be as current as the data in the operational database. Also called *replication database*.
See also Operational database.

Report control—A control that inserts a report into a workspace.
See also Workspace.

Report linking—A feature for creating links between reports. Linked reports and dashboards can be seamlessly opened from other reports, just as report levels can be opened from other levels in the same report. Both conditional and unconditional links can be created.

Report schedule—An option for subscribing to a standard or custom report. Staff members can schedule the report to be sent to an individual staff member, a group of staff members, a distribution list, an external email address, or any combination of these options.

Report section—A section of an output level that contains a component of the report's output, such as a title, chart, or tabular data.

Report variable—An item added to a report that is used to return different data or data in different formats in the same column. For example, a single report can be created that displays the number of incidents by staff member, group, queue, or status. When running a report, the variable value is selected from the Search window or from docked filters.

Reportgen—A scheduled utility that sends out scheduled reports.
See also Report schedule *and* Scheduled report.

Re-queuing—The action of moving an incident from an agent's inbox into a queue.

Resolution time—The maximum allowable time (in minutes) set by a service organization for resolving incidents.
See also Response requirements.

Response interval—The days of the week and times when a service organization makes itself available to respond to and solve incidents on a daily basis. Days and hours can be specified.
See also Response requirements.

Response requirements—The maximum time allowed (in minutes) for incident response and resolution within the operating hours defined by the organization. The response requirements are used to measure agent performance in responding to and solving incidents and can also be used for SLAs that do not have customized response requirements.
See also SLA *and* Response interval.

Response time—The maximum allowable time (in minutes) set by a service organization for initially responding to new incidents.
See also Response requirements.

Result grouping—A feature in a report definition for selecting fields to group data by. Result grouping provides a more organized view of a report. Multiple levels can be defined for result grouping. The more levels used, the finer the detail will be.

Review—One of the default answer statuses. This status can be used to notify the knowledge engineer when a public answer needs to be reviewed.
See also Answer status.

Ribbon—All the tabs and buttons for performing actions and functions on an entire report, individual records in a report, or items in an explorer tree or list. The buttons on each tab are grouped by related functions, and each group is labeled. The tabs and buttons on the ribbon change based on what is displayed on the content pane.

Rollover—A method of displaying additional report details by hovering over data described in the report's output definition.

Rollup—A method of displaying report data that groups records together by specific fields. The grouped records are displayed under headings that can be expanded or collapsed to display or hide the records under the heading.

Root certificate—A self-signed certificate generated by a party that signs other public certificates. Certification authorities may authorize other entities to issue certificates. The root certificate belongs to the top-level certification authority.

Round-robin queue—A type of incident queue in which unresolved incidents are automatically assigned to agents in a rotating fashion.

RPA (responses per assignment)—A statistic that calculates the average number of times a staff member or group responded to each incident.

RSS (Really Simple Syndication)—The primary standard used for the syndication of web content. RSS is an XML-based format used primarily for distributing news headlines on the Internet. Oracle Service Cloud contains an RSS channel so staff members can monitor RSS feeds for content. *See also* Oracle RightNow Social Monitor Cloud Service.

Rule—*See* Business rule.

Rule base—All rules, states, functions, and variables associated with a particular object type (answers, contacts, incidents, chat sessions, opportunities, organizations, targets, and tasks) in business rules.

Rule log—A feature for viewing the rule or rules that have fired against a specific answer, contact, incident, opportunity, organization, or task. *See also* Business rules.

Rule state—A container for business rules. Every rule base must contain an initial state, and states can be added to handle all stages of object processing. Rules in the initial state can transition objects to other states in the rule base. *See also* Initial state.

Rules engine—The software that evaluates objects to determine if they meet the conditions of any rules in the rule base and then executes the actions defined in the rules.

Run-time selectable filter—A component that defines the initial data set available in a report and allows staff members and customers to customize the data returned. Run-time selectable filters are statements constructed from expressions, functions, and operators, and can be customized when running a report.

S

S/MIME (Secure Multipurpose Internet Mail Extensions)—A standard for sending secure email messages that can verify the sender's identity. S/MIME emails can be encrypted for security and signed to verify authenticity.

Safe mode—A login method that allows staff members to log in to Oracle Service Cloud without activating add-ins. Safe mode is available after malfunctioning add-ins have prevented administrators and staff members from logging in.
See also Add-in.

Sales period—The period of time used to track the revenue goals assigned to each sales representative. The default sales periods are annual, semiannual, quarterly, monthly, and weekly.

Sales product—An option for identifying items or services sold by an organization. Sales products can be added to quotes and promotions.

Sales products custom field—A field for gathering and displaying additional information about sales products. Sales products custom fields appear on the Custom Fields page of the Product Details editor.

Sales representative—A staff member who may be assigned opportunities and who may also maintain contact and organization records.

SAML (Security Assertion Markup Language)—An XML-based protocol in which an identity provider authenticates a user's identity and passes that information to a service provider, which can then decide to allow the user access to the service without requiring an additional login procedure.
See also Identity provider, SAML 2.0 open login, *and* Single sign-on.

SAML 2.0 open login—A type of single sign-on that uses Security Assertion Markup Language and is the protocol that Oracle Service Cloud uses for its single sign-on feature.
See also SAML *and* Single sign-on.

Scheduled—A mailing and survey status that indicates a broadcast mailing or broadcast survey is ready to be sent and will be emailed at the scheduled send date and time.

Scheduled report—A report that is sent as an HTML email or HTML email attachment to staff members, distribution lists, or external email addresses at specified times. Scheduled reports can also be sent when alerts defined in data exceptions are triggered.
See also Exception.

Schema—The structure of a database system described in a formal language supported by the database management system. In a relational database, the schema defines the tables, the fields in each table, and the relationships between fields and tables.

Score—A calculated value that ranks the order of displayed answers. An answer's score is determined by its solved count and any display position that was set when the answer was added or updated. Score also refers to the relative weight assigned to each choice in a choice question for surveys. Score values can be used for survey calculations to trigger rules or campaign actions based on a contact's answers and also for reporting purposes.

Screen pop—*See* Third-party screen pop.

Script—A control that can be added to a custom workspace to help staff members enter record information in a logical order. Scripts can contain multiple pages with fields and other controls as well as branching logic to guide staff members to different pages based on actions they take on a script page.

Script rules—A type of rule used to trigger actions, such as setting the value of a field, on script pages when specified conditions are met.

Search and selection criteria—The run-time selectable filters and sorting options that can be defined when searching for a particular record. *See also* Run-time selectable filter.

Search index—A matrix that includes a list of important words within a document and their document of origin, allowing efficient searching. In some cases, the matrix is a database table. In other instances, the matrix is a file stored on a hard drive. For a word or phrase to be searchable within an incident, answer, file attachment, or external document, it must first be indexed.

Search priority word—A word that is associated with an answer or document. The associated answer or document will always be displayed to customers when the search priority word is included in their search text.

Secure email—Incoming and outgoing email that has authenticity (the sender is who it appears to be), integrity (content has not changed during transmission), and privacy (only the intended recipient can read it).

Seeding—The initial set of answers in the knowledge base.

Segment—The criteria for creating dynamic lists of contacts based on user-defined filters. Multiple filters can be created and logical expressions can be used to create the exact data set needed to target contacts. Once a segment is created, it can be used in broadcast mailings and surveys and the group of contacts will be constantly adjusted and updated as they meet or fall outside of the segment's requirements.

Self-learning knowledge base—The automatic generation of self-service content based on customer interactions so that the most pertinent information is presented.
See also Knowledge base.

Sender ID—A form of email authentication that identifies IP addresses authorized to send mail on behalf of a specific organization. Sender ID differs from SPF authentication primarily by the components of the email used to authenticate the message.

Sender Policy Framework (SPF)—A form of email authentication that identifies IP addresses authorized to send mail on behalf of a specific organization. SPF differs from Sender ID authentication primarily by the components of the email used to authenticate the message.

Sending—A mailing and survey status that indicates the broadcast mailing or broadcast survey is currently being sent to contacts. The system automatically sets the status to Sending after the mailing or survey is done being prepared to send or at the scheduled date and time.

Service Console—The user interface where staff members work in Oracle Service Cloud. Staff can add and edit records and items, generate standard reports and create custom reports, access their notifications, and chat with customers from this console. Administrators can also configure and customize their application from the console. Also called *administration interface* or *agent desktop*.

Service level agreement—*See* SLA.

Session hard timeout—Functionality for automatically expiring sessions to help reduce session exploitation. Oracle Service Cloud is set up to automatically expire sessions so organizations can control the length of time before staff sessions expire and staff members must reauthenticate to continue working.

Sharing—The process of sharing contacts, tasks, or both between Microsoft Outlook and Oracle Service Cloud. All sharing functions are initiated from Outlook.

Sibling answer—Related answers that share the same product or category. Sibling answers may also contain the same file attachments.

Single sign-on—A method for a user (in Oracle Service Cloud, a staff member or customer) to log in to one application, known as an identity provider, and then be authenticated and logged in to another application, such as Oracle Service Cloud, without being required to log in separately to the second application.
See also Identity provider *and* SAML 2.0 open login.

SLA (service level agreement)—A contract that is applied to contacts and organizations specifying the level and type of customer service they are eligible to receive. Generic SLAs are created by administrators, and SLA instances are applied to specific customers, either automatically through business rules or manually by staff members. SLA instances are called service contracts on the customer portal and can be accessed from the Account Overview page.
See also Response requirements.

SLA instance—A customer's individual copy of an SLA. An SLA is a generic contract that has not been applied to a specific customer. An SLA instance is a copy of the generic SLA applied to a specific customer.

Slicing—A method of grouping tabular report data by a common element. When slicing, a common value in a field can be chosen and only those rows that have that value will be returned in the report. Other slice groups can be selected from links or a tree element.

Smart Interaction Hub (SIH)—Functionality for directing customer interactions to the most qualified source for resolution by leveraging agent skills.

Smart merge—A feature that allows staff members to merge similar answers in the knowledge base to provide more meaningful answers to customers and to reduce answer duplication.

SmartAssistant—Oracle technology that uses business rules to automatically suggest possible answers to customers' email questions and Ask a Question queries. Staff members can use SmartAssistant to search for answers in the knowledge base that are related to an open incident or a current chat session.
See also Suggested answers.

SmartSense—Oracle technology that estimates a customer's emotional state or attitude based on the words and language the customer uses when submitting a question in Service. SmartSense also rates the incident responses sent by agents. The SmartSense ratings for both customer and agent appear wherever they have been placed on the workspace. In Feedback, SmartSense evaluates text questions submitted by customers in surveys. In social monitoring, SmartSense evaluates posts returned from cloud searches.

Snippet—Any text or part of a document that can be used in more than one document. Snippets can be added to documents from the Content Library component.

Social monitor—A component for searching social networking sites to monitor and act on conversations about an organization and its products. *See also* Oracle RightNow Social Monitor Cloud Service.

Solved—One of the default incident status types and incident statuses. An incident marked Solved has been resolved.

Solved count—The method for determining where an answer will display in the list of answers. The most useful answers (those with the highest solved count) are pushed to the top of the list, while those with the lowest ratings are moved down on the list. When a customer clicks one of the options in "Was this answer helpful?" on the answer details page, it directly affects the solved count. The solved count is increased for answers that are viewed, and the last answer viewed has a higher solved count than answers viewed earlier in the same web visit. The solved count is also increased when an agent uses a SmartAssistant suggested answer when responding to a customer's question.

Sort order—The sort order of a report's output columns. The default sort order is defined when generating a report and can be modified when running the report.

Spacer—A control that is manually added to a workspace to maintain the row and column arrangement when fields and controls are moved and removed or to create white space in a workspace.

Spider—*See* Web spider.

SSL (secure sockets layer)—An industry standard for secure Internet-based transfer of information.

Staff account—The settings for a staff member authorized to access an Oracle Service Cloud application, including user name, password, profile, group assignment, and email information.

Staff account custom field—A field for gathering and displaying additional information about staff members. Staff account custom fields appear on the Custom Fields page of the Staff Accounts editor.

Staff member—Any employee with a staff account and profile authorized to access an Oracle Service Cloud application.

Stage—To compile and optimize all the customer portal pages from the development folder, where they are created and tested, into the staging folder, where they appear exactly as they will when the staged files are promoted into production. Stage also refers to the level of completion of a particular opportunity within a specific strategy. Tasks can be defined within a stage and can be required to be completed before the opportunity can move to the next stage.
See also Promote, Strategy, *and* Task.

Standard reports—The complete set of predefined reports available in Oracle Service Cloud. Standard reports can be copied and used to create custom reports.

Standard text—Any text prepared in advance that can be sent to customers when responding to incidents, appended to responses by a business rule, or sent by an agent during a chat session. Also called *standard response*.

State—A field that classifies how contacts and organizations were added and what actions have occurred since their creation. The State field is automatically populated when a contact or organization record is added or updated, and staff members can also manually update the State field. State field options include Service, Outreach, Opportunities, and any combination of the three. State also refers to the current stage of an object in rules processing.
See also Rule state.

Status—The current state of an answer, incident, mailing, opportunity, survey, or task.
See also Answer status, Incident status, Mailing status, Opportunity status, Survey status, *and* Task status.

Status type—The current state of an answer, incident, or opportunity. Default answer status types are Public and Private. Default incident status types are Unresolved, Solved, and Waiting. Default opportunity status types are Active, Closed, Dead, Inactive, Lead, Lost, and Reject.

Stopword—A word that is not included in the keyword indexes in Service and is not searchable as a result. Pronouns, articles, and adverbs are common stopwords.

Strategy—A sales plan defined by an organization that includes stages and associated tasks that must be completed in order for opportunities to move through each stage. Strategies allow organizations to define multiple sales plans based on their business processes and help ensure that policies and procedures are enforced.

Strict priority—A pull policy that defines the order in which the system pulls incidents or chats from multiple queues. The strict priority ranking also identifies from which queues agents can retrieve incidents.

Style—All of the specifications that can be defined for presenting graphical and tabular data in a report, including fonts, colors, and borders.

Subscription—A type of cloud search that pulls all available thread content from a custom Facebook or RSS channel account at regular intervals.
See also Cloud search.

Suggested answers—The list of answers from the knowledge base that is returned when SmartAssistant is invoked, either by staff members working on incidents or engaged in chat sessions or through business rules that append answers to email questions and Ask a Question queries from customers.
See also SmartAssistant.

Suggestion—A product recommendation automatically generated by Offer Advisor using a predictive model based on customer purchase history.

Support Home—The entry page on the customer portal. This page provides customers with quick access to the tools they need to answer their questions and receive immediate customer service.

Survey—A method of gathering customer responses and feedback. Surveys can be sent as mailings, served as a web page, or sent as events triggered by a campaign or business rule.
See also Oracle RightNow Feedback Cloud Service.

Survey status—A method of tracking the state of a survey. The default survey delivery statuses include Draft, Scheduled, Launched, Recurrence Scheduled, Preparing to Send, Sending, Suspended, Expired, Suspended by Error, Canceled, and Completed.

Suspended—A mailing and survey status that indicates a mailing or survey has been temporarily suspended from the Sending or Launched status.

Suspended by Error—A mailing and survey status that indicates a transactional mailing or transactional survey encountered an error and has been temporarily suspended.

Synchronization—The process of collecting and combining contact and task records in Oracle Service Cloud and Microsoft Outlook to ensure data is consistent between applications. Also called *sync*.

Syndicated widget—A Customer Portal widget that can access the Oracle Service Cloud database from any external web page. The code used to place the syndicated widget on a web page is available under tag documentation on the Customer Portal Administration site.

System attribute—A customized field that can be added to account (staff account), answer, asset, contact, incident, opportunity, organization, quote, sales product, and task standard objects. System attributes can be displayed in reports and workspaces, and can be used when defining relationships between standard and custom objects.
See also Custom object *and* Oracle Service Cloud standard object.

T

Table instance—A component of a data set that specifies the database tables that data can be selected from and how database tables are joined in a report or segment.

Target—A specific group of customers sharing common characteristics to whom a promotion is presented. A customer may belong to more than one target.

Target rule—A type of business rule that has the sole purpose of creating a target consisting of contacts who meet the conditions established by the rule.

Task—An action or activity scheduled to be completed within a specified time. Tasks can be standalone, or they can be associated with answers, campaigns, contacts, documents, incidents, mailings, opportunities, organizations, surveys, and stages in a sales strategy.

Task custom field—A field for gathering and displaying additional information about tasks. Task custom fields appear when adding or editing a task.

Task inheritance—A feature for linking a task's assigned staff member, contact, or organization to the equivalent value in a record associated with the task.

Task status—A method of tracking a task's state. The default task statuses are Not Started, In Progress, Completed, Waiting, and Deferred.

Techmail—A scheduled utility that retrieves mail from specified POP3 mailboxes. Service processes some of the mail into new incidents and routes the incidents using business rules (depending on settings). Outreach and Feedback process bounced messages to assist in tracking incorrect email addresses.

Template—A structured format used in a document in which specified sections are locked and cannot be edited and a section is open for customized content. The customer portal also uses templates to apply a uniform style to individual pages of the support site. Templates are also available as a starting point for creating a workflow's flow diagram, and templates can be added for community groups and hives.

Territory—A specific geographical sales region configured in Opportunity Tracking. Sales representatives can be assigned specific territories for opportunity assignment. Up to twelve levels of territories can be defined.

Test message—A mailing message that can be sent to small cross-sections of an audience to test a response before launching a final message.

Text explanation—A text field that can be associated with a response in a guided assistance guide. The text explanation is displayed after an agent selects the associated response from a question in the guide.
See also Guided assistance.

Text field—A customizable field containing text that is commonly added to reports. Once a text field is created, it can be added to any custom report and then adjusted as necessary.

Text matching—A feature in Offer Advisor that enables agents to search for specific terms that best express the customer's interests. After a search, the list of promotions and suggestions on the Offer Advisor window will be reordered, and the ranking of each will reflect its relevance to the terms entered by the agent.
See also Offer Advisor.

Text question—A question type that allows customers to type their answer to a question.

Theme—A group of related text responses to a survey question. Themes are created by topic monitoring and identified by common keywords. Themes are also used in social monitoring to group related cloud search results and in the customer portal to apply CSS styling to multiple elements of a support site by applying a single theme.
See also Oracle RightNow Customer Portal Cloud Service, Oracle RightNow Social Monitor Cloud Service, *and* Topic monitoring.

Third-party screen pop—A feature that lets staff members open a Service Console or report from a third-party application.
See also Service Console.

Time billed—A way to track the time spent responding to incidents. Data from the Time Billed field can be used for customer billing and for determining average incident resolution time.

Tool window—A default interface control on the Service Console for accessing reports, records, and items, and for searching the knowledge base. Recent Items and Navigation tool windows appear on the left navigation pane, and the Quick Search tool window appears on the right navigation pane. Tool windows can be put in any order, displayed in separate, floating windows, or removed from the console.

Topic browsing—A feature that provides clustering and guided browse functionality on the customer portal so customers can browse specific topics to find related answers.

Topic monitoring—A process that groups survey text responses into clusters of related responses called themes and labels each theme with keywords that define the responses. Topic monitoring is also used in social monitoring to group related cloud search results.
See also Data mining *and* Themes.

Tracked link—A link that can be tracked by Outreach and reported on for statistical purposes.

Tracked link category—An option for classifying tracked links for reporting purposes. A tracked link category can have one sub-category level.

Transactional mailing—A mailing that is sent only when an event occurs. Transactional mailings are sent to a contact when the contact meets specified criteria in a campaign and can be scheduled to be sent immediately, on a specific date, or at an interval in the future.

Transactional survey—A survey that is sent only when an event occurs. Transactional surveys are sent to a contact when the contact meets specified criteria in a campaign or business rule and can be scheduled to be sent immediately, on a specific date, or at an interval in the future.

Transfer—A feature in Chat that enables an agent to transfer a customer to another agent during a chat session.

Trending—A method of predicting a trend for a specified date range in the future based on a report's current data. Trending periods are defined when creating or editing a custom report and can be included in standard reports.

Trigger—The part of a script or workspace rule that defines the event that causes the rule conditions to be evaluated and (if matched) the rule action to occur.

U

Unqualified—One of the default chat agent statuses. This status indicates that the agent is not available to chat. The Unqualified chat agent status has an Unavailable status type.

Unresolved—One of the default incident status types and statuses. Incidents with an Unresolved status have recently entered the system, either by a customer or agent.

Unrestricted—One of the default chat agent statuses. This status indicates that there are no restrictions to the agent's availability to chat. The Unrestricted chat agent status has an Available status type.

Unspecified—One of the default chat agent statuses. This status indicates that the agent is logged out of Chat. The Unspecified chat agent status has a Logged Out status type and is displayed to agents by default.

Unsubscribe link—A link in a mailing that contacts can click to opt out of future mailings or surveys.

Updated—One of the default incident statuses. An incident marked Updated has been updated by a customer from Your Account. Updated incidents have an Unresolved status type.

Upgrading—The process of moving from one release of Oracle Service Cloud to a newer release.
See also Migration.

URL answer—A type of answer that consists of a link to an external URL. The URL address and the content of the web page are displayed.

User agent settings—The shortcut on the customer portal administration dashboard that allows page set mapping.
See also Page set mapping.

User link—A navigation element on community pages containing links to the logged-in user's profile, inbox, favorites, and subscriptions, and a sign-out option.

User type—The community role of a member account as defined by the nature of actions that the member is permitted to take.

Utility—Any of a number of programs in Oracle Service Cloud to help manage and configure an installation. Utilities include Agedatabase, Bulkdel, Dbaudit, Dbstatus, Kexport, Kimport, Langcvt, Msgtool, Reportgen, Techmail, and Wltool.

V

Validation—The process of error-checking items such as desktop workflows, scripts, rules, advanced surveys, and campaigns. Items are validated to ensure that all required properties have been completed and that the configuration is functional. Oracle Service Cloud also validates email addresses for industry-accepted formatting.

Variable—A temporary data item in a rule base. The variable is assigned an initial value that can be modified through rule actions, used as a rule condition to trigger other actions, and restored to its initial value for the next round of rules processing. Variables also refer to shortcuts defined for a larger string that can be inserted in the body of an answer or inserted inline during a chat session. When the variable is inserted in the body of the answer or in a chat response, it is replaced with the value specified in the variable.

Versioning—The system of numbering the Customer Portal framework and widgets to denote varying levels of changes. Major and minor changes are not backward compatible, while nano changes are applied automatically to all Customer Portal installations.

View partial—A reusable segment of code for common functionality that can be called from widget views to avoid duplicating the same code in multiple widget view files.

Virtual assistant—A process of routing incoming chats to a simulated agent that uses knowledge base data to respond to customer questions. Virtual assistant chats can ease the volume of chats requiring an agent.
See also Oracle RightNow Virtual Assistant Cloud Service.

Visibility—A setting that determines where a custom field or customizable menu item will appear. Visibility settings specify the interfaces in a multiple-interface installation where these fields appear. The settings can also define whether the fields appear on the administration interface and customer portal and whether certain custom fields with customer visibility can be edited.

Visit—*See* Web visit.

W

Waiting—One of the default incident status types and incident statuses. An incident marked Waiting has been responded to by a staff member and is waiting for a response from the incident creator.

Web form—A document in Outreach that allows contacts to input information that can be submitted to the database. Web forms are served as web pages by Oracle Service Cloud.

Web Indexer—A search method that lets customers simultaneously search the knowledge base along with web pages and other web-accessible documents within a specified domain.

Web spider—A software application that reads web pages and other documents and indexes the content for a search engine, often following hyperlinks from one web page to another.

Web visit—The period of time a customer spends looking for a satisfactory answer to a question. The end of a web visit generally occurs when a customer closes the browser or leaves the interface or when a specified time period elapses.

Web visit tracking—A feature that tracks information about a customer's current web visit. That is, it tracks the pages on the customer portal that the customer clicked before submitting a question.

Website link survey—A type of survey that is published as a web page and can be linked to from any source.

Weight—A displayed value given to resulting answers of a text search. The value is equal to the sum of the weights (for indexed words) of all the matched words from the text search. Weight also refers to an internal value given to each indexed keyword for an answer or incident. The value is relative to a constant and is based on number of occurrences, capitalization, and location of the word (ranked high to low: Keywords, Summary, Question, and Answer field for answers; Subject field and incident thread for incidents).

Widget—A collection of files that generates a specific function when it is placed on a page of the customer portal. Widgets can be buttons, fields, reports, or other elements that can access the Oracle Service Cloud database and communicate with other widgets through events or to the server through AJAX requests.

Widget builder—A tool that generates custom widget code, including placeholders to allow additional editing of the code. The widget builder, accessed on the Customer Portal Administration site, can extend an existing widget or create a new one.

Win/loss reason—An option for classifying and recording reasons for winning or losing an opportunity.

Wltool—A utility that is manually run after making changes to one of the wordlist files.
See also Wordlist file.

Word stemming—A feature used in keyword indexing and text searching that finds the root of each word and stores the stemmed root instead of the whole word, thereby saving large amounts of space while making a search broader and more appropriate.

Wordlist file—Any of the files that can be modified to customize indexing, text searching, and SmartSense emotive ratings.
See also File Manager.

Workflow—*See* Desktop workflow.

Workgroup—All of a record's open, associated records (for instance, an incident's contact, organization, and tasks) that are docked to the Service Console. All records in a workgroup are saved and closed in a single operation. When another non-associated record is opened, the records in the workgroup are collapsed on a single content pane tab.

Working record—The record being evaluated or acted upon by a workflow element or connector. For instance, a workspace element can display the first or last record opened in the workflow or a record named elsewhere in the workflow.
See also Desktop workflow.

Workspace—The configuration of the content pane when working with answers, contacts, incidents, opportunities, organizations, and tasks; when working in Chat; and when working with quotes, quote products, and service opportunities. Standard workspaces exist for each type of workspace, and custom workspaces can be created. The workspaces staff members use depend on the workspaces selected in their profile.

Workspace rules—A type of rule used to dynamically adjust the display, behavior, and values of fields and controls on a workspace based on staff member actions. Each rule is triggered by one or more events and conditions.

Workspace designer—The tool used to create and edit custom workspaces.

WYSIWYG (what you see is what you get)—*See* HTML editor.

Y

Your Account—A tab on the customer portal that opens the Account Overview page where customers can view and update all the questions they have previously submitted and view any answer or product/category notifications to which they are subscribed. They can also view their service contracts, edit their account information, and change their password. This component is restricted and requires a customer account.
See also Customer account.

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